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RESPONSE TO COMMENTS

for

Second Draft Permit No. R8-2015-0001
NPDES Permit No. CAS618030

Orange County Flood Control District, the County of Orange
And
The Incorporated Cities therein within the Santa Ana Region

Area-wide Urban Storm Water Runoff

October 23, 2015

Response No.	Comment Date	Commenter	Comment Summary	Response
1.1	2/13/2015	Construction Industry Coalition on Water Quality	The commenter recommends specific language changes to Provision XIIH.5. to clarify that a project whose runoff is proposed to be treated at an off-site LID BMP can be allowed to do so without the need to apply the BMP selection hierarchy on-site beforehand.	Regional Board staff agrees that a project should not have to demonstrate that LID BMPs cannot be implemented on-site before being allowed to use an off-site LID BMP. The recommended language change has largely been adopted with the caveat that the requirements of Subsection XII.M. apply.
1.2	2/13/2015	Construction Industry Coalition on Water Quality	The analysis of the barriers to regional and sub-regional BMPs in pages 31-34 of the Draft Technical Report indicates that Regional Board staff holds beliefs that are contrary to the commenter's assertion that such BMPs "will ultimately become a process that land development projects in Orange County…use for compliance".	The analysis cited by the commenter was provided to explain the challenges of implementing regional and sub-regional BMPs and to help explain the changes made in the Draft Permit towards easing those challenges. The analysis was not intended to be predictive or to critique the approach in an imbalanced way. Regional Board staff welcomes the commenter's perspective on the challenges. We hope that stakeholders will be able to provide information, as we approach the next iteration of the MS4 Permit, that will help us evaluate how effective the changes have been in encouraging or discouraging public and private investment in regional and sub-regional BMPs.
1.3	2/13/2015	Construction Industry Coalition on Water Quality	The commenter objects to the 140 day period, following permit adoption, after which the requirements of Section XII will apply to initial project applications. The commenter recommends allowing 10 to 12 months to allow incorporation of new criteria and to facilitate an "ongoing improvement effort" as required in Section XII.C.5.	See Response 5.6.
1.4	2/13/2015	Construction Industry Coalition on Water Quality	Based on the input of CICWQ and other stakeholders, the revisions and enhancements to the program technical documents could go beyond the time needed to comply with the revised permit.	Regional Board staff does not support the suggestion that the continual improvement of the documents should be an opportunity to delay implementation of the requirements of Section XII on new development/significant redevelopment. The continual improvement process must be a separate and ongoing effort and not something that the Co-permittees undertake once with each permit renewal. There should be regular opportunities for stakeholders to recommend improvements. Consequently, postponement of the requirements is not necessary for this purpose.
2.1	2/13/2015	Contech Engineered Solutions LLC	The commenter points out features of the Draft Permit intended to promote the performance of structural treatment control BMPs.	The comment is noted.
2.2	2/13/2015	Contech Engineered Solutions LLC	"Section X.II.D.15 should also prevent the specification of innovative and/or proprietary BMPs that have not been tested following a robust testing protocol..." "During the current permit term…Some cities accept promotional brochures with exceptional performance claims…while others require performance verification through the TAPE [Technology Assessment Protocol] program."	Section 4.1 of the Technical Guidance Document describes BMPs that are presumed to meet storm water management requirements in Fact Sheets and referenced design manuals. Other types and variations are allowed to be approved if "documentation is provided demonstrating that the BMP is functionally equivalent to those described in [the Technical Guidance Document] or published design standards." This demonstration may require monitoring data to validate a proposed BMP's performance. Approval of a project WQMP that includes structural treatment control BMPs that are not described in the Technical Guidance Document and whose performance has not been substantiated with a demonstration is a violation of the current Permit. The commenter appears to be referring to Section XII.D.15. of the Draft Permit This Section continues the principal requirements of Section 4.1 of the Technical Guidance Document in a more direct and verifiable way.

2.3	2/13/2015	Contech Engineered Solutions LLC	The draft permit also encourages innovation by providing a pathway for acceptance of nonconforming BMPs in Section X.II.E, which allows installation of up to 3 innovative BMPs for the purpose of evaluation.	The commenter appears to be referring to Section XII.E. of the Draft Permit. Two observations are worth noting. The first is that there is no requirement that a non-conforming facility be enrolled in the demonstration facility program beforehand. This means that a nonconforming facility may be "discovered" as part of an inspection or audit and may be enrolled in the program after-the-fact by a Co-permittee in order to avoid some violations. Used this way, Section XII.E. also functions as an allowable "error rate" in the Co-permittees' approval of conforming facilities. The second is that the commenter's interpretation that up to 3 innovative BMPs is allowed is incorrect. The language is "3 similar nonconforming" facilities. The ambiguity of the term "similar" would allow multiple dissimilar groups of 3 for an unknown total number of facilities. In order to better control the "error rate", the language has been replaced with a fixed total number of 10 nonconforming facilities.
2.4	2/13/2015	Contech Engineered Solutions LLC	"There is no baseline performance standard for pretreatment controls upstream of infiltration in the current draft."	This is incorrect. Many "pretreatment controls" are "structural treatment control BMPs" which are subject to the requirements of Section XII.D. The performance standards sought by the commenter are in this Section, particularly in Provision XII.D.15 (Revised to Provision XII.D.16 in the 3rd revised draft Permit).
2.5	2/13/2015	Contech Engineered Solutions LLC	"In the current draft there is no baseline performance standard for treatment of runoff that is discharged to an off-site BMP."	Provision XII.D.16. states that "All requirements in this Order for the design of structural treatment control BMPs apply to both on-site or off-site facilities." This includes Provision XII.D.15. In some cases, an off-site facility may pre-date the effective date of this Order. In these cases, the current Draft Permit Section XII.M. (formerly Section XII.L) includes requirements that the off-site facility meet the requirements of the permit in effect at the time or that the facility complies with Section XII.D. As noted elsewhere in this Response, both the Draft Permit and the current 2009 Permit include the requested performance standards.
2.6	2/13/2015	Contech Engineered Solutions LLC	"Feasibility requirements in section X.II.K (Specific Requirements for Harvest and Use LID BMPs) are unnecessarily stringent and should be changed. Irrigation with harvested water in excess of the agronomic demand should be encouraged, provided that it does not create runoff."	The commenter is describing a system of retention LID BMPs that is not prohibited in the Draft Permit. The application of water at a rate that is greater than agronomic rates, without producing runoff is effectively an infiltration facility. The system described by the commenter would therefore be comprised of a harvest and use system whose drawdown is fully or partly achieved using an infiltration LID BMP. This system of retention LID BMPs is allowed. Section XII.K is intended to control the method for evaluating demand rates for drawing down harvested storm water. It does not limit or apply to drawdown achieved through other methods.
3.1	1/23/2015	Disneyland Resort	The commenter recommends deletion of Provision XII.I.3. and requests other clarifying changes to Provision XII.I.7.	Regional Board staff agrees that it should not be necessary to obtain a waiver and has deleted Provision XII.I.3. Some of the clarifying language changes have largely been rejected because the comment indicates that the original intent of the language is unclear and also that the language does not address the commenter's concern regarding the retrofit site. As the result, Provision XII.I.7. has been rewritten so that any new redevelopment on either the retrofit site or the project site using the off-site retrofit option must reconsider future structural treatment control BMPs according to the permit requirements in effect at the time.
3.2	1/23/2015	Disneyland Resort	The commenter recommends creating a new subsection for "Credit Programs"; requests deleting the requirement that the project receiving credits obtain a waiver; and requests additional clarifying changes similar to their previous comment.	To improve the readability of the Draft Permit, Regional Board staff has given "Credit Programs" its own Subsection XII.N. Regional Board staff has structured the new Subsection to allow the use of credits by projects that may not necessarily be eligible for a waiver as requested but under very limited circumstances. In particular, credits may only be traded between projects under the same ownership, credits can only be generated by LID BMPs, and both projects must be located within the same watershed as the nearest receiving water of the U.S. These limits are intended to prevent the potential abuse of the credit program.

4.1	2/13/2015	City of Lake Forest	The City of Lake Forest supports and joins in the submission of the comments submitted by the County of Orange.	Comment noted.
4.2	2/13/2015	City of Lake Forest	The City of Lake Forest provides recommended language to fully implement the designation agreements signed by the Executive Officer of the Santa Ana Region and by the Executive Officer of the San Diego Regional Water Quality Control Board on February 10, 2015.	Regional Board staff has included language to implement the designation agreements in the new Draft Permit, the Technical Report, and Appendix A.
4.3	2/13/2015	City of Lake Forest	The commenter recommends specific language changes in the Draft Permit and Technical Report to clarify the notification steps preceding the development of compliance plans for WQBELs and receiving water limitations (now called Watershed Management Plans collectively).	Regional Board staff has no objections; the changes have been made.
4.4	2/13/2015	City of Lake Forest	The commenter recommends specific language in Section XVIII that reiterates the methods of compliance with WQBELs.	Regional Board staff has reconsidered the presentation of Section XVIII and we recognize that the indentation formatting is not as intended and may cause confusion with the reader. With corrections, we believe that the organization of this section spells out clearly the methods of compliance.
4.5	2/13/2015	City of Lake Forest	The commenter objects to the “dual classification of MS4s and waters of the U.S.” and requests specific modifications to Finding 13, the definition of “MS4” in the Glossary, and to Section V of the Technical Report.	The text that concerns the commenter notes a fact: that the definition of MS4 does not exclude waters of the U.S. Therefore, there will be instances where, according to the definition of an MS4, a “conveyance” that is “Owned or operated by a State, city, town, borough county, parish, district, association, or other public body…having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes” will also be waters of the U.S. There is no language in the text of either definition which excludes the other. Changes have been made to the text of concern to focus on this point.
4.6	2/13/2015	City of Lake Forest	The commenter objects to the substitution of the terms “natural’ and “background” with the more general term “anthropogenic”. The commenter cites the use of the terms in various definitions in 40 CFR 130.2.	For consistency, the terms “natural” and “background” have been re-introduced as recommended.
4.7	2/13/2015	City of Lake Forest	The commenter requests that language recognizing the legal limitations of the Co-permittees’ inspection programs be re-stored in Sections VI, VIII, IX, and X of the Draft Permit.	The legal limitations on the Co-permittee have been sufficiently recognized in the Findings. Within the provisions of the Draft Permit, they go without saying and are unnecessary.
5.1	2/12/2015	City of Orange	The City of Orange supports the comments made by the County of Orange. Some of the City’s comments are summarized in the City’s letter and detailed in an attachment to the letter.	The commenter’s support of the County’s comments is noted. Where the comments are both summarized in the City’s letter AND appear in the attachment, Regional Board staff will provide a response in order to minimize duplication.

5.2	2/12/2015	City of Orange	The City continues to be concerned with the omission of the DAMP and LIP, which contain the Co-permittees' established programs. The 2011 Model WQMP and Technical Guidance Document are acknowledged and referenced in a footnote, but do not appear in any provisions. These are important documents that have not been recognized in the Order. It would have been simpler to link the existing documents and add new requirements.	The Co-permittees' established programs are not fully represented in the documents cited by the commenter. Within all of the past and current iterations of the MS4 Permit, there are references to over 40 different planning documents. The actual number of documents that exist is not known, largely because many were not subject to review and approval. These documents collectively represent the Co-permittees' programs and are enforceable under Provision II.A.1. of the current 2009 Permit. As reported in the Technical Report, during audits, Regional Boards staff also noted that some Co-permittees were implementing practices that were not documented and some documented practices had been abandoned. Some programs had also matured and that maturity was not fully reflected in the program documents. In other audits, Regional Board staff observed program documents that had been amended such that measurable and verifiable commitments had been removed. Given these circumstances, while some documents are certainly important and it would also certainly be simpler to link the documents, this approach would not necessarily lead to a robust, transparent, or comprehensible storm water program. Furthermore, the proposed approach provides the Co-permittees with a greater degree of flexibility in the content of the documents and the ability to more rapidly document and implement program improvements.
5.3	2/12/2015	City of Orange	The City is opposed to the exclusion of irrigation runoff from the list of authorized non-storm water discharges.	Regional Board staff believes that the added findings are sufficient to support the proposed exclusion.
5.4	2/12/2015	City of Orange	The new proposed language for developing non-priority project plans suggests that any outdoor project may be considered a source of pollutants if rainfall flows off it and the runoff is carried into the storm drain. The provision will only lead to confusion and increased project costs without any measureable pollution reduction benefits because non-priority projects are not considered significant sources of pollution.	The Regional Board has not found non-priority projects to be insignificant sources of pollution; no such assertion is in the current 2009 Permit. The commenter is reminded that the difference between a non-priority project and a priority project is measured by square feet of impervious cover for most categories in Subsection XII.B.2. of the current 2009 Permit. One project adding 5,000 square feet of impervious cover is a priority project, for example, while a project adding 4,999 is not. So it is appropriate that the latter project receive some attention to address its potential water quality impact. What this Draft Permit is trying to accomplish is the establishment of a third category of project types that do not need to have source control or site design BMPs. The proposed language does not establish the threshold. Rather, the language provides general guidance, as the commenter observes, and leaves the matter to the discretion of each Co-permittee but requires them to report their choices. Regional Board staff acknowledges that this is an imperfect solution. As was explained during the January 30, 2015 Workshop, it is likely that a unifying requirement may be developed during the next permit term once the Co-permittees' choices have been examined.
5.5	2/12/2015	City of Orange	The City objects to the requirement that non-priority project plans be approved by a registered civil engineer or a licensed landscape architect. The City requests that the requirement that non-priority project plans not be prepared by a professional unless the plan includes features that require the design expertise of a professional.	The commenter's interpretation of the review requirement for non-priority project plans is incomplete. Provision XII.M.5. allows the preparer to *approve* a plan under the supervision of a professional. There is no requirement that a non-priority project plan be prepared by a professional. Provision XII.D.8. (Revised to Provision XII.D.9.) does require professional oversight for structural treatment control BMPs. We also note that not all non-priority projects will require a non-priority project plan; only those designated by each Co-permittee. Subsection XII.M. has been relocated to Subsection XII.O. The provisions there have been amended to require that non-priority project plans to be prepared and approved by persons with qualifications and competencies that are commensurate with the complexity of the project and plan.
5.6	2/12/2015	City of Orange	The City points out complications in establishing a date by which projects that are being considered must comply with the provisions relating to WQMPs. The City recommends that the provisions not apply to projects that are under design within 50-days of the Order's adoption.	More precisely, the proposed requirement is that the requirements would apply to projects "that are approved 90-days after the effective date" of the Order. Because the effective date is 50-days from the date of adoption, this allows 140-days total from the date of adoption before the requirements apply. Regional Board staff's principal concern is that, whatever cutoff is established, that it be discrete and recognizable by all of the Co-permittees. In a separate personal communication on May 14, 2015, the commenter believes that this is the case. Therefore, Regional Board staff has amended the revised Draft Permit to apply to the date where design work is initiated by a Co-permittee.

5.7	2/12/2015	City of Orange	The City does not believe that 50-days is sufficient time to allow the Co-permittees to implement the requirements of Section XII.	The actual time is 140-days after the effective date of the Permit.
5.8	2/12/2015	City of Orange	The City notes that Provision XIV.C. of the Draft Permit requires the preparation of written inspection and maintenance schedules for each of its facilities, and goes on to object to having to prepare reports for over 1,800 drainage facilities.	Provision XIV.C. does not require the preparation of individual inspection reports as asserted by the commenter. Provision XIV.C. is not intended to read that each facility have its own written inspection and maintenance schedule. One document may include multiple schedules that address most or all facilities at the Co-permittees' discretion. The language of Provision XIV.C. has been revised to Subsection XIV.F in the third revised draft Permit and amended to prevent this misinterpretation.
6.0	2/13/2015	County of Orange	The County reports the involvement of other Co-permittees in the development of their comments and that the cities of Brea, Fullerton, Garden Grove, Huntington Beach, Irvine, La Habra, La Palma, Lake Forest, Orange, Santa Ana, Seal Beach, Tustin, and Westminster "have directed that they be recognized as concurring entities on this letter".	The comment is noted.
6.1	2/13/2015	County of Orange	The County provides an outline of two broad areas of concern regarding the absence of mention of a "State of the Environment analysis" provided in the Report of Waste Discharge and concerns that the compliance pathway provided in the receiving water limitations provision "will still likely result in non-compliance for an exceedance of a water quality standard." Further details are provided in the attachments.	The reported "State of the Environment analysis" appears to refer to chapter 2 of the 2013 Report of Waste Discharge titled "State of the Environment". Regional Board staff believes that a reference to the 2013 Report of Waste Discharge constitutes an adequate reference to each of the chapters contained therein. Regional Board staff disagrees with the commenter's implication that the purpose of providing the compliance pathway was to eliminate the risk of non-compliance.
6.2	2/13/2015	County of Orange	The information in the "State of the Environment" analysis needs to be explicitly considered because it provides the justification for modifying Program priorities, such as the number of industrial facility inspections, which are not directly linked to the constituents of concern: fecal indicator bacteria, nutrients from shallow groundwater, and toxicity. The Technical Report observes that feedback is integral to the iterative planning process and informs the development of this and future iterations of the MS4 Permit, but then fails to consider information that it says is needed.	Feedback is integral to the iterative process for development of the MS4 Permit. Like the feedback needed by the Draft Permit for storm water program management, the feedback for permit development must be based on valid performance measures and valid methods of measurement. The "State of the Environment" has been considered as part of the 2013 Report of Waste Discharge in conjunction with other forms of feedback. Other forms that have been considered include inspection reports, audit reports, enforcement actions, and informal contacts with Co-permittees and their representatives. The 2013 Report of Waste Discharge has been considered, but the recommendations that were excluded in the Draft Permit were excluded generally because the feedback is not sufficient to support the recommendations. In these instances, the reasons have been explained in the Technical Report and in earlier responses. In many other instances, the recommendations do not conflict with the requirements of the current 2009 or Draft Permits and were accepted because they improved the clarity. In some cases, the recommendations surround efforts to amend adopted TMDLs and were excluded because they are outside of the scope of the Permit. In other cases the recommendations involve amending the monitoring program, which is already accommodated by the language in the Draft Monitoring and Reporting Program, and were included.
6.3	2/13/2015	County of Orange	The success and challenges with controlling fecal indicator bacteria in dry weather is the principal justification for the County's request to include a regulatory compliance pathway in the Receiving Water Limitations provision that accommodates the uncertainties and challenges presented by these and other constituents.	The comment is noted. The water quality-based effluent limitations for the Fecal Coliform TMDL have been removed from the revised draft Permit for reasons explained in the revised Technical Report.

6.4	2/13/2015	County of Orange	The commenter requests that additional time be allowed for comments prior to scheduling a hearing for adoption. The commenter reserves the right to respond to other commenters and to present evidence for the record.	Regional Board staff anticipates that additional time will be allowed.
6.5	2/13/2015	County of Orange	The commenter provides a general outline of the organization of their comments.	The organization is greatly appreciated. As more detailed comments are provided, additional clarification to any responses to general comments will be provided.
6.6	2/13/2015	County of Orange	The commenter provides a more detailed explanation of the organization of their comments.	See Response 6.5.
6.7	2/13/2015	County of Orange	The Draft Permit does not recognize the Report of Waste Discharge or the significant water quality outcomes that have been achieved in Orange County and, therefore, lacks Substantial Evidence to support new or modified program requirements.	The Report of Waste Discharge is recognized in the Technical Report. The Technical Report forms the basis for the Draft Permit. Other forms of information, in addition to the Report of Waste Discharge, have been recognized to support new or modified program requirements where the information is relevant and valid and not based on unsubstantiated suggestions of such relationships. The Regional Board is not obligated to consider the Report of Waste Discharge to the exclusion of other relevant information.
6.8	2/13/2015	County of Orange	The “assessment of the ‘State of the Environment’” describes the results of long-term monitoring and special studies that are used to examine the condition of the surface water environment in Orange County. The analyses point to bacteria, nutrients, and toxicity as the water quality priorities for the County and forms the basis for recommendation for the fifth term MS4 permit intended to ensure further improvements in surface water quality.	Regional Board staff does not disagree with the Co-permittees’ identified priorities. The comment is noted.
6.9	2/13/2015	County of Orange	Formulation of the fifth term permit must assess what measures have been implemented and how the environment has responded. The Draft Permit and Fact Sheet do not reference the ROWD to provide a basis for program modifications.	The Technical Report considers the ROWD in various sections. In order to provide more explicit consideration, a new subsection has been added to Section VIII of the Technical Report. The Regional Board is not obligated to consider only the ROWD to the exclusion of other relevant sources of information.
6.10	2/13/2015	County of Orange	Omission of significant water quality outcomes described in the ROWD creates a false case for increasing regulatory requirements. Without supporting evidence, a number of requirements may be perceived as arbitrary and capricious.	The ROWD is not the sole source of information used to formulate the requirements of the Draft Permit. At this point, the commenter has not identified requirements that lack supporting evidence or increased requirements that are based on a false case. Where specific instances are found, Regional Board staff will address them.
6.11	2/13/2015	County of Orange	The commenter provides an outline of three general areas of concern regarding changes to the BMP lexicon, the “50 Days for Implementation”, and requirements for non-priority projects. In summary, these changes will precipitate changes in the Model WQMP and Technical Guidance Document, changes in Co-permittees approval protocols, and training to the Co-permittees staff and the development community.	The commenters concerns are detailed later in these Responses and are responded to more thoroughly as details are provided. In general, the fact that changes in an MS4 Permit will precipitate changes in the Co-permittees’ storm water programs is not, by itself, sufficient reason to not make changes to the Permit.

6.12	2/13/2015	County of Orange	The commenter provides extensive arguments against changes to the Model WQMP but does not identify specific changes that they are opposed to.	The Draft Permit contains changes in the form of new provisions which in many cases are based on findings made as part of program audits. Regional Board staff previously recognized that some changes may have been unintentional. Those unintentional changes should have been addressed in the Second Draft MS4 Permit. In order to evaluate the merits of the change against the commenter's arguments, Regional Board staff must know the specific changes that the commenter objects to. At this point, the commenter has not provided this information. Where specific changes are identified, Regional Board staff will address them.
6.13	2/13/2015	County of Orange	The commenter cites the significant collaborative effort that went into the development of the Model WQMP and Technical Guidance Document, including the time investment and cost.	The Model WQMP and Technical Guidance Document has affected and will affect millions of dollars of capital investment in land development in Orange County. Many of the new provisions are designed to protect the related investment in storm water treatment infrastructure by providing safe, effective, and publicly-acceptable facilities. In addition, many of the new provisions are designed to permit the Co-permittees to effectively inspect those facilities over the life of the project to make sure that those facilities remain this way for as long as necessary. From an economic perspective, the costs cited by the commenter are sunk costs. Leaving as-is or changing the Model WQMP and Technical Guidance Document will not recover those costs. As such, they are not relevant in evaluating the merits of the proposed changes in the Draft Permit against future costs of program changes.
6.14	2/13/2015	County of Orange	The Draft Permit should recognize that, in addition to the traditional approach to regulating storm water permittees, there is also the option of developing and implementing a watershed-based approach as a compliance pathway. The commenter also reports that the State Water Resources Control Board supports the establishment of an "alternative pathway" to permit compliance and encourages watershed approaches in its draft Permit in its review of Order No. R4-2012-0175.	The term "watershed approach" is a vague construct and Regional Board staff finds it necessary to expand on its meaning as we understand it. The Draft Permit allows responsible Co-permittees to develop Watershed Management Plan to comply with receiving water limits and/or water quality-based effluent limits by developing a coordinated approach to planning, implementing, and evaluating best management practices (essentially carrying out the "iterative approach") at the watershed scale specifically in response to exceedances of those standards or limits. The presence of this feature addresses the commenter's concern. While the planning and evaluation of BMPs can be done on a watershed scale, it is important to recognize that many BMPs are ultimately implemented locally by the individual Co-permittee. This is important because responsible Co-permittees will be expected to follow through on tasks which have been described in the plan in a measurable and verifiable manner. The watershed-based approach should not be a mechanism for masking the individual responsibilities of each Co-permittee. The benefits of carrying out the "iterative process" on the watershed scale include avoiding redundant overlap in BMPs, avoiding duplicative monitoring, coordination of public education campaigns to improve their effectiveness, and coordinating employment of professional and technical services. On the other hand, the watershed-based approach potentially involves reconciling different viewpoints of several organizations and the challenge of obtaining buy-in from internal and external stakeholders. Depending on the situation, this may lead to pressure for conformity, suppression of creative solutions, resistance to adaptive changes, and general stagnation of the program. To protect against this, the Draft Permit has been designed to accommodate implementation of BMPs in whatever manner the Co-permittees collectively or individually determine to be necessary.
6.15	2/13/2015	County of Orange	In certain locations, the Draft Permit is highly prescriptive such that the ability of the permittees to adaptively manage their programs is limited. In Section XIV, the term "accumulated pollutants" is overly inclusive in the context of cleaning municipal facilities. If the term is intended to be limited to trash and debris, the Section should be amended to state so clearly.	Regional Board staff agrees; the term "accumulated pollutants" has been amended to be more specific.

6.16	2/13/2015	County of Orange	Section XIV includes new requirements to develop a series of standard operating procedures with prescriptive requirements on when and how they should be reviewed. The commenter objects to the prescriptiveness on the general basis in the summarized comment in Response 6.15 above.	More precisely, the provisions require standard operating procedures, require their annual review, and prescribe a method for documenting that review. Standard operating procedures are typically written by knowledgeable persons responsible for carrying them out. There are multiple reasons for having SOPs, among them are to provide personnel with all the safety, health, environmental and operational information necessary to perform a job properly. In this case, to perform a job with minimal water quality impacts. A well-written SOP is instructive, concise, and easily readable by the intended audience. It contains no extraneous detail. An SOP should reflect procedures as they are actually carried out pursuant to the organization's policies. An SOP may be site- and task-specific or they may be task-specific but applicable to many locations. Because procedures may change for various reasons (e.g. new equipment), they need to be reviewed periodically. Typically this is done annually and the review documented in a short format immediately in the SOP, such as by initials and date. Additional guidance on SOPs is widely available on the internet. Regional Board staff acknowledges that the provisions are prescriptive but notes that they are in conformance with ISO standards for quality management and represent best practices. Regional Board staff disagrees that they inhibit adaptive management. SOPs are adaptive in the context of the process described above. SOPs essentially document adaptations of procedures.
6.17	2/13/2015	County of Orange	Modifying the current training program according to Section XVI of the Draft Permit would negatively impact the current training program and limit the ability of the permittees to make changes in the future.	After further consideration, Regional Board staff recognizes that the specification of training curriculum has the potential of dictating how finite training hours are used. Section XVI has been amended so that it does not dictate the subject matter that training hours must focus on during the required training. Instead, Section XVI defines the knowledge that the training program must impart on the affected personnel. This approach would allow instructors to focus on known deficiencies during training events rather than treating all subject matter as equally important.
6.18	2/13/2015	County of Orange	The commenter objects to the use of new terms in the Draft Permit. Specifically, the term "storm water control measures". Other terms are discussed elsewhere	The term "storm water control measures" is actually an old term found in various other storm water publications. Its use in the Draft Permit is for the benefit of readers who may be more familiar with it. To avoid confusion, the amended Draft Permit limits its use.
6.19	2/13/2015	County of Orange	The commenter objects to the use of the phrasing 'unusually large quantities of pollutant' and "accumulated pollutants".	Regional Board staff agrees that "accumulated pollutant" can be replaced with "trash and debris". See Response 6.15. The commenter's objection to 'unusually large quantities of pollutants' and variants of that phrasing appear to stem from the fact that it does not prescribe an actionable and objective threshold for field personnel to work with. The phrasing is purposefully relative and is subject to interpretation depending on circumstances. The Co-permittees must develop the actionable threshold. This threshold does not need to be one involving burdensome measurement methods. A threshold could be approximated visually, such as 'when 25% or more of the bottom of the catch basin is covered by trash or debris'.
6.20	2/13/2015	County of Orange	The commenter objects to the interchangeable use of the term "interventions" with "BMPs". The term is not defined.	The term "interventions" has the same meaning in the Draft Permit as in common usage. Its use in the Draft Permit and Technical Report in place of the term "BMP" is intended to highlight the process-oriented application of BMPs through the iterative process. In the pollution process, BMPs are applied at various stages to intervene and prevent the pollutant from reaching the receiving water; it is part of a systems approach to problem-solving. This systems approach to considering BMPs focuses the program manager on the specific purpose(s) of the BMP. This in turn helps to identify relevant and valid performance measures for the BMP's effectiveness, not simply as a means to comply with a permit.
6.21	2/13/2015	County of Orange	The commenter seeks consistency since several permittees are regulated under more than one regional board.	Regional Board staff will consider the recommended changes on their merits. Consistency is part of the consideration but less so since the Designation Agreements for the cities of Lake Forest, Laguna Hills and Laguna Woods now address the majority of complications from being within multiple regional boards.

6.22	2/13/2015	County of Orange	The Regional Board should clarify that the City of Lake Forest has been designated under the Santa Ana Region while the cities of Laguna Hills and Laguna Woods are designated under the San Diego Region.	Language has been incorporated into the revised Draft Permit to recognize the designations.
6.23	2/13/2015	County of Orange	Finding 4 deviates from CWA Section 402(p)(3)(B) in that it separates the MEP clause from the "other measures" clause as two separate statements, implying that "other measures" are not subject to the MEP standard.	The language of Finding 4 has been amended to better conform to the Clean Water Act language.
6.24	2/13/2015	County of Orange	The commenter asserts that the State Water Resources Control Board's Order No. 2001-0015 "states that discharges into the MS4 are to be controlled through an iterative, BMP based approach that is *less* stringent than the MEP standard." The commenter supports this assertion with excerpts from the Order.	Regional Board staff agrees in large part with the excerpted sections of Order No. 2001-0015 with the exception that there is no statement in the Order that asserts that an iterative, BMP-based approach is less stringent than the MEP standard. If this were the case, then it would leave open the question of what standard actually applies.
6.25	2/13/2015	County of Orange	"To the extent the Tentative Order would hold the dischargers liable in the event that any discharge into the MS4 occurs, the Tentative Order exceeds the requirements of the CWA and violates existing State Board policy."	The Draft Permit does not prohibit "any discharge into the MS4". The Draft Permit prohibits certain non-storm water discharges in accordance with 40 CFR 122.26(d)(2)(iv)(B)(1). The Draft Permit does not exceed the requirements of the CWA or violate existing State Board policy.
6.26	2/13/2015	County of Orange	It is unclear what "must include other provisions as necessary to reduce pollutants..." means in Finding 8.	Finding 8 (revised to Finding 9 in the third revised draft Permit) has been amended for clarity.
6.27	2/13/2015	County of Orange	Finding 9 should be amended to further recognize the limitations of the Co-permittees to control certain activities that generate pollutants present in urban runoff. Examples of these include the operation of internal combustion engines, atmospheric deposition, brake pad wear, tire wear, and leaching of naturally occurring minerals from local geography.	The requested statement is rejected because it is not entirely accurate and it overstates the limits of the Co-permittees' abilities. The Co-permittees do have significant influence on their transportation networks, including influence on the proximity of jobs, housing, and services; the accessibility and quality of public transportation; and the accommodation of non-motorized transportation in the public rights of way. Consequently, the Co-permittees exert indirect influence on the operation of related internal combustion engines and related pollutants. The Co-permittees generally do not control the leaching of minerals from local geology. However, landscape-related ordinances can influence the use of irrigation and the subsequent leaching process. The MS4 can control the conveyance of leached minerals. The configuration of the MS4 can influence any potential uptake and transformations of those minerals while they are being transported. Consequently, the inclusion of the recommended statement could discourage Co-permittees from considering BMPs which are in their power to affect.
6.28	2/13/2015	County of Orange	Runoff discharges to receiving natural waters cannot be legally classified as part of the MS4 and cannot be classified as both an MS4 and a receiving water.	According to common definitions, "natural" refers to a condition that is free from human influence, not made or caused by humans. Regional Board staff is unaware of any water body in the permit area, except possibly headwaters beyond the urban and suburban fringe, that satisfy this term. Even the beaches of Orange County are influenced by beach replenishment projects, groins, and the sediment-transport effects of the Prado and Seven Oaks dams. On May 26, 2015, US EPA and the US Army Corps of Engineers released a Final Rule concerning the definition of waters of the U.S. In the Final Rule (pre-publication page 98), the agencies explain "The definition of tributary includes natural, undisturbed waters and those that have been man-altered or constructed, but which science shows

				function as a tributary. In addition, alteration or modification of natural streams and rivers for purposes such as flood control, erosion control, and other reasons does not convert the tributary to a ditch. A stream or river that has been channelized or straightened because its natural sinuosity has been altered, cutting off the meanders, is not a ditch. A stream that has banks stabilized through use of concrete or rip-rap (e.g., rocks or stones) is not a ditch. The Los Angeles River, for example, is a 'water of the United States' (and, indeed, a traditional navigable water) and remains a 'water of the United States' and is not excluded under paragraph (b)(3) even where it has been ditched, channelized, or concreted." After consideration of the new Final Rule, Regional Board staff finds no reason to amend Finding 13. See Response 4.5.

6.29	2/13/2015	County of Orange	The commenter recommends incorporating Finding 18, recognizing "significant progress that has been made through the development and implementation of the 2011 Model WQMP and Technical Guidance Document." Proposed Finding 18 also asserts the "land development program in Orange County has made significant progress towards improving the quality of runoff from new and redevelopment projects".	Regional Board staff does not believe that proposed Finding 18 is sufficiently factual. Regional Board staff audits of project WQMPs that pre-dated the 2011 Model WQMP and Technical Guidance Document found many significant problems with the review processes and project outcomes which resulted in permit violations even when the requirements were unambiguous. We recognize that the 2011 Model WQMP and Technical Guidance Document represent significant advancements in the documentation of a process. But these documents represent only part of a system which Co-permittees respond to to achieve compliance. Follow-up audits found significant program improvements by those subject Co-permittees. But it is evident that an effective system for achieving compliance must involve unambiguous permit requirements, Regional Board staff audits and, if necessary, enforcement action. As such, we do not share the commenter's confidence that is implied in proposed Finding 18. Therefore, proposed Finding 18 is rejected.
6.30	2/13/2015	County of Orange	The commenter recommends incorporating finding 19, describing "the importance of the key technical feasibility considerations identified in the [Technical Guidance Document] developed through comprehensive analysis, extensive BMP and LID implementation experience, and review and comment by the Model WQMP and TGD [Technical Advisory Group]." Proposed finding 19 also "identifies the importance of having technical feasibility alternatives that result on long term effective BMPs, as well as that the intent of …Section XII is to build off of the established technical feasibility criteria within the Model WQMP and TGD".	Proposed Finding 19 is not a complete or accurate description of the circumstances surrounding the origins of the 2011Model WQMP and Technical Guidance Document. Proposed Finding 19 is the Co-permittees' interpretation of those circumstances. While Regional Board staff believes that the Co-permittees are entitled to their interpretation, it is an opinion that is unlikely to be fully shared by all of the stakeholders involved in the process, particularly NRDC and Orange County Coastkeeper. Regional Board staff does not see the need to provide our own accounting of the circumstances surrounding the origins of the 2011 Model WQMP and Technical Guidance Document in this Order. They have already been fully documented in the record for the approval of those documents. More importantly, we recognize that the Draft Permit does include requirements that are based, in large part, on the program described by the 2011 Model WQMP and Technical Guidance Document. This has already been sufficiently explained in the Technical Report. In addition, proposed Finding indicates that the 2011 Model WQMP and Technical Guidance Document will "ensure that the long-term effective BMPs can be maintained and do not contribute to risks to people, property, or the environment". This is a worthy goal and Regional Board staff anticipates that the Co-permittees will strive to meet it using the 2011 MWQMP and Technical Guidance Document as amended or revised. But from our perspective, the Regional Board does not provide this "ensurance" through these documents; this is done through the enforcement of the relevant permit requirements of the Draft Permit. Therefore, proposed Finding 19 is rejected.
6.31	2/13/2015	County of Orange	The commenter recommends incorporating finding 20, which "identifies the value of regional BMPs and the benefit of redevelopment goals with water quality improvement of existing areas with use of regional BMPs." Finding 20 also relates various benefits of Regional BMPs in general and specifically holds the Natural Treatment System Master Plan as an example.	Proposed Finding 20 describes regional BMPs as a "critical tool" to help achieve improvements in storm water quality and goes on to describe various characteristics that make them "better monitored" and provide a "better opportunity". While Regional Board staff believes that there is sufficient evidence to allow regional BMPs to be considered alongside project-level BMPs, we do not agree, as suggested by the proposed finding, that they are categorically superior to project-level BMPs. We are not aware of any studies to support this conclusion and the related apparent endorsement of the Natural Treatment System. Instead, the draft Technical Report provides a balanced description of the benefits of both regional and project-level BMPs in order to support their equal consideration as allowed in the Order's requirements. We must note that more than a few of the benefits identified in the existing language in the draft Technical Report and proposed Finding 20 relate to the economics of groundwater supply or other matters with little relationship to improving surface water quality. We are not opposed to describing such benefits. But these benefits should not be pursued under the banner of this Order at the expense of protecting surface water quality.

6.32	2/13/2015	County of Orange	The Draft Permit contains sections that are more stringent than federal law. Consequently, an economic analysis is required. The economic analysis in the Technical Report is inadequate.	The allegation that the requirements are more stringent than federal law is vague. Absent specific allegations, Regional Board staff does not believe that the requirements are more stringent than federal law. Consequently, an economic analysis is not required but, as indicated by Regional Board staff during the January 30, 2015 Workshop, one has been provided out of an abundance of caution. Although we disagree with many of the points, the commenter's criticism of the provided analysis is not entirely without merit. It is important to recognize that no economic analysis can achieve perfection without perfect information, which makes them easy targets of criticism. Therefore, a basis in perfect information is not a reasonable standard with which to evaluate the analysis. As we have suggested in our earlier Response, the Co-permittees possess, or have the ability to collect much of the information necessary to improve the economic analysis. It is disingenuous to criticize an economic analysis on one hand, while possessing but not providing information that would improve it on the other. Provision XX.A. leaves open the possibility that national standards will be developed by USEPA for the provision of information and the performance of economic analyses. Our earlier Response has also already addressed the alleged flaws in methodology. In summary, absent better information being made available, Regional Board staff continues to assert that the economic analysis is based on the best available information and conforms to generally-accepted practice.
6.33	2/13/2015	County of Orange	The Regional Board has no legal authority to determine whether a particular mandate is unfunded through Finding 33. This lies within the sole and exclusive jurisdiction of the Commission on State Mandates.	Finding 33 does not contradict or diminish the authority of the Commission on State Mandates. As noted in our earlier Response, "it is entirely appropriate for the Regional Board to set forth the legal and factual basis for why this Permit does not constitute a reimbursable state mandate".
6.34	2/13/2015	County of Orange	"The Draft Permit does not provide adequate technical justification and findings of fact for the exclusion of several categories of non-storm water discharges from the discharge prohibitions." The commenter specifically refers to categories described in 40 CFR 122.26(d)(iv)(B)(1) that are not shown in Table 2 of the Draft Permit.	Sufficient findings have been made for the exclusion of irrigation runoff and its variant terms. All others except for "street wash water", "water line flushing" and "discharges from potable water sources" have been reintroduced into the revised Draft Permit. Street wash water was not included in Order No. R8-2009-0030 or the previous Order No. R8-2002-0010. In Order No. R8-2002-0010, street wash water is expressly subject to an effective prohibition in Provision VI.6.e. Street wash water was included in Order No. 96-31 and in Order No. 90-71. The exclusion of street wash water occurred following the submittal of a report by the City of Los Angeles, *A Study of Pollutants Entering Storm Drains from Street and Sidewalk Washing Operations in Los Angeles, California* in 1997. Additional language has been added to the Technical Report to explain why the exclusion is being continued in this Draft Permit. Discharges from "water line flushing" and "discharges from potable water sources" now require coverage under State Board Order WQ 2014-0194, NPDES Permit No. CAG140001. The inclusion of these discharges in Table 2 would contradict the State Board's permit.
6.35	2/13/2015	County of Orange	The Co-permittees should not be required to obtain separate coverage for *de minimis* discharges outside of the Newport Bay Watershed. Section III.B.3. requires compliance with the *De Minimis* Permit; this represents a change from the current 2009 Permit requirement.	Under the current 2009 Permit, *de minimis* discharges are authorized subject to the requirements in the new Attachment A. The requirements of Attachment A are based on the provisions of the *De Minimis* Permit, CAG998001 and State Board Order WQ 2014-0194-DWQ, NPDES Permit No. CAG140001. Under the current 2009 Permit, the Co-permittees were required to comply with the requirements of the *De Minimis* Permit as incorporated by reference. Although the requirements are referenced differently, under either approach, the Co-permittees are not required to obtain separate coverage. The commenter's allegation that there is a change is incorrect.

6.36	2/13/2015	County of Orange	Section VII.F. of the Draft Permit should be modified to recognize the establishment of, and be consistent with, the County-wide Area Spill Control (CASC) program.	Regional Board staff does not believe that it is appropriate to reference the CASC program within the Draft Permit requirements as this may incorrectly lead the reader to believe that: 1) the program complies with the Permit requirements in its existing state; 2) that the program elements supersede the Permit requirements; or 3) that the CASC is immutable and represents the only mechanism for compliance. None of these statements is true. Regional Board staff recognizes that the proposed requirements of the Draft Permit are based on the CASC as well as interviews with County staff regarding its current level of maturity (i.e. its current scope is broader than described in the 2003 DAMP). We also recognize that, as a practical matter, the Co-permittees may use the CASC as an initial mechanism to start complying with the Draft Permit. The Draft Permit requirements take the additional step of prescribing specific performance metrics which the commenter objects to. After further consideration, Regional Board staff believes that the requirements would create inflexibility in the event that the metrics could be improved by substitution or modification. Consequently, the prescriptive metrics have been deleted in favor of allowing the Co-permittees to develop their own metrics pursuant to the draft requirements in Section I.A.
6.37	2/13/2015	County of Orange	The Draft Permit should not require inventories of construction projects that are less than 2 weeks in duration.	Based on interviews with program managers during audits, Regional Board staff learned that the source information for inspection inventories came from departments operating municipal permitting programs. This means that the inspection inventory is a subset of a larger inventory of permitted projects, including construction projects less than 2-weeks in duration. As a matter of normal practice, Regional Board staff does not expect the Co-permittees to experience any difficulty in maintaining such an inventory since it is effectively populated by the applicants and is effectively already in their possession. However, as suggested in our earlier response, difficulties may come from inadequate coordination between departments to communicate the required construction project subset to storm water program managers. Where such difficulties exist, it should be within the power of each Co-permittee to address them.
6.38	2/13/2015	County of Orange	The inventory of construction sites should be updated on a bi-annual basis. The higher frequency is unreasonably burdensome and does not provide a benefit to water quality. A bi-annual frequency is recommended.	As indicated in Response 6.37 above, permit applications are received by Co-permittees in near real time by various departments. The cities program managers that were audited reported no difficulties collecting relevant subsets of data from those departments at intervals as short as bi-weekly. The commenter offers no evidence that such inter-departmental data requests are any more burdensome than the many other inter-departmental data requests that likely occur on a daily basis within the Co-permittees' organizations. The commenter's basis for the recommendation is that time spent updating the inspection inventory would be better spent performing inspections. The commenter offers no estimate of how many more inspections could be performed versus updating. If the time spent is overly burdensome as claimed, the update process should first be examined to improve it. The proposed bi-annual frequency would also mean that projects with durations less than the 6-month frequency interval would not be placed in an inspection inventory and consequently not be inspected at all. It would also mean that completed inspection projects would not be removed from the inventory in a timely manner. The only identifiable benefit of a longer update frequency is that it would be an indirect way to reduce the number of performed inspections. While it is clear that a number of inspections will not be performed if the recommendation is accepted, it is not clear what benefit to water quality will be achieved. The potential impact on water quality could be negative if the number of these short term sites was disproportionate compared to the number of longer-term project sites. In consideration that short-term projects during the dry season face significantly less risk of exposure to storm water than wet season projects, Regional Board staff has adjusted the frequency of inventory updates to twice during the dry season.

6.39	2/13/2015	County of Orange	The recommended approach in the Report of Waste Discharge to inspecting industrial sites was not included.	As described in the Technical Report and the Response to Comments on the First Draft Permit, the recommendation has been considered and rejected. In part, although the recommendation has been characterized as a reprioritization of resources, Regional Board staff is unable to distinguish the recommendation from a simple reduction in resources.
6.40	2/13/2015	County of Orange	The recommended approach in the Report of Waste Discharge to inspecting commercial sites was not included.	See Response 6.39 above.
6.41	2/13/2015	County of Orange	The commenter request that the Draft Permit be further revised to be consistent with and reinforce the existing New Development Program.	In general, Regional Board staff does not object to additional changes to improve consistency between the language in the Draft Permit and the 2011 Model WQMP and Technical Guidance Document. Where improvements in consistency can be achieved, changes have been made. Likewise, where improvements to the existing program can be made, requirements have been formulated. Those changes that are proposed in the Draft Permit have been made to improve the existing program.
6.42	2/13/2015	County of Orange	There remains relatively limited practical experience upon which to base an opinion about necessary improvements in the New Development Program and the technical guidance. The Draft Permit should be revised to reinforce the adequacy of the current program documents and the Permittees' current approach for continual improvement.	Regional Board staff cannot reinforce the adequacy of the New Development Program for the reason cited by the commenter. As noted in the Technical Report, many of the new requirements in the Draft Order are synthesized from the 2011 Model WQMP and Technical Guidance Document. Many others are based on findings of program deficiencies that are documented in program audits. Admittedly, many of the audits were performed prior to the approval of the 2011 Model WQMP and Technical Guidance Document. However, even though new audits might find program improvements, this would not negate the need for the requirements. This is because the Draft Permit does not enforce the New Development Program through incorporation of the documents by reference. Therefore, it is necessary that the requirements be expressed independently in the Draft Permit in order for them to be enforceable.
6.43	2/13/2015	County of Orange	The BMP lexicon in the Draft Permit should be consistent with the 2011 Model WQMP and Technical Guidance Document.	As noted in our earlier Response 4.4, Regional Board staff has evaluated the differences in the lexicon. In many cases, the terminology in the 2011 Model WQMP and Technical Guidance Document are shorthand versions of the terminology in the Draft Permit. The terms are so similar that there is little risk that one can be confused for another. The exception is the use of the term "treatment control BMP" in the Technical Guidance Document. This term is commonly used to broadly describe all treatment control BMPs, including LID BMPs. As such, it is imprecise and unsuitable for use in a permit requirement. This imprecision was pointed out by Regional Board staff on more than one occasion in our comments on the documents during their review. The Draft Permit corrects this by substituting a more precise term, "non-LID BMP".
6.44	2/13/2015	County of Orange	The effective date for Section XII.B. should be 12 months following adoption of the Draft Permit.	Regional Board staff believes that the Co-permittees can do more to justify the recommended 12 month period. During a meeting with County staff and other representatives of the Co-permittees on March 26, 2015, Regional Board staff requested a schedule of actions (project timeline) necessary to carry out the changes to the New Development Program documents.

6.45	2/13/2015	County of Orange	Maintaining a record of the decision to classify a project as a priority project, or non-priority project plan is not necessary.	Regional Board staff disagrees. The basis for the decision needs to be recorded in order to document compliance by either the Co-permittee or the applicant. Regional Boards staff has already found and documented in SMARTS, an instance where an industrial facility performed improvements that should have required a WQMP. It appears that the applicant understated the amount of impervious area affected by the project. Alternately, the Co-permittee maybe responsible. Without the record, the Regional Board and the Co-permittee will be hampered in their ability to enforce the respective requirements of the Permit and municipal ordinance as it relates to the program documents.
6.46	2/13/2015	County of Orange	"For projects that do not require a WQMP or non-priority project plan, it is unnecessary for the project applicant to submit these documents as part of the application process."	Regional Board staff agrees. Changes have been made to Section XII.B.6. to clarify this.
6.47	2/13/2015	County of Orange	Third-party verification is a valid approach to address long-term maintenance and performance of structural BMPs. Section XII.B.16. requires the Co-permittees "to develop guidelines for inspecting structural BMPs to ensure proper design and maintenance. The commenter requests that other verification processes to provide proper design and maintenance be allowed in addition to inspections.	SectionXII.B.16 actually requires each Co-permittee to develop, publish, and apply guidelines developed for the purpose of providing that site design and structural treatment controls to be readily inspected and maintainable and generally of a quality that is satisfactory to the Co-permittee. This provision relates to non-technical criteria for the approval of proposed site design and structural treatment controls. It does not relate to inspections. If the commenter is referring to Provision XII.B.15., this provision requires an effective inspection program to identify and correct missing, damaged, or deficient source control, site design, and structural treatment control BMPs, during construction or development. Regional Board staff recognizes that the language of the Provision implies that the program must involve inspections by Co-permittees. In order to focus more on the expected outcome, rather than the verification mechanism, the term "inspection" has been removed. This broadens the verification mechanisms that the Co-permittees may employ to achieve the program's stated purpose. This accommodates the commenter's request as it pertains to the construction phase. Under any mechanism, the Co-permittees assume the risks of defective facilities. This change allows the Co-permittees to choose the mechanisms to manage that risk.
6.48	2/13/2015	County of Orange	Provision XII.C.7., requiring that an applicant to "demonstrate" a source of funding for long-term performance, operation, and maintenance of source control, site design, and on-site structural treatment control BMPs over the life of the project is infeasible.	Regional Board staff agrees. The required demonstration at the time of the approval of the project WQMP is unlikely to represent the circumstances of a project site's operators or funding over the project's lifetime. The language of Section XII.C.10. (revised to Section XII.C.8. in the third revised Draft Order) has been amended.
6.49	2/13/2015	County of Orange	The database attributes required by Provision XII.C.10. are inconsistent with the Co-permittees' electronic database and include redundant requirements that do not add value to the effort.	One of the purposes of an electronic database is to provide rapid access of information to users. The commenter is referring to the attributes required to: (1) serve the needs of municipal inspectors and (2) to evaluate individual or cumulative impacts on groundwater quality from infiltration LID BMPs. The attributes for infiltration LID BMPs were requested by staff of the Orange County Water District for the second purpose. The remaining attributes are for the benefit of inspectors and are necessary to locate and identify a facility; establish a basis to evaluate the facility's function; understand any history of problems; and identify responsible parties. Unless located in a database, the information would remain in individual project WQMPs. These documents would be potentially hundreds of pages long, and might not be in a readily-accessible location or format. Considering the above-stated purposes, Regional Board staff agrees that information on funding sources is not immediately relevant in most cases and has been removed in the amended Draft Permit. The other attributes have been retained.

6.50	2/13/2015	County of Orange	The requirement to incorporate a mechanism to verify the loss rate of a infiltration LID BMP is technically impractical, unnecessary given the ongoing inspection program, and should be removed.	In open systems, such as basins, the mechanism to verify the loss rate might be to take multiple visual readings of a graduated marker in the basin. A graduated marker might also be installed on the inside of a vault or a view port might also be constructed. Similar low-tech methods are employed to monitor flood control basins, flood stages in channels, and capacities in underground tanks. Regional Board staff is unaware of a circumstance in which the requirement would be technically impractical.
6.51	2/13/2015	County of Orange	Section XII.D.10. allows flexibility by allowing structural treatment control BMPs that are undersized. However, the intent is unclear.	In many circumstances, urban projects are required to drain to the public right of way without drainage crossing into adjacent lots. In these situations, the project area will typically be the same as the tributary area for the site's structural treatment control BMPs. Sizing conflicts may occur if the project area is a subarea of the larger lot. Provisions XII.B.5.a.iii. and iv. specify when the BMP must be sized to treat the entire drainage area. In other circumstances, drainage may be allowed to cross property lines and a project area may involve constructing a structural treatment control BMP that accepts the design capture volume from offsite parcels. These situations may occur if off-site flows cannot be diverted away from the facility. Under either circumstance, a structural treatment control BMP may be constructed so that the facility is undersized relative to its tributary area, not simply its project area. An undersized facility may require unconventional operation or maintenance to prevent problems such as flooding or entrainment and bypass. The intent here is to provide a disincentive for a designer to propose a facility that would place a burden on subsequent owners or operators by requiring the disclosure of the burdens.
6.52	2/13/2015	County of Orange	Subsection XII.D. creates a program for approving and testing nonconforming structural treatment control BMPs. The resource requirements for this program are impractical.	Regional Board staff strongly prefers that all structural treatment control BMPs be sized and designed according to published and generally-accepted methods which would negate the application of Subsection XII.D. However, experience has shown that this does not always happen. Subsection XII.D. was created to establish program criteria to develop better BMP designs and, as noted in Response 2.3 above, establish a mechanism where a nonconforming facility that may have inadvertently been approved can demonstrate its effectiveness. Making such a demonstration will not always be practical, but it is necessary to ensure the efficacy of the suite of structural treatment control BMPs at the Co-permittees' disposal. Co-permittees have the ability to avoid the application of Subsection XII.D. by carefully applying published and generally-accepted sizing and design criteria.
6.53	2/13/2015	County of Orange	The commenter objects to the requirement in Subsection XII.H. to obtain a waiver before being allowed to retrofit an offsite development.	See Response 3.1.
6.54	2/13/2015	County of Orange	The commenter objects to being required to consult with local groundwater management agencies on a project-by-project basis in Subsection XII.I. The commenter prefers that the consultation process occur through area-wide planning.	The subject requirement was included at the urging of the Orange County Water District. Regional Board staff will consider alternative language that is mutually acceptable to the Co-permittees and the District.

6.55	2/13/2015	County of Orange	In Subsection XII.J., indoor harvest and use of storm water should only be considered as the applicable plumbing code allows.	The “applicable plumbing code” may be the Uniform Plumbing Code as adopted into local municipal ordinance. As such, the “applicable plumbing code” may be added to by the Co-permittees. As noted in our earlier Response, Regional Board staff is unaware of any prohibition on indoor harvest and use of storm water in the Uniform Plumbing Code. We again observe that the Uniform Plumbing Code allows indoor plumbing for hazardous materials, such as natural gas in residences and schools. In comparison, it is unclear what the basis would be to prohibit harvest and use of storm water. Acknowledging the “applicable plumbing code” appears to invite the Co-permittees to prohibit indoor harvest and use, potentially as a means to preempt meaningful consideration of the BMP. Including the commenter’s recommendation inappropriately subordinates the permit requirements to a potentially unjustifiable prohibition.
6.56	2/13/2015	County of Orange	Section XII.L.1.d.i. requires maximizing the retention of the design capture volume onsite even when the volume will be conveyed to an off-site LID BMP. Offsite structural BMPs should be in the same level as onsite BMPs.	After further consideration, Regional Board staff recognizes that the requirement to maximize infiltration of the site’s design capture volume is a worthy objective regardless of the type of BMP employed. As worded, a project proponent would have to consider non-infiltrating retention LID BMPs before using an off-site LID BMP. This is not our intention. Consistent with the commenter’s point, an effort to maximize infiltration should be applied evenly regardless of the location of the structural treatment control BMPs and in conjunction with onsite site design and source control BMPs. In order to communicate this better, “retention” has been replaced with “infiltration”. The subsequent requirement to maximize infiltration has been relocated to Subsection XII.C. so that it can be evenly applied. This re-wording and re-organization means that structural treatment control BMPs must maximize infiltration regardless of their location on-site or off-site. Onsite source control and site design BMPs must also maximize infiltration.
6.57	2/13/2015	County of Orange	The commenter believes that non-priority project plans should be prepared and approved by persons whose qualifications are appropriate to the complexity of the plan.	Regional Board staff agrees. The revised Draft Permit has been amended accordingly.
6.58	2/13/2015	County of Orange	Policies and procedures to identify non-priority projects which will require non-priority project plans should be developed by the Principle Permittee to ensure consistency across the permit area.	There is currently no general requirement for consistency among the different Co-permitees’ permit programs. Development projects in different jurisdictions will typically face different sets of requirements; this is generally accepted by the development community. Differences in requirements for non-priority project plans will become a part of that varying landscape. Regional Board staff prefers a unifying approach. But without an understanding by Regional Board staff of the extent of those differences between the Co-permittees, as the commenter’s recommendation would preclude, Regional Board staff believes that it is premature to presume that a single, one-size-fits-all approach is appropriate.
6.59	2/13/2015	County of Orange	Section XIII.B.5. requires the Co-permittees to develop educational content with the “most” potential to appeal to audiences. This would be difficult, if not impossible, to demonstrate and is therefore without merit. Prioritizing messages should be done through the rationale in the written plan.	The purpose of the phrasing to focus the reader on maximizing impact, not having some neutral level of impact or little impact. It is not intended to establish an enumerated threshold that must be met. It is common practice for advertising agencies to tailor messages to target audiences with the most potential to purchase products. Regional Board staff does not believe that it takes any particular expertise to view a commercial and readily identify the target audience. We are confident that the Co-permittees can likewise identify target audiences for their own public education program.

6.60	2/13/2015	County of Orange	The approach to drainage facility maintenance was modified from the fourth-term Permit without technical justification. See Comment 4.	See Responses 6.15, 6.16, and 6.17.
6.61	2/13/2015	County of Orange	The requirements of Section XIX do not reference established guidance for the performance of program effectiveness assessments. The commenter specifically refers to a guidance document developed by the California Stormwater Quality Association.	The CASQA guidance was not referenced in the Draft Permit for the same reasons that other specific program documents are not referenced as explained in Response 6.36 above. Furthermore, those reasons have been incorporated into additional language in a new Section XI.C. of the Technical Report.
6.62	2/13/2015	County of Orange	The approach in the Draft Permit to performing program effectiveness assessments is not consistent with the approach that has "generally been utilized within California".	After reviewing 5 years of Annual Progress Reports and performing over 20 program audits to date, Regional Board staff has been unable to identify any comprehensive approach that has been 'generally utilized' by the Co-permittees to perform program effectiveness assessments. Therefore, the commenter's basis for comparison is not apparent. As noted in the Technical Report, the basis for the performance of program effectiveness assessments relies on methods of quality management that have been successfully practiced for almost half a century in Japan, the United States, and elsewhere in business and in government.
6.63	2/13/2015	County of Orange	The commenter recommends requiring effectiveness assessments on "prioritized BMPs". "It is not a good expenditure of resources to track and assess the effectiveness of all the BMPs employed by the stormwater program or even to assess each of the program elements."	In testimony provided to the California Senate's Select Committee on California Job Creation and Retention Informational Hearing on Regulatory Reform on October 6, 2011, CASQA representatives stated "permittees need to be able to implement cost-effective [BMPs] and not be required to implement BMPs that are not cost-effective or are not proven to be, in fact, best management practices." The Draft Permit approach accommodates CASQA representative's viewpoint. If a BMP is deemed worth doing, its effectiveness should also be deemed worth evaluating to be sure that it is, in fact, a BMP. Unless the BMP is being used for purposes other than improving water quality, it is unclear what reasoning supports the alternate. Regional Board staff must note that there is no requirement that each BMP be evaluated with an individual performance metric. One performance metric may be used to evaluate a group of BMPs which serve a common purpose. Regional Board staff believes that the requirements are flexible enough that the Co-permittees can avoid developing an overly burdensome program.
6.64	2/13/2015	County of Orange	The commenter objects to developing a generalized model of how each pollutant is released into the environment. The purpose of this is unclear and appears to be overly burdensome.	There is no requirement that there be a separate model for individual pollutants. Provision XIX.C.1. (revised to Section XIX.C.1. in the third revised draft Order) also allows for pollutants to be evaluated based on functional similarities (e.g. "trash", "nutrients", "organochlorine pesticides"). A model can only be as detailed as the understanding of the process. If a model cannot be as detailed as desired, the information gaps that the model reveals can form the basis to support additional research and to limit other program investments until additional information is acquired. Fundamentally, the modeling requirement serves to make the Co-permittees' rationale behind their storm water program transparent. The purpose of the modeling is further explained in Section XII.P. of the Technical Report.
6.65	2/13/2015	County of Orange	The commenter objects to the requirement in Provision XIX.C.2. to describe BMPs in the pollution process and where in the process they are to be applied. The purpose of the requirement is unclear and appears to be overly burdensome.	Identifying BMPs in relationship to the pollution process helps to illustrate the purpose of the BMP. Establishing a clear purpose can help shape the nature of the BMP and identify appropriate performance metrics. For example, public education efforts pertaining to litter may be intended to persuade target audiences to not litter. Another public education effort pertaining to litter may be to encourage the public to pick up litter, as in the case of gazebo rental users in parks for private events. Both BMPs have similar purposes. But because they relate to the pollution process at different points, they may be structured very differently.

6.66	2/13/2015	County of Orange	The waste load allocation tables in the Appendices are unnecessarily converted from the previous Permit, introducing potential confusion and inconsistencies.	The earlier tables describe “waste load allocations” as “water quality-based effluent limits” or WQBELS at the urging of US EPA. Some WQBELs were removed because their compliance dates have been superseded by other dates. Only the relevant current compliance dates are shown. Important information, previously shown in footnotes is now shown more prominently as notes in larger font, closer to the related tables or as provisions. Some statements have been reworded in a more direct fashion suitable for an enforceable provision. Some table headings were modified to clearly indicate what the tables’ content are. Statements regarding the underlying assumptions to the development of waste load allocations have been omitted; although relevant during their development, they are less relevant in implementation. The commenter has not described any specific instances where the changes could lead to “confusion and inconsistencies”.
6.67	2/13/2015	County of Orange	The commenter generally requests that requirements that monitoring and reporting be consistent with the applicable Basin Plan Amendment be included in the Appendices or in Section XVIII.	The requested requirement is found in the Monitoring and Reporting Plan in Provision II.B.3.
6.68	2/13/2015	County of Orange	The sediment TMDL does not establish waste load allocations for the Co-permittees.	The sediment TMDL clearly assigns allocations to named urban Co-permittees. Those named Co-permittees discharge via point sources. Consequently, the allocations are waste load allocations that apply to the Co-permittees and are properly implemented via NPDES permits.
6.69	2/13/2015	County of Orange	The inclusion of the City of Stanton as a responsible party for the San Gabriel River TMDL – Coyote Creek Metals TMDL is inconsistent with the Los Angeles Region basin plan amendment. The Santa Ana Region should not add a new responsible party to this TMDL without going through the public process.	The Santa Ana Regional Water Quality Control Board is not adding the City of Stanton to the Los Angeles Region’s TMDL. The City of Stanton is identified as a responsible municipal agency, along with the other Orange County municipalities for which the Los Angeles Region’s TMDL is applicable.
6.70	2/13/2015	County of Orange	Sediment load allocations have been inappropriately incorporated into the Permit.	See Response 6.66.
6.71	2/13/2015	County of Orange	The Toxics TMDL for the Newport Bay Watershed does not mention that waste load allocations for some pollutants have been superseded by Basin Plan amendments adopted by the Santa Ana Regional Water Quality Control Board.	Appendix G has been modified to address the commenter’s observation.
6.72	2/13/2015	County of Orange	The implementation schedule and actions in the Metals TMDL for Coyote Creek are not included in Appendix H.	To the extent that Regional Board staff was able to craft enforceable requirements, the adopted implementation schedule for the Metals TMDL for Coyote Creek has been incorporated into Appendix H. Regional Board has compared the approach used by Los Angeles Regional Board staff in their development of Order No. R4-2012-0175 (Attachment P) and is unable to find any conflicts between the WQBELs in the Draft Permit and in Attachment P of Order No. R4-2012-0175.

6.73	2/13/2015	County of Orange	The phrase “wet-weather sampling events may not be consecutive” in Section II.C.5. of the MRP appears to have unintended meaning.	The language has been removed to emphasize the need for interceding dry period for wet-weather sampling as opposed to precluding wet-weather events to follow after another.
6.74	2/13/2015	County of Orange	The commenter requests language in the MRP that allows flexibility to tailor analytes based on outfalls and sampling events.	Language has been included to allow more detailed monitoring changes subject to approval by the Executive Officer.
6.75	2/13/2015	County of Orange	The commenter raises a number of concerns with the validity of the Test of Significant Toxicity.	The earlier Response 16.82 found in the Response to Comments on the First Draft Permit have already addressed the commenter’s remarks.
6.76	2/13/2015	County of Orange	The requirement for the performance of Causal Assessments is premature and the earlier Response suggests that the onus is on the Co-permittees to provide resources to developing Causal Assessments. If the Co-permittees participate in the use of Casual Assessments, it should be on a voluntary basis.	The performance of a single Causal Assessment does not constitute sufficient resources to fully develop Causal Assessment methods. It will help, but the effort will also provide practical insight and experience in the application of Causal Assessments in southern California and with the refinement of techniques. Since Causal Assessments are likely going to be required from the Co-permittees on a more frequent basis, it is fitting that the Co-permittees participate early on. Regional Board staff believes that a Casual Assessment should be required. However, the Provisions of the MRP allow the Co-permittees to partner with others to affect the Casual Assessment.
6.77	2/13/2015	County of Orange	Since toxicity testing requirements were removed from Section II.J., Toxicity Identification Evaluations should also be removed.	Toxicity testing requirements have not been removed from the MRP and therefore the Toxicity Identification Evaluation requirements remain unchanged.
6.78	2/13/2015	County of Orange	The nature and frequency of monitoring at outfall and receiving water locations, and of toxicity testing programs should be further amended to reflect the monitoring as currently practiced.	Additional changes have been made to the MRP.
6.79	2/13/2015	County of Orange	The date of the submittal of the first Annual Progress Report should be postponed by a year to reflect the effects of the new fifth-term Permit.	Regional Boar staff disagrees. We do not expect the 2015 Annual Progress Report to solely reflect the fifth-term Permit. The information in the 2015 Annual Progress Report will likely be largely influenced by the current 2009 Permit. As such, it is necessary to evaluate compliance for that reporting period.

7.1		Orange County Coastkeeper	The commenter acknowledges the money and time "dedicated to the issues", but the "iterative process has been underutilized and ineffective to date in bringing MS4 discharge into compliance with water quality standards." The program's failure is "the direct result of widespread non-compliance and non-enforcement by Regional Boards. Discussions on the iterative process must be taken with a focus on Regional Board implementation and discharger compliance."	Regional Board staff disagrees with the commenter's summary assessment. In the County of Orange alone since the Permit's adoption in 2009, Regional Board staff has performed over 20 program audits to date. In the entire Santa Ana Region, Regional Board staff has performed 93 inspections of the Co-permitee's construction projects, 61 of those in Orange County. Regional Board staff has taken enforcement action in cases where we have become aware of violations. Regional Board staff believes that achieving water quality standards will depend on a number of fundamental factors including: 1) the effective application of the skills of Regional Board staff and the Co-permittees' staff; 2) the adequacy of resources dedicated to the goal; 3) barriers within the systems that Co-permittees' staff operate in; and 4) barriers within the systems - principally the Permit - that Regional Board staff operates in. Since 2009, Regional Board staff has worked to understand these four fundamental factors. Nearly all of the audits performed in Orange County over the years have been carried out in part to better understand the systems that the Co-permittees' staff operate in and understand the effects and limitations of the systems that the Permit established. Regional Board staff believes that the commenter's allegation that the iterative process is underutilized and ineffective can be attributed to a combination of deficiencies in any of the four fundamental factors outlined above. Regional Board staff's focus is on that factor which we have the most control: the next Permit. The purpose is to improve the various systems established by the current Permit, particularly the "iterative process", to better define and enforce it. Regional Board staff believes that significant improvements in the Permit will result in improvements in the other three factors.
7.2		Orange County Coastkeeper	The Regional Board is prematurely wading into the controversy surrounding the receiving waters limitation language. The commenter provides a summary of the debate surrounding the language in the San Diego Region's language and the commenter's objections to changes proposed by the State Board.	The comment is noted. Regional Board staff believes that the amended receiving water language and the new language of Section XI of the amended Draft Permit is consistent with the method approved by the State Board.
7.3		Orange County Coastkeeper	The commenter proposes a process that is 1) designed to achieve compliance with all applicable water quality based requirements within the 5-year life of the Permit; 2) assessed using peer reviewed computer modeling; and 3) is carried out under time schedule orders.	The Draft Permit proposes a process that is largely similar to what is described by the commenter with three exceptions. First: the Draft Permit does not presume that water quality standards or water quality-based effluent limitations can be achieved within the 5-year life of the Permit. Where a TMDL has been adopted that establishes such a deadline, the deadline will be enforced in the final Permit. But in other circumstances, Regional Board staff is unaware of any evidence that this is the case as a rule for all other pollutants. This may be achievable for some pollutants in some watersheds where the relationship between BMPs and their effect on receiving water quality is well understood. But these circumstances may not widely exist. Second: The Draft Permit does not presume that there is always a valid computer model that is designed to reliably assess the likelihood of a program achieving water quality standards. Even in cases where a model does exist, the Draft Permit does not presume that there is input data that is complete and of sufficient quality that a reliable output can be reasonably expected (a phenomena recognized in computer programming parlance as GIGO – "garbage in garbage out"). Instead, Regional Board staff believes that the combinations of models and pollutant data needs to be assessed first. In some circumstances, other forms of evidence, such as statistical trend analysis, may be equally valid to support a proposed program. These should not be categorically excluded because they are not based on a computer model.

				Third: The Co-permittees would be considered in compliance with the Permit while they develop plans to come into compliance with water quality standards or water quality-based effluent limits. The Draft Permit provides a conditional fixed deadline for the submittal of the first draft plan and a floating deadline that depends on when feedback is given by the Executive Officer.

7.4		Orange County Coastkeeper	The commenter encourages the Regional Board to require the Co-permittees to develop an inventory of existing development sites that are candidate for being retrofit with structural treatment controls and prioritized by “areas with significant water quality problems”.	Regional Board staff has not ignored the County’s existing obligations under R9-2015-0001as alleged by the commenter. We have carefully considered and rejected the recommendation. See Response 10.3 below. Regional Board staff has considered that, during the term of the current 2009 Permit, that the Regional Board has not received a notice that any project was unable to incorporate structural treatment controls. This would be an indication that there was any demand for the service suggested by the commenter. If such demand existed, then it might be beneficial for the Co-permittees to invest the hours necessary to identify property owners willing and able to voluntarily shoulder the operation and maintenance cost of a structural treatment control. Absent evidence of a demand for this service, Regional Board staff believes it would be imprudent to cause the Co-permittees to redirect their resources away from services to their communities for which there is a demand. Regional Board staff has also considered the potential nature of those transactions between project applicants and volunteer property owners. Certainly, the Co-permittees could develop the inventory. But those property owners would be under no obligation to enter into these transactions. They could change their minds. They could change owners. The reliability of that inventory would be suspect very quickly and the cost of keeping the inventory current for the benefit of a very small number of projects would likely be disproportionately high. The property owners would reasonably expect compensation for accepting the maintenance costs of structural treatment controls and the costs of disruption to business. The compensation demanded could be predatory and unnecessarily increase the social cost of protecting water quality. Regional Board staff has little reason to believe that a project proponent would be attracted to engaging in these transactions.
7.5		Orange County Coastkeeper	The Draft Permit must be updated to reference the existence of Orange County’s Marine Protected Areas.	Regional Board staff has examined the restrictions and prohibitions for Marine Protected Areas established in the South Coast by the Department of Fish and Wildlife. Generally, these restrictions and prohibitions relate to recreational and commercial activities and not to discharges of pollutants. We are unable to identify restrictions or prohibitions which directly relate to the scope of the Draft Permit. Nevertheless, Marine Protected Areas have been included in the definition of “Environmentally Sensitive Area” shown in the glossary of the revised Draft Permit. Regional Board staff has reviewed the Marine Protection Act and determined that this clarification is consistent with the Legislative Findings and Declarations and that the term Marine Protected Areas fits within the meaning of “Environmentally Sensitive Area”. The change in the language of the revised Draft Permit does not reflect a change in the meaning of the term “Environmentally Sensitive Area”; it reflects a clarification and the recognition that the commenter seeks. The definition affects the scope of priority projects in Section XII, the inventory in Section XIV, and facility prioritization in Section XIV of the Draft Permit.
8.1		Orange County Water District	The commenter provides background to establish their interest in the protection of groundwater in Orange County from degradation and contamination. The commenter asserts that the protection of groundwater “is best accomplished through careful siting and management of LID BMPs using knowledge of potential water quality impacts associated with various land uses.., site-specific land use conditions, depth to groundwater, and underlying groundwater quality, among other factors.”	Regional Board staff generally agrees. The Draft Permit incorporates all of the factors described into the process for siting infiltration LID BMPs.
8.2		Orange County Water District	The commenter requests that provisions on infiltration LID BMPs for the protection of groundwater be expanded to include biotreatment control BMPs.	A similarity between infiltration LID BMPs and biotreatment control BMPs is that biotreatment control BMPs may infiltrate a large portion of their design capture volume into the underlying groundwater. Consequently, vertical separation from groundwater is specified in various published engineering design manuals. Those standards for separation from groundwater are already enforced by Provision XII.D.16. in the revised Draft Permit (XII.D.15. in the Second Draft Permit). An important distinction between the two is that biotreatment control BMPs have design features that make water quality problems more readily detectable than many infiltration LID BMP designs. All biotreatment control BMPs have a surface component which is readily visible to an observer on the ground. In addition, biotreatment control

				BMPs also incorporate vegetation at that surface whose morbidity or mortality could provide another mechanism for monitoring the condition of the facility. Since an infiltration LID BMP is likely to often be an underground vault these mechanisms are not always available to readily detect a problem. This Order provides a more protective standard for separation from groundwater for infiltration LID BMPs as a result.

8.3		Orange County Water District	The commenter requests changes to Provision XII.J.2. to more narrowly define when Co-permittees must consult with the local groundwater management agency.	Regional Board staff has narrowed the requirement as requested.
8.4		Orange County Water District	The commenter requests that, where the separation from groundwater to an LID BMP is reduced to less than 10 feet, that the location of the depth to groundwater be known with a greater degree of certainty. The commenter requests that Provision XII.J.3. be amended so that information on depth to groundwater be based on site-specific information where available.	Regional Board staff agrees and has amended the revised Draft Permit accordingly.
8.5		Orange County Water District	The commenter requests that Provision XII.J.5. be amended so that infiltration LID BMPs are not sited over areas with soil or groundwater contamination without consultation with the local groundwater management agency. Additional changes are requested to address irregular language.	Regional Board staff agrees that the intent of the Provision is unclear. We have amended the language into separate provisions for clarity. While Regional Board staff supports the need for additional information and coordination in the situations addressed by the Provision, we do not support crafting a provision that enforces requirements that might be imposed by another entity. This could potentially place the Regional Board in an inflexible position of enforcing another entity's requirements where that entity has no independent authority. Consequently, we have amended the Provision but rejected the requirement to make a demonstration satisfactory to the local groundwater agency. Similar statements that would set up this relationship in Subsection XII have also been removed.
9.1		City of Santa Ana	The commenter requests that there be a requirement to "promptly notify" the Regional Board of exceedances of water quality standards in Section IV of the second Draft Permit. This would be consistent with the language of State Water Resources Control Board Order No. 99-05.	Regional Board staff has amended the revised Draft Permit to require prompt notification as a matter of consistency with Order No. 99-05. This requirement is insufficiently vague. The ambiguity is addressed by Provision IV.C. which states that determinations will be made, in part, based on assessments of water quality data performed according to scheduled cycles of monitoring, reporting, and analysis required in Monitoring and Reporting Program No. R8-2015-0001 (MRP). The 'prompt notification' element of Order No. 99-05 is specifically satisfied by requiring regular monitoring that is designed to identify exceedances of water quality standards and related WQBELs, analysis of the data, and reporting according to the schedule. This process is not fully described in Section IV. It is located in the MRP. Section IV already refers the reader to the MRP and we do not see the need to modify this Section. Regional Board staff has modified the Technical Report to clarify the manner of notification.
9.2		City of Santa Ana	The commenter requests that language be added to Provision XVIII.A.3. summarizing the methods of complying with WQBELs.	The preceding provision already directs the reader to subsequent sections that detail the methods of complying. The addition of the commenter's recommended summary language would potentially tempt the reader to not continue to read the more detailed provisions of Section XVIII. This could lead to serious consequences for the intended audience, the Co-permittees. Therefore, the commenter's requested change is rejected.

9.3		City of Santa Ana	The commenter objects to statements asserting that MS4s can be waters of the U.S.	See Response 4.5.
9.4		City of Santa Ana	The commenter objects to the exclusion of the terms “background” and “naturally-occurring” and their replacement by “non-anthropogenic” in Finding 2 and Section IV.C.3.	Regional Board staff agrees and the revised Draft Permit has been amended accordingly.
9.5		City of Santa Ana	The commenter requests that original language in Subsections VI, VIII, and IX of the Draft Permit, regarding the limitations on municipal action be restored.	The omission or inclusion of the language does nothing to affect the actual limitations. However, the inclusion of the language implies a disclaimer that there may be conflicts between municipal authority and the requirements of the Draft Permit where no conflicts in fact occur. Regional Board staff does not wish to suggest that the requirements were written in such a manner that we feel the need to include a disclaimer. The requirements have been written with careful consideration of limits on municipal action; related inspection programs have been in place long enough that conflicts would have come to light; and Co-permittees have sufficient experience to avoid conflicts.
10.1		U.S. Environmental Protection Agency	The commenter recommends that Section XII.F. be revised to enable “offsite projects” if water quality protections are in place at the site of the priority project and it’s clear that “offsite projects” will provide water quality benefits that are equal or greater than onsite controls. The commenter offers sections of the San Diego Regional MS4 Permit and the Los Angeles County MS4 Permit as examples.	Regional Board staff believes that a successful regional or sub-regional BMP can be achieved by avoiding unnecessary regulatory complexity. The commenter places Regional Board staff in the awkward position of critiquing our regional board colleagues. Instead of attempting to dictate the process by which regional or sub-regional BMPs may be born from, the Draft Permit focuses on the circumstances under which their use is acceptable. This avoids creating what appears to be separate – but allegedly equal – performance criteria. In contrast the performance criteria in the Draft Permit are clear, uniform, and based on sound engineering. They are generally the same whether the structural treatment control BMP is on-site or off-site. To more fully support this approach, a modification has been made to Section XII.F. to make the sizing criteria more considerate of the differences between tributary areas for on-site and off-site facilities.
10.2		U.S. Environmental Protection Agency	The commenter recommends clarifying that a facility that uses an on-site non-LID BMP must implement an off-site “retention project or some other alternative means”.	Under the process established by the Draft Permit, the commenter’s recommendation presumes that a project proponent is faced with the choice of using an available off-site BMP and possibly having to construct pre-treatment controls or constructing a non-LID BMP on site. In this situation, the Co-permittee could not allow the project proponent to rely on a non-LID BMP unless the proponent could demonstrate that the use of the off-site LID BMP is technically or economically infeasible pursuant to the established hierarchy. Note that the selection hierarchy applies regardless of the location of the BMP. Note also that we are presuming that the hazards of the off-site facility have already been evaluated and mitigated in a separate process. An alternate presumption is that an off-site facility is not available but can be constructed. If not correct, the non-LID BMP would be an allowable alternative on site. If an off-site facility could be constructed, this alternative would be considered through the “Fourth Priority” of offsite retrofits. This would not always produce LID BMPs. Without the “Fourth Priority”, the hierarchy would not require a project proponent to expand the scope of their project to include areas outside of the original project footprint. Regional Board staff believes that there are significant technical and legal issues which would make this path infeasible for a large majority of project proponents.

10.3		U.S. Environmental Protection Agency	The commenter clarifies their earlier comments on the First Draft Permit. The commenter recommends that the Permit require the Co-permittees to identify public and private property that may be candidates for off-site retrofits.	The recommended process assumes that the step of identifying candidate sites is difficult and warrants early information collection by the Co-permittees. Given the range of storm water treatment products available in the market, Regional Board staff disagrees. It would be a simple matter and we are confident that one could easily identify candidate sites with a drive down any city street. Regional Board staff has discussed this approach on few occasions where it was necessary to consider it with individual members of the development community through our CWA Section 401 process. Members have reported that the greatest difficulty with this approach is the transaction cost of engaging with the owners of candidate sites. The transaction cost includes the costs of compensation for the long-term maintenance liability (compensation may take the form of additional property improvements as part of the installation, rather than direct cash payments) and the time-costs of delay in bringing the development project to market during the negotiation process. The commenter's recommendation does not address these barriers.
10.4		U.S. Environmental Protection Agency	The commenter points out that the compliance deadlines in Tables C-1 and C-2 for fecal coliform do not match the dates in Table 5-9f in the Attachment to Regional Board Resolution 99-10.	Regional Board staff has amended the date in C-2 to match the dates on page 5-113, bottom paragraph, of the Basin Plan. Table C-1 and its related provisions have been removed from Appendix C for reasons explained in Section XII.W. of the revised Technical Report.
10.5		U.S. Environmental Protection Agency	The commenter requests that pyrethroids be added to the potential contaminants to be monitored as part of the Monitoring and Reporting Program.	Pyrethroids were inadvertently omitted and have been added to the revised Draft Monitoring and Reporting Program.
11.1		The Walt Disney Company	The concepts of issuing a waiver and generating design capture volume "credits" under Section XII.L. should be separated.	Regional Board staff agrees. The current Draft Permit allows for a project proponent who treats the design capture volume for a tributary area that is larger than the project's portion draining to the facility to trade the excess design capture volume if the facility is a LID BMP. This concept is significantly separate from the issuance of a waiver. The revised Draft Permit has been amended to separate the two concepts into their own permit subsections.
11.2		The Walt Disney Company	The commenter objects to the requirement for a waiver in order for a project to be eligible to use a credit.	The Draft Permit does not require that the project proposing to use a credit to receive a waiver. The project must be eligible for a waiver. The amended Draft Permit creates a new credit program that allows a person to install a structural treatment control LID BMP, independent of a priority project, and generate units of design capture volume that can be transferred to priority projects that need them. If the facility is installed in association with a priority project, then any design capture volume or flow that is treated by the facility, in excess of that needed by the associated project, can be traded and therefore function as a sub-regional facility. Unlike sub-regional facilities in Subsection XII.M., credits can be traded with projects that do not drain to the facility but which drain to the same nearest water of the U.S. The trading market is limited, however, to those projects that are owned by the proponent. These amendments address the commenter's concern.

Construction Industry Coalition on Water Quality

February 13, 2015

Mr. Adam Fischer
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501

Via Email: adam.fischer@waterboards.ca.gov

RE: Comments on Draft Orange County Municipal Separate Storm Sewer System ("MS4") Permit, NPDES Permit No. CAS61080

Dear Mr. Fischer:

The Construction Industry Coalition on Water Quality (CICWQ) is submitting comments concerning the Draft Orange County Municipal Separate Storm Sewer System ("MS4") Permit, NPDES Permit No. CAS61080 (herein referred to as Draft Permit). We are submitting this letter on behalf of the CICWQ membership, which is described below.

CICWQ is an advocacy, education, and research 501(c)(6) non-profit group of trade associations representing builders and trade contractors, home builders, labor unions, landowners, and project developers. The CICWQ membership is comprised of members of four construction and building industry trade associations in southern California: The Associated General Contractors of California, Building Industry Association of Southern California, Engineering Contractors Association, and Southern California Contractors Association, as well as the United Contractors located in San Ramon. Collectively, members of these associations build a significant portion of the transportation, public and private infrastructure, and commercial and residential land development projects in California.

In preparing this comment letter, we draw from many years of our members' collective experience working both on public infrastructure and facilities, and private commercial, industrial, and residential development projects in Orange County that are governed by NPDES permits issued by the Santa Ana Regional Water Quality Control Board (Regional Board).

As you know, CICWQ and our affiliated trade associations including Building Industry Association of Southern California, Orange County Chapter and Building Industry Legal Defense Foundation submitted comments on earlier permit drafts and participated in workshops. We appreciate the Regional Board's consideration of our input, and we note positive changes have been made in the Draft Permit regarding the planning and land development requirements affecting CICWQ's membership.

At this time, however, we remain concerned about the lack of permit language clarity and clear process description for those priority projects which may have available for use an "off-site" pathway for compliance with the on-site retention standard for water quality treatment control and hydromodification control, where required. We see no clear language that equates on-site compliance with that of using an off-site project or a sub-regional/regional facility for compliance with WQMP requirements. We ask that these two options be made co-equal, and clearly stated in the permit. We believe introducing clear permit language regarding on- and off-site compliance with WQMP requirements would greatly clarify the permit's intent and procedures. Clarity in permit requirements would also potentially facilitate broader adoption of these types of multi-benefit regional approaches—regulatory certainty for participating development projects is crucial for projects to provide the funding necessary to get regional projects started and completed.

As we understand the process now described in Draft Permit Section XII., New Development (Including Significant Redevelopment) subsections F to K, it is not clear whether a project proponent (who could take advantage of an off-site project or sub-regional/regional facility) would first need to perform a hierarchical engineering feasibility analysis described in Section XII. subsections F to I, including the new requirement to analyze retrofit of existing development, and then either seek a waiver as described in Section L. Waiver of Structural Treatment Control BMPs and Credit Programs, or direct a portion or all of the design capture volume to and participate in a regional or sub-regional facility subject to the conditions described in Section K. Off-site Structural Treatment Control BMPs: Regional and Sub-Regional Facilities. Please note there are some subsection letter heading inconsistencies and redundancies in Section XII.

1.1

We understand that the Regional Board's intent is to allow qualifying off-site or regional BMPs to be used as a co-equal pathway to on-site BMPs, provided that the selection and design of these facilities follows the same hierarchical engineering analysis (i.e., retain then biotreat, and so on) and we believe this is a reasonable approach. However, requiring a project proponent to perform an engineering feasibility analysis of on-site retention when an appropriately approved off-site or regional project is available to the project at the time of occupancy is not reasonable, and we do not believe it is the Regional Board's intent to do so. We suggest that a minor adjustment of language could provide the clarity that is needed. In the Draft Permit currently, direction to a project proponent seeking to use an off-site project or sub-regional/regional facility is given in XII. H.5:

> *"If a project proponent does not propose to use any LID BMPs on-site and a regional or sub-regional off-site LID BMP, that meets the requirements in Section XII.K. below, is planned to serve the project, the Co-permittees may require the use of the regional or sub-regional facility. The Co-permittees must require any BMPs that are needed to satisfy pre-treatment requirements for that facility where applicable."*

We suggest the following changes to the Draft Permit language that would clarify the co-equal process and would replace the language currently in XII H.5:

1.1

> *"If ~~a project proponent does not propose to use any LID BMPs on-site and~~ a regional or sub-regional off-site LID BMP project or facility, that meets the requirements in Section XII.K. below, is planned to serve the project, the Co-permittees may ~~require~~ allow the use of the regional or sub-regional facility in lieu of on-site LID BMPs. The Co-permittees must require any BMPs that are needed to satisfy pre-treatment requirements for that facility where applicable."*

We raise this issue with you because we believe, contrary to some of the statements made in the Draft staff Technical Report (see pages 31-34 of 97), that off-site compliance with LID requirements, including regional BMPs, will ultimately become a process that land development projects in Orange County (and perhaps the entire Santa Ana region) use for compliance, especially in urban and built out and constrained dense environments. It is our belief that a number of factors have inhibited the development of such projects/programs, not least of which is the Great Recession, which caused a tremendous slowing of land development and re-development activity in Orange County since the 4th term MS4 permit was adopted in 2009, as well as lack of clarity in the pathways for using regional BMPs as provided in the 4th term permit and the associated Model WQMP.

1.2

Furthermore, it is our understanding from discussions with Orange County Public Works (and municipal co-permittees in Orange County) and Orange County Water District, that there are some locations along and adjacent to the Santa Ana River, where regional stormwater capture is feasible and could support stormwater runoff from already developed (and potentially re-developed) areas. These types of sub-regional and regional facilities have broad-based public and private sector support, including the State and Regional Water Boards, US EPA, California Stormwater Quality Association, and our membership, as such projects can assist in meeting receiving water quality protection goals, provide augmentation of regional groundwater supplies, and depending on the location and facility configuration and elements, result in other measurable and quantifiable environmental benefits.

One other area of concern we have with the Draft Permit is the extremely short time frame upon which the County of Orange and co-permittees have to begin requiring projects to comply with the new permit provisions as specified in Section XII. B:

1.3

> "*The requirements of Section XII.B., and subsequent sub-sections of Section XII, apply to initial project applications received by the Co-Permittees beginning 90-days after the effective date of this Order (50-days following adoption) and thereafter."*

Construction Industry Coalition on Water Quality (CICWQ)
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1.3

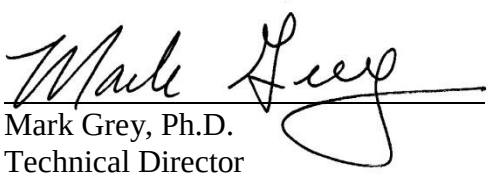
It is very important to CICWQ's members that updated technical program documents (e.g. Model WQMP, TDG, WQMP templates, checklists) and training materials are available for project applicants and reviewers in advance of the date at which new permit requirements will go into effect. As written, the County and co-permittees would have approximately 4.5 months to update the program support documents and conduct training. A more realistic period would be a 10 to 12-month implementation schedule, which would allow more opportunity for the County and co-permittees to carefully incorporate the new criteria as well as facilitate an ongoing improvement effort for the overall program documents, as the Draft Permit requires (Section XII.C.5).

1.4

In addition to undertaking a well-considered approach for incorporating new permit provisions, the implementation effort could involve obtaining input from CICWQ members and other stakeholders on what has been working and what has not in the last 3.5 years of practice since the current program documents went into effect. Based on this input, revisions and enhancements to program technical documents could go beyond the minimum update needed to comply with the revised permit and could include enhancements that result in more consistent application of requirements and better water quality results. Importantly, it would better allow for training of WQMP preparers and reviewers prior to the effective date.

CICWQ's membership is in the forefront of water quality regulation, providing to water quality regulators practical ideas and solutions that are implementable and that have as their goal clean water outcomes. If you have any questions or would like to discuss the content of our comment letter, please feel free to contact me at (951) 781-7310, ext. 210, (909) 525-0623, cell phone, or mgrey@biasc.org.

Respectfully submitted,



Mark Grey, Ph.D.
Technical Director
Construction Industry Coalition on Water Quality

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February 13, 2015

Adam Fischer
Orange County MS4 Permit Liaison
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501Riverside, CA

RE: Comments on draft order R8-2015-0001

Dear Mr. Fischer,

Thank you for the opportunity to comment on the second draft of the Orange County MS4 Permit. This permit clearly establishes a post construction BMP selection hierarchy that appropriately prioritizes runoff reduction approaches but also allows the flexibility to use biotreatment BMPs where retention is infeasible. Where neither full retention nor biotreatment of the water quality flow rate or volume is feasible, treatment controls are allowed in combination with off-site LID based controls. This approach is not new, however the current draft gives some much needed clarity regarding the selection and design specific BMPs.

Structural Treatment Control Performance
Section X.II.D.15 requires that Structural Treatment Controls either be designed to conform to accepted design standards, or have their performance demonstrated in field testing following a recognized protocol. This addition should prevent specification of undersized public domain BMPs which in the past have been constructed using questionable materials or shoehorned into site designs in ways that don't allow typical hydraulic loading rates or flow patterns and can lead to poor performance.

2.1

Biotreatment design in particular is an emerging science. For example, recent research has shown that bioretention media blends using compost amendments can have an extended washout period of where nutrients and dissolved metals leach from the media and produce a net increase in effluent loads. Maintaining hydraulic capacity through the media and mulch layer over time can also be a challenge as mulch degrades and sediment accumulates on the media bed surface. Construction stage issues like inferior material sourcing, excessive compaction and failure to protect systems from construction stage runoff can also cause rapid failure. These are not insurmountable problems, but as guidance documents are updated, they do need to be considered and structural treatment controls constructed to comply with this permit must follow that new guidance.

2.2

Section X. II.D.15 should also prevent the specification of innovative and/or proprietary BMPs that have not been tested following a robust testing protocol like the "Technology Assessment Protocol – Ecology" (TAPE) which is part of the Washington State Department of Ecology's emerging technology evaluation program and can be applied to both public domain and proprietary BMPs. During the current permit term performance documentation requirements for proprietary biotreatment systems have varied widely at the plan check level. Some cities accept promotional brochures with exceptional performance claims and extreme hydraulic loading rates at face value, while others require performance verification through the TAPE program. Establishing a requirement for robust testing of BMPs prior to widespread

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2.2 installation is critical in ensuring that performance is as claimed and that operation and maintenance burdens are reasonable.

2.3 The draft permit also encourages innovation by providing a pathway for acceptance of nonconforming BMPs in Section X.II.E, which allows installation of up to 3 innovative BMPs for the purpose of evaluation.

Baseline performance standards for pretreatment BMPs

2.4 There is no baseline performance standard for pretreatment controls upstream of infiltration in the current draft. Setting one would be a helpful since these BMPs do not need to have high or medium effectiveness for pollutants of concern on site. Their role is primarily to protect downstream BMPs from failure due to occlusion with fine sediment and trash, and to intercept spills prior to infiltration. The Washington State Department of Ecology (Ecology) has awarded Pretreatment General Use Level Designations to several treatment systems that are designed for this purpose[1]. Ecology also has a Basic Treatment Standard that requires removal of finer particles. The New Jersey Department of Environmental Protection has developed laboratory testing protocols for hydrodynamic separators and media filters that are designed to establish sediment removal rates[2]. Requiring that proprietary pretreatment BMPs be sized consistent with their approved flow rates from these programs would ensure that pretreatment BMPs are adequately protective. This change should be made in section X.II.J.

Baseline performance standards for treatment prior to discharge to a regional BMP

2.5 In the current draft there is no baseline performance standard for treatment of runoff that is discharged to an off-site BMP. Section X.II.H.5 appears to waive the requirement that non-LID treatment controls be designed to remove pollutants of concern prior to discharge to an off-site BMP. This last sentence of this section should be amended to require treatment of runoff with BMPs that have medium or high effectiveness for pollutants of concern prior to discharge from a site to a regional facility. Similarly, it should be clarified in section X.II.K (Off-Site Structural Treatment Control BMPs: Regional and Sub-Regional Facilities) that runoff discharged to a regional BMP must be treated on-site with BMPs with medium or high effectiveness for pollutants of concern on site.

Rainwater Harvesting Demand

2.6 The draft permit gives new emphasis to rainwater harvesting. However, feasibility requirements in section X.II.K (Specific Requirements for Harvest and Use LID BMPs) are unnecessarily stringent and should be changed. Irrigation with harvested water in excess of the agronomic demand should be encouraged, provided that it does not create runoff. This can dramatically increase the drawdown rate for rainwater harvesting systems since very little landscape water is required for plant vitality within 48 hours of a storm. Application of harvested water at half the combined ET and infiltration rate of the irrigated landscape should be considered in demand calculations performed in the feasibility screening process.

Summary

Overall, this draft makes some important steps forward in requiring more robust and consistent post-construction BMP selection and design routines. A pathway for innovative BMP testing and approval is

[1] http://www.ecy.wa.gov/programs/wq/stormwater/newtech/technologies.html
[2] http://www.njstormwater.org/treatment.html

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also given. These changes will help to ensure that BMP performance is consistent with expectations. Adding baseline performance requirements for pretreatment upstream of infiltration and for treatment of runoff prior to discharge to regional facilities will ensure that all Structural Treatment Controls are effective. Finally, a simple change to allow application of harvested water to landscapes at a rate that can be evaporated or infiltrated without runoff will boost rainwater harvest in the region. I hope that you will make these changes to the next draft of the permit.

Sincerely,

Vaikko P. Allen II, CPSWQ, LEED-AP
Director - Stormwater Regulatory Management

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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

January 23, 2015

Mr. Adam Fischer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main St., Suite 500
Riverside, CA 92501-3339

Subject: Comments on Second Draft Orange County Municipal Separate Storm Sewer System ("MS4") Permit, Draft Order No. R8-2014-0002, NPDES Permit No. CAS618030

Dear Mr. Fischer:

The Disneyland Resort greatly appreciates the opportunity to comment on the Second Draft Orange County Municipal Separate Storm Sewer System ("MS4") Permit, NPDES Permit No. CAS618030 prepared by the California Regional Water Quality Control Board Santa Ana Region ("RWQCB") for implementation by the Orange County Flood Control District, the County of Orange and the Incorporated Cities therein within the Santa Ana Region for Urban Runoff.

The revised second draft of the MS4 permit includes new language in Section XII that if revised as recommended will provide a clearer description of the requirement and avoid confusion during implementation.

To accomplish this goal, revisions to new permit language in this second draft would be needed for Section XII as noted below.

Comment #1

3.1

Section XII.I - Fourth Priority Consideration of Offsets through Retrofit of Existing Development

I. Fourth Priority Consideration of Offsets through Retrofit of Existing Development
1. Co-permittees must require that project proponents give fourth priority

consideration to offsetting all or any portion of the untreated design capture volume with treatment of the same or greater design capture volume using structural treatment controls (according to Subsections XII.F. XII.G., and XII.H. above) through retrofits of existing development at an off-site location.

2. The retrofit site must be located within the same watershed of the nearest receiving waters of the U.S.

~~3. If the entire design capture volume cannot be treated on-site, the project must be eligible for and receive a Waiver (see Subsection XII.L).~~

~~4~~3. The off-site location must not have a pending or submitted development application which would produce similar structural treatment controls on its own.

3.1 ~~5~~4. The structural treatment control(s) selection process at the off-site location must be subject to the requirements of Section XII as applicable.

~~6~~5. The operator of the structural treatment control(s) at the retrofit site must be subject to requirements in the project WQMP or another equally-effective mechanism that provides for its proper operation and maintenance.

~~7~~6. The retrofit option applies only to the ~~subject~~ receiving project and not to future redevelopment of the ~~same~~ retrofit site; any future redevelopment of the retrofit site ~~projects~~ must consider incorporation of structural treatment controls.

The deletion of XII.I.3 is recommended since a development project that treats the full or partial DCV through the fourth priority option should not be required to submit a waiver. No permit requirement is being "waived" by the City or Regional Board. Additionally, this is consistent with first, second and third priority considerations which do not require a waiver.

The rewording of renumbered XII.I.6 is recommended for clarification of the requirements applicable to the retrofit site and the receiving project site.

Comment #2

Section XII.J – Credit Programs

J~~L~~. Credit Programs

3.2 1. Co-permittees are authorized to allow transactions of design capture volume or flow "credits" between projects within the same watershed of the nearest receiving water of the U.S. The "credit" shall be generated when a LID BMP has been designed to treat the design capture volume or flow from an area that is outside of the project boundaries. Credits must be generated and traded subject to the following additional limitations:

a. Additional credits ~~Credits~~ may not be generated by oversizing the LID

BMP relative to its tributary area.

~~b. The receiving project must be eligible for a waiver as described above.~~

~~c~~b. The credit may only be used once for the receiving project; it may not be re-used for future projects in the same site as the original project receiving the credit.

~~d~~c. The selection of structural treatment controls for future projects on the retrofit site must be based on the merits of the project alone and not on credits allowed for past projects in the same space.

~~e~~d. The Co-permittees where the affected projects are located must have and employ an effective system of accounting and tracking for the credit transfers.

Section XII.K – K~~L~~. Waiver of Structural Treatment Control BMPs ~~and Credit Programs~~

K~~L~~. Waiver of Structural Treatment Control

1. Co-permittees are authorized to waive their requirement to provide structural treatment control BMPs (see Provision XII.C.1 above) to remove pollutants and subsequently approve a WQMP if all of the following conditions are met:

3.2

a. Employing structural treatment control BMPs has been demonstrated in the project WQMP to be technically and economically infeasible; or there is no structural treatment control BMP available for which the environmental and public health impacts can be mitigated to an acceptable level;

b. Retrofit of existing development is not feasible; ~~No feasible opportunities are available to retrofit existing development in the tributary area of the same receiving water to treat the untreated design capture volume;~~

c. Source and site design BMPs have been incorporated to maximize the infiltration of urban runoff;

d. If a schedule has been designed to mitigate the water quality impacts of the untreated design capture volume and has been approved by the Executive Officer, the Co-permittee has collected the related impact fees or services from the project proponent;

e. The Executive Officer has been provided written notice of the Co-permittee's intent to issue the waiver, along with adequate supporting documentation, at least 30-days prior to issuance by the Co-permittee; AND

f. The Executive Officer approves the proposed waiver or 30-days has elapsed without action by the Executive Officer on the proposed waiver, whereby it is "deemed approved".

The deletion XII.L.1.b is recommended for simplification.

3.2

Separating Section J for the Credit Program is recommended because the credit program allows for the treatment of the full or partial DCV through the credit option and should not be required to submit a waiver. No permit requirement is being "waived" by the City or Regional Board. The entire DCV is treated by credits generated from a previously installed project that provided credits. This section should be before the waiver in the permit and therefore a new numbering system is suggested as J and K.

Renumbered Section XII.K. clearly authorizes the City to process a waiver from the requirements to treat the DCV.

If you have any questions or require additional information, please do not hesitate to contact me at 714-781-3563.

Sincerely,

Janina Galicinao
Manager, Environmental Compliance
Disneyland Resort

CITY OF LAKE FOREST

February 13, 2015

VIA EMAIL (SANTAANA@WATERBOARDS.CA.GOV)

California Regional Water Quality Control Board, Santa Ana Region
Attn: Adam Fischer
3737 Main Street, Suite 500
Riverside, CA 92501

Subject: Comments on the Second Draft Orange County Municipal Separate Storm Sewer System Permit (Tentative Order No. R8-2015-0001, NPDES Permit No. CAS618030)

Dear Mr. Fischer:

4.1 The City of Lake Forest ("City") appreciates the opportunity to review and comment on the California Regional Water Quality Control Board, Santa Ana Region ("Santa Ana Water Board") second draft of the Orange County Municipal Separate Storm Sewer System ("MS4") Permit, Order No. R8-2015-0001 ("Second Draft Order"). Since the City already provided comments on the first public draft of the MS4 Permit released in May 2014, the comments in this letter focus on the Second Draft Order. However, the City does not waive the comments previously submitted in response to the first draft of the MS4 Permit. The City is also aware that the County of Orange has prepared and submitted comments on the Second Draft Order. The City expresses its support for and joins in the submission of the County's comments. The comments in this letter supplement the County's comments, as well as the City's comments on the first draft, and are intended to allow the City to continue working toward the common goal of improving water quality in the region.

1. INCLUDE LANGUAGE TO IMPLEMENT THE DESIGNATION AGREEMENT

4.2 The Cities of Lake Forest, Laguna Hills, and Laguna Woods are located partially within the jurisdictions of the Santa Ana Water Board and the California Regional Water Quality Control Board, San Diego Region ("San Diego Water Board"). As a result, these cities have experienced significant administrative and financial burden having to comply with two different MS4 permits that is not contributing to greater overall water quality improvements in either region. Written requests for designation of a single regional water board to regulate matters pertaining to

permitting of Phase I MS4 discharges were submitted by the cities to the Santa Ana Water Board and the San Diego Water Board. In an effort to address these concerns, the Santa Ana Water Board and the San Diego Water Board are entering into an agreement whereby the Santa Ana Water Board is designated to regulate the entire jurisdiction of the City of Lake Forest, including those areas located within the San Diego Water Board's jurisdiction; and the San Diego Water Board is designated to regulate the entire jurisdictional area of the Cities of Laguna Hills and Laguna Woods, including those areas of each City located within the Santa Ana Water Board's jurisdiction. These designations should be reflected within the language of the Second Draft Order.

Recommendation: Specific modifications to the Second Draft Order are as follows:

A. Fact Sheet Section V

DESIGNATION OF A REGIONAL WATER BOARD

Regional Water Board Designation. The Cities of Laguna Hills, Laguna Woods, and Lake Forest (Cities) are located partially within the jurisdictions of both the California Regional Water Quality Control Board, Santa Ana Region (Santa Ana Water Board) and the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board). Written requests for designation of a single Regional Water Board to regulate matters pertaining to permitting of Phase I MS4 discharges were submitted to the Santa Ana Water Board by the City of Laguna Hills by letter dated March 12, 2014, the City of Laguna Woods by letter dated September 8, 2014, and the City of Lake Forest by letters dated January 14, 2013 and April 4, 2014. The City of Lake Forest requested designation of the Santa Ana Water Board, and the Cities of Laguna Hills and Laguna Woods requested designation of the San Diego Water Board. Water Code section 13228 specifies the circumstances that allow, and the process for, designation of a Regional Water Board.

4.2

Factual Considerations. The Santa Ana Water Board and San Diego Water Board establish generally consistent requirements for MS4 discharges to meet the technology-based standard of reducing pollutants in the discharge to the maximum extent practicable (MEP), a related iterative process to ensure MS4 discharges meet receiving water quality standards, and non-storm water discharges to be effectively prohibited from entering the MS4. However, due to the unique nature of watersheds and water quality issues in the Santa Ana Region and San Diego Region, MS4 permit requirements between the two Regional Water Boards may also vary to address region specific pollutant discharges and watershed conditions. The Cities of Laguna Hills, Laguna Woods, and Lake Forest report that management and implementation of municipal programs to comply with two different MS4 permits creates a significant administrative and financial burden that is not contributing to greater overall water quality improvements in either region.

Regional Water Board Agreement. In an effort to address the concerns of the Cities, the Santa Ana Water Board and the San Diego Water Board have entered into an agreement whereby the Santa Ana Water Board is designated to regulate the entire jurisdictional area of the City of Lake Forest, including those areas located within the San Diego Water Board's jurisdiction; and the San Diego Water Board is designated to regulate the entire jurisdictional areas of the Cities of Laguna Hills and Laguna Woods, including those areas of each City located within the Santa Ana Water Board's jurisdiction. Under the terms of the agreement the City of Lake Forest will be required to retain and continue implementing the prohibition of over-irrigation discharges identified in section 15.14.030 of the City Municipal Code for regulating storm water quality throughout its jurisdiction, which was established during the permit term of Order No. R9-2009-0002. The City of Lake Forest will also be required to actively participate in the development and implementation of the Aliso Creek Watershed Management Area Water Quality Improvement Plan required pursuant to the San Diego Water Board's Regional MS4 Permit, Order No. R9-2013-0001, as amended by Order No. R9-2015-0001. Under the terms of the agreement, any Total Maximum Daily Load (TMDL) and associated MS4 permit requirements issued by the Santa Ana Water Board or the San Diego Water Board which include the Cities of Laguna Hills, Laguna Woods, or Lake Forest as a responsible party, will be incorporated into the appropriate MS4 permit by reference. Enforcement of the applicable TMDL would remain with the Regional Water Board which has jurisdiction over the targeted impaired water body. Applicable TMDLs subject to the terms of the agreement include, but are not limited to, the Santa Ana Water Board's San Diego Creek/Newport Bay TMDLs and the San Diego Water Board's Indicator Bacteria Project I Beaches and Creeks TMDL.

4.2

Periodic Review of Regional Water Board Agreement. The basis supporting the Cities of Laguna Hills, Laguna Woods, and Lake Forest requests to designate a specific Regional Water Board for regulatory oversight of MS4 discharges may change under future conditions and circumstances. Therefore, the Santa Ana Water Board will periodically review the effectiveness of the agreement during each MS4 permit reissuance. Based on this periodic review the Santa Ana Water Board may terminate the agreement with the San Diego Water Board or otherwise modify the agreement subject to the approval of the San Diego Water Board.

B. Table 1 Footnote

The entire jurisdiction of the City of Lake Forest, including those areas located in the San Diego Region, will be regulated by the Santa Ana Water Board. The

entire jurisdiction of the City of Laguna Hills and the City of Laguna Woods, including those areas located in the Santa Ana Region, will be regulated by the San Diego Water Board. These designations are subject to the terms of the

agreement between Santa Ana Water Board and the San Diego Water Board and become effective on the later effective date of this Order or the effective date of San Diego Water Board Tentative Order No. R9-2013-0001, as amended by Order No. R9-2015-0001.

C. New Finding 2

Regional Water Board Designation. The Cities of Laguna Hills, Laguna Woods, and Lake Forest are located partially within the jurisdictions of the California Regional Water Quality Control Board, Santa Ana Region (Santa Ana Water Board) and the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) and are subject to regulation by both Regional Water Boards. Pursuant to CWC section 13228, the Cities of Laguna Hills, Laguna Woods, and Lake Forest submitted written requests that one Regional Water Board be designated to regulate each of the Cities. The Santa Ana Water Board and the San Diego Water Board have entered into an agreement dated January XX, 2015, whereby the Santa Ana Water Board is designated to regulate the entire jurisdictional area of the City of Lake Forest, including those areas located within the San Diego Water Board's jurisdiction, and the San Diego Water Board is designated to regulate the entire jurisdictional areas of the Cities of Laguna Woods and Laguna Hills, including those areas of each City located within the Santa Ana Water Board's jurisdiction, on the effective date of this Order or San Diego Water Board Order No. R9-2013-0001, as amended by Order No. R9-2015-0001, whichever is later. The agreement provides that the City of Lake Forest will be required to retain, and continue implementation of, its over-irrigation discharge prohibition in Section 15.14.030 of the City Municipal Code for regulating storm water quality throughout its jurisdiction. The City of Lake Forest will also be required to actively participate during development and implementation of the Aliso Creek Watershed Management Area Water Quality Improvement Plan required pursuant to San Diego Water Board Order No. R9-2013-0001, as amended by Order No. R9-2015-0001. Each Regional Water Board retains the authority to enforce provisions of the Phase I MS4 permits issued to each city but compliance will be determined based upon the Phase I MS4 permit in which a particular city is regulated as a Copermittee (Water Code section 13228 (b)). Under the terms of the agreement, any TMDL and associated MS4 permit requirements issued by the Santa Ana Water Board or San Diego Water Board which include the Cities of Laguna Hills, Laguna Woods, or Lake Forest as a responsible party, will be incorporated into the appropriate Phase I MS4 permit by reference. Enforcement of the applicable TMDL will remain with the Regional Water Board which has jurisdiction over the targeted impaired water body.

4.2

Applicable TMDLs subject to the terms of the agreement include, but are not limited to, the Santa Ana Water Board's San Diego Creek/Newport Bay TMDLs and the San Diego Water Board's Indicator Bacteria Project I Beaches and Creeks TMDL. The Santa Ana Water Board will periodically review the effectiveness of

the agreement during each MS4 permit reissuance. Based on this periodic review the Santa Ana Water Board may terminate the agreement with San Diego Water Board or otherwise modify the agreement subject to the approval of the San Diego Water Board.

4.2

D. Appendix A Footnote

The City of Lake Forest must also comply with the TMDL for Indicator Bacteria, Project 1 – Twenty Beaches and Creeks in the San Diego Region per Attachment E of San Diego Water Board Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and any revisions thereto.

2. <u>INCLUDE FURTHER CLARITY ON COMPLIANCE PLANS FOR RECEIVING WATER LIMITATIONS</u>

The City appreciates the revisions in Section IV.D to more closely conform the Second Draft Order with State Water Resources Control Board Resolution WQ 99-05 ("Resolution 99-05"). Resolution 99-05 includes a requirement that "permittees . . . promptly notify and thereafter submit a report to the Regional Water Board . . ." after determining that a discharge causes or contributes to an exceedance of a water quality standard. (Resolution 99-05.) The Second Draft Order does not include the requirement that permittees "promptly notify" the Santa Ana Water Board of the intent to prepare a compliance plan prior to submitting a draft plan to the Executive Officer. (Second Draft Order, Section IV.D.) This omission removes notification from the iterative process inconsistent with Resolution WQ 99-05. Including a notification requirement establishes a clear initiation point for the iterative process and clarifies plan submission deadlines.

<u>Recommendation</u>: Include a notification requirement in Section IV.D, consistent with Resolution 99-05, and make corresponding modifications to the Technical Report, as follows:

4.3

A. Second Draft Order Section IV.D

Upon a determination by a Co-permittee or the Executive Officer that a discharge is causing or contributing to the exceedance of an applicable water quality standard, the responsible Co-permittee(s) must <u>promptly notify and thereafter</u> submit a draft plan to the Executive Officer describing actions that will be taken to achieve compliance. A plan to achieve compliance with TMDL waste load allocations-related water quality-based effluent limits related to the exceeded water quality standard, and prepared according to Section XVIII of this Order, also satisfies this Provision.

B. Draft Technical Report Section XII.C

. . . To implement this "iterative process", Section IV of this Order requires <u>the Co-permittees to notify the Executive Officer of their intent to develop a compliance plan,</u> development of a plan revising the storm water management program and its components

to include additional BMPs, an implementation schedule and additional monitoring to address the exceedances; and implementing the revised storm water management program.

4.3 *C. **Draft Technical Report Section XII.O**.* The Technical Report's description of the method of complying with the WQBELs incorporated into Section XVIII of the Second Draft Order omits reference to the notification requirement. Revise the description of the method of compliance as follows:

"(2) notifying the Executive Officer of the intent to develop a plan and thereafter implementing an approved plan that is designed to comply with final WQBELs"

3. REVISE TMDL SECTION TO PROVIDE FURTHER CLARITY ON COMPLIANCE PATHWAY

Consistent with TMDL requirements, Co-permittees have developed and implemented, or are in the process of developing and implementing compliance plans for several TMDLs in the Newport Bay watershed. The Executive Officer has reviewed and approved some of the plans and the Co-permittees are implementing approved plans. Where a TMDL provides for the development and implementation of a compliance plan in fulfillment of the TMDL requirements, the Second Draft Permit should reflect such provision. Where Co-permittees are in the process of developing a TMDL and/or an implementation plan, such as the current selenium TMDL for Newport Bay, participation in the TMDL and/or plan development should constitute compliance with the TMDL, as incorporated into the Second Draft Permit.

4.4

Recommendation: Revise Section XVIII.A.3 to incorporate compliance pathways established in existing TMDLs and participation in the development of plans as compliance with the Second Draft Order, as follows:

A Co-permittee may comply with WQBELs through any lawful means. Implementing an approved implementation plan, BMPs consistent with an approved plan, or a WQBEL compliance plan, as defined herein, constitutes compliance with this Order. Where an implementation plan, WQBEL compliance plan, or Time Schedule Order (TSO) is being developed, including the development of a TMDL for selenium in the Newport Bay and a corresponding implementation plan, a Co-permittee's participation in the development of such TMDL, plan or order constitutes compliance with this Order.

4. ELIMINATE STATEMENTS ASSERTING THAT AN MS4 CAN BE A RECEIVING WATER

4.5 Finding 13, the definition of "municipal separate storm sewer system," and Section V of the Technical Report continue to improperly consider some MS4s to be waters of the United States. An MS4 cannot be a water of the United States under the statutory and regulatory structure of the Clean Water Act, even if the MS4 exhibits characteristics of a water of the United States. (33 U.S.C. §§ 1362, subds. (12), (14); 40 C.F.R. § 122.26, subd. (b)(8).) The Clean Water Act's

definition and treatment of the terms "navigable waters" and "point sources" create separate and distinct categories that do not overlap. (See, *Rapanos v. United States* (2006) 547 U.S. 715, 735.) Navigable waters are waters of the United States. (33 U.S.C. 1362(7).) A "point source" is a discernible, confined and discrete conveyance from which pollutants are or may be discharged into navigable waters. (33 U.S.C. 1362(14).) Writing for a plurality of the Supreme Court in *Rapanos*, Justice Scalia supported the distinction between these terms, stating, "[t]he definitions thus conceive of "point sources" and "navigable waters" as separate and distinct categories. The definition of 'discharge' would make little sense if the two categories were significantly overlapping." (*Rapanos, supra*, 547 U.S. at p. 735.) Attempting to diminish the distinction between MS4s and waters of the United States by "applying the definition [of waters of the United States] to . . . storm sewers . . . [and] man-made drainage ditches . . . stretche[s] the term 'waters of the United States' beyond parody." (*Rapanos, supra*, 547 U.S. at p. 734.) MS4s and waters of the United States cannot discharge into themselves. (*Los Angeles County Flood Control Dist. v. Natural Resources Defense Council, Inc.* (9th Cir. 2013) 133 S.Ct. 710, 713.)

Recommendation: Revise Finding 13, the definition of "municipal separate storm sewer system," and Section V of the Technical Report to remove dual classification of MS4s and waters of the United States, as follows:

4.5

A. Finding 13

> **Runoff Discharges to Receiving Waters.** The MS4s discharge runoff into lakes, reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within the Santa Ana Region. ~~Development generally makes use of natural drainage patterns and features to convey runoff. Rivers, streams and creeks in developed areas used in this manner and under the ownership and control of the Permittees are part of MS4s regardless of whether they are natural, anthropogenic, or partially modified features. In these cases, the rivers, streams and creeks in the developed areas of the Permittees' jurisdictions are both an MS4 and receiving water.~~ Discharges of runoff from MS4s must occur through outfalls (point sources) into waters of the U.S. Outfalls do not include open conveyances connecting two municipal separate storm sewers. Outfalls also do not include pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. (40 C.F.R. 122.26(b)(9)).

B. Glossary

> **Municipal Separate Storm Sewer System ("MS4")** – A conveyance or system of conveyances designed to collect and/or transport urban runoff (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, ~~natural drainage features or channels, modified natural channels,~~ man-made channels, or storm drains): (i) Owned or operated by a State, city town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm

water, or other wastes; (ii) Designated or used for collecting of conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW)

C. Technical Report, Section V

In summary, MS4s are defined in 40CFR122.26(b)(8) as "a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains)…designed or used for collecting or conveying storm water". ~~Due to the broad inclusion of the definition, portions of MS4s in the permit area will include open channels that are waters of the U.S. In these cases, the channels are considered receiving waters whose beneficial uses must be protected.~~

4.5

Clean Water Act Section 502 defines a "discharge of a pollutant" and the term "discharge of pollutants" as "any addition of any pollutant to navigable waters from any point source" and "any addition of any pollutant to waters of the contiguous zone or the ocean from any point source other than a vessel or floating craft". The term "discharge", as used in this Order, means the discharge of a pollutant. Discharges regulated by this Order occur through "outfalls" which are a point source at the point where a MS4 discharges to waters of the U.S. An outfall does not include open conveyances connecting two municipal separate storm sewers. An outfall does not include pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. (40 C.F.R. 122.26(b)(9).)

5. RETAIN "BACKGROUND" AND "NATURAL" IN FINDING 2 AND SECTION IV.D.3

The Second Draft Order's modifications to Finding 2 replaced the phrase "background or naturally occurring pollutants or flows" with "non-anthropogenic pollutants or flows[.]" The terms "background" and "natural" loadings are technical terms and should not be replaced in their entirety by the term "non-anthropogenic." (40 C.F.R. § 130.2, subds. (e), (g), (i).)

Recommendation: Include the terms "background" and "naturally occurring" in Finding 2 and Section IV.D.3.h, as follows:

4.6

A. Finding 2

Regulated Sources and Activities. This Order regulates the discharge of pollutants from anthropogenic sources in urban runoff from MS4s or activities within the jurisdiction and control of the Co-permittees. Except as noted in Finding 8 below, this Order authorizes discharges of urban runoff from MS4s subject to the conditions and provisions herein. This Order is not intended to obligate the Co-permittees to address background, naturally-occurring, or non-anthropogenic pollutants or flows in receiving waters.

B. Section IV.D.3.h

4.6

provide evidence, acceptable to the Executive Officer, that the source of pollution is background, naturally-occurring, or non-anthropogenic, or that the cause of pollution is not within the jurisdiction or control of the Co-permittees.

6. RESTORE RECOGNITION OF LIMITATION ON MUNICIPAL AUTHORITY

Co-permittees' ability to enter private property and conduct inspections of stormwater facilities is limited by the United States Constitution, California's Constitution, and state and federal law. The Second Draft Order eliminates four references to this limitation, and requires Co-permittees to maintain legal authority that is adequate to enter, inspect, and gather evidence from industrial, construction, and commercial establishments. (Second Draft Order, Sections VI.C [general legal authority requirement]; VIII.B [construction inspection]; IX.B [industrial inspection]; X.B [commercial inspection].) Intentionally deleting reference to these limitations may imply that Co-permittees must have authority to enter private property in all circumstances. (See *Pacific Gas & Elec. Co. v. Energy Resources Conserv. & Dev. Comm'n* (1983) 461 U.S. 190, 220 [deletion of language in the drafting history may demonstrate consideration and rejection of the deleted proposition].) Restoring the original language eliminates this potential confusion.

Recommendation: Restore the original language in Sections VI.C, VIII.B, IX.B, and X.B, recognizing the constitutional and statutory limitations on municipal authority, as follows:

A. Section VI.C

4.7

Each Co-permittee must secure and maintain legal authority, to the extent allowed by State and Federal Law, and subject to limitations on municipal action under the constitutions of the state of California and the United States, that is adequate to enter, inspect, and gather evidence (including pictures, video, samples, statements, and documents) from industrial, construction, and commercial establishments to determine compliance with ordinances, permits, conditions, and

other requirements of the Co-permittees related to the control of discharges of pollutants to their MS4s.

B. Section VIII.B

Each Co-permittee must inspect construction sites in their inventory, subject to limitations on municipal action under the constitutions of the State of California and the United States. Each Co-permittee must have written policies and procedures that describe how inspections and related enforcement actions are carried out. Inspections and related enforcement actions must be carried out in a manner that enforces compliance with applicable ordinance(s), plans, permits, or other requirements related to the control of discharges of pollutants to their MS4s.

C. Section IX.B

Each Co-permittee must inspect industrial sites in their inventory, subject to limitations on municipal action under the constitutions of the State of California and the United States. Each Co-permittee must have written policies and procedures that describe how inspections and related enforcement actions are carried out. Inspections and related enforcement actions must be carried out in a manner that consistently enforces compliance with applicable ordinance(s), plans, permits, or other requirements related to the control of discharges of pollutants to their MS4s.

4.7

D. Section X.B

Each Co-permittee must inspect commercial sites in their inventory, subject to limitations on municipal action under the constitutions of the State of California and the United States. Inspections must occur according to written processes and procedures, and in a manner to enforce compliance with ordinance(s), plans, permits, WQMPs, or other requirements related to the control of discharges of pollutants to their MS4s.

CONCLUSION

Thank you for the opportunity to comment on the Second Draft Permit and for your willingness to accommodate the City's request for regulation by a single regional water board. The City is committed to improving water quality in the region and provides these comments with the intent to participate in developing a permit that accomplishes this goal.

Sincerely,
CITY OF LAKE FOREST

Devin Slaven, CPSWQ, QSP/QSD
Environmental Manager

CITY OF ORANGE

CITY MANAGER PHONE: (714) 744-2222 • FAX (714) 744-5147

February 12, 2015

Mr. Adam Fischer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

Subject: MS4 NPDES Permit Draft Order No. R8-2015-0001

Dear Mr. Fischer:

5.1

As an Orange County Co-permittee affected by Order No. R8-2015-0001, the City of Orange would like to take this opportunity to comment on the proposed Order. The City previously commented on the first draft and appreciates the number of changes made to improve the Order. However, not all issues have been resolved and there are still a number of issues of concern to the City. A short summary of those issues is provided in the following paragraphs and a complete write-up is provided in the attachment to this letter. The City would also like to acknowledge the County of Orange's letter, which provides an in depth analysis and proposed redline changes to the Order, which are supported by the City.

5.2

The City continues to be concerned with the omission of the Drainage Area Management Plan (DAMP) and Local Implementation Plan (LIP), which contain the City's and Co-permittees' established model programs. These are important documents that are not recognized in the Order. The Model WQMP and Technical Guidance Document, which serve as the guidance documents to comply with the new development/significant redevelopment program requirements are acknowledged and referenced in a footnote but not explicitly cited in any provision. We recognize the need to allow Co-permittees the flexibility to develop individual programs but believe linking the existing documents and simply adding new requirements would have made the Order simpler.

Another major concern with the Order is that not enough time is allowed to incorporate the new requirements of Section XII - New Development/Significant Redevelopment. Section XII states that all requirements listed under the section apply 50 days following adoption of the Order. The implication is that a program that complies with Section XII's requirements must be in place within 50 days.

To comply with this requirement the City and Co-permittees approved model programs will need to be revised as well as the countywide Model WQMP and Technical Guidance Document. Given the time required to update and approve these documents, 50 days is simply not enough time to develop and incorporate the Order's new Section XII requirements.

These and other issues are discussed in the attachment to this letter. Questions regarding these comments may be directed to Gene Estrada at 714-744-5547.

Sincerely,

John W. Sibley
City Manager

Attachment

cc: Joe DeFrancesco, Public Works Director
Frank Sun, Deputy Director/City Engineer
Chris Crompton, Manager, Public Works Environmental Resources
Hope Smythe, Santa Ana Region Water Quality Control Board

N:\Public Works\ADMIN\ADMIN\JDEFRANCESCO CORRESPONDENCE\2015-2-12 Letter Draft MS4 Permit December 2014.docx

Attachment
Draft Order R8-2015-0001 Comments

1. Section III.A - Irrigation Runoff

Table 2 of Section III.A has been revised and no longer exempts irrigation water as a non-storm water discharge as allowed by federal regulations.

The City recognizes the need to conserve water and reduce irrigation runoff. However, before completely prohibiting irrigation water runoff, factual findings must be presented in the Findings section of the Order that identifies irrigation water as an actual pollutant source that causes impairment in local water bodies.

5.3

Completely prohibiting irrigation water from running unto the street gutter is problematic even when employing best watering practices. Using a hose for lawn watering is one of the best practices available that allows the control of water applied yet may still result in residual runoff, which would be a violation of the Order. Other lawn watering practices implementing controllers or other devices that may also result in minimal or residual runoff into the gutter would be a violation of the Order even if the water evaporates or never makes it to storm drain as would irrigation spray carried into the gutter by wind.

Recommendation: Do not remove irrigation water from the permitted non-storm water discharges in Table 2.

2. Section XII.M - Non-Priority Project Plans

Designating Non-Priority Projects

The City's comments noted the concern with the previous draft Order requiring non-priority project plans for projects simply because *they were exposed to storm water*. It was noted that this requirement was overly broad and would result in a virtual halt of the issuance of over the counter building permits because non-priority project plans would now be required for simple projects such as reroofs, walls, solar panels, patio covers, and many other projects. In addition, the provisions would also result in increased project costs of hundreds to thousands of dollars.

5.4

The draft Order has been revised and now classifies projects as non-priority projects if they are *exposed to storm water and may be considered sources of pollution*. An attempt has been made to link non-priority projects with their potential to discharge pollutants. The concern with the proposed language is that any outdoor project may be considered to be a source of pollutants if rainfall flows off it and the runoff is carried into the storm drain system. This provision will only lead to confusion about designating which type of projects are non-priority projects and create permitting obstacles in addition to increasing projects costs without achieving any measurable pollutant

reduction because non-priority projects are not considered significant sources of pollutants.

5.4

Recommendation: Delete Section XII.M.1

XII.M.5 Civil Engineer Approval of Non-Priority Project Plans

The City previously commented that the new requirement to have registered civil engineers or licensed architects approve non-priority project plans or WQMPs, as they are referred to in Orange, was unnecessary unless structural treatment devices were incorporated into the project design.

The response to the City's comment noted in the Response to Comments interprets provision M.5. to mean that a registered civil engineer or licensed landscape architect does not need to prepare the plan but that *someone acting on behalf of the City* who approves the non-priority project plan either as staff or through a consultant must be a registered professional.

It is not clear why this requirement is placed on the Co-permittees. Applicants that prepare non-priority project plans should be responsible for selecting individuals or professionals to prepare project documents based on the level of complexity involved. If a non-priority project only implements source controls or site design BMPs that do not require extensive technical knowledge by the preparer, there is no reason to require a registered professional to review the non-priority project plan. This is simply an unnecessary administrative burden placed on the City and Co-permittees.

5.5

Where a non-priority project plan includes structural treatment devices that involve hydrological processes or require technical expertise for their design, it is the City's expectation that the non-priority project plan will be prepared by someone with the required technical expertise. Such a plan would be reviewed internally within the City by someone equally capable. However, it is not necessary to include a provision requiring the City to select certain individuals to review and approve non-priority project plans. The selection to review and approve documents submitted to the City should be left to the City.

Recommendation: Delete or modify provision XII.M.5 to require registered professionals to prepare non-priority project plans only if they include features that require design expertise from registered professionals.

3. Section XII. – Timing of New Development Requirements on Public Projects

Paragraph XII.B.1 (old designation), states that the new development/significant redevelopment requirements of Section XII apply to Co-permittee initiated projects (public projects) *approved* 50 days after adoption of the Order.

The City appreciates the attempt to clarify the timing of applicability of the new development/significant requirements for public projects. It is recognized that selecting an appropriate time frame to commence implementation of new requirements on public projects is difficult due to timing differences between agencies and the complex processes involved in implementing public projects. However, there are concerns with the word *approved.*

It is clear from the Order that Section XII's requirements do not apply to private projects if an application has been submitted to the City within the first 50 days after the Order's adoption. This submittal usually contains the initial or conceptual design of the project. Therefore, it seems only reasonable that public projects would need to implement new development requirements at the same project stage as private projects.

The previous draft Order stated that the new development requirements did not apply to public projects if the project was *funded* within 50 days of adoption of the Order. This was problematic because funding could occur at various stages within a project. It is possible that *funding* could be given very early in the process prior to commencement of design if it was a highly visible project. It is also possible that *funding* could occur late in the project process prior to solicitation of bids. In the latter case, the project has been designed and if it had not been funded within the 50 days of the Order's adoption, the project would have had to incorporate the new Order's requirements.

5.6

Revising the Order's language to *approved* raises similar concerns with the implementation of the new development requirements. Again, it is possible that a highly visible project obtains *approval* to proceed prior to commencement of design. It is also possible that *approval* of a project does not occur until it is ready for bid solicitation, which could be well after the 50 days of the Order's adoption.

A preferable option is to replace *funding* with *design.* This would allow existing projects that are currently under design but may not be formally approved within 50 days of the Order's adoption to implement the requirements of the existing Order.

Recommendation: Revised Section XII. B to state that the new Order requirements do not apply to Co-permittee initiated projects that under design within 50 days of the Order's adoption.

4. Section XII - Time to Implement New Development Requirements

As noted above, Section XII of the Draft Order states that all new development/significant redevelopment requirements apply 50 days following adoption of the Order. This section has been significantly revised and contains many new requirements that are not currently in Co-permittee approved documents. This includes: potential new categories of non-priority projects, new criteria for demonstration facilities, changes to the use of water quality credits, the sizing of volume capturing biotreatment BMPs, retrofitting existing development and updates to the rating of structural treatment BMPs.

5.7

These new program requirements will need to be incorporated into existing model programs, the Model WQMP, Technical Guidance Document and the City's Water Quality Ordinance. The Model WQMP and TGD previously needed to undergo public review and approval by the regional board executive officer. The water quality ordinance needs to be approved by city council. Given the time required to update and approve these documents, 50 days is simply not enough time to develop and incorporate the Order's new program requirements into these documents.

Recommendation: Revise the Order to state that the new development/significant redevelopment requirements begin 12 months following the Order's adoption.

5. Section XIV - Written Inspection and Maintenance Schedules for Municipal Facilities

Paragraph XIV.C requires each Co-Permittee to prepare a written inspection and maintenance schedule for each facility subject to the requirements of Section XIV.C.

Preparing reports for facilities such as channels, which encompass large areas, makes sense but does not make sense for small facilities like catch basins and storm drain inlets. Within Orange there are 1800 catch basins and 185 storm drain inlets as reported in our November 15, 2014 Annual Report. Each catch basin and inlet is inspected in a matter of minutes: the time it takes to visually inspect these facilities. Preparing a report for each catch basin and inlet is unnecessary and will result in unnecessary resource expenditures and costs for an effort that is not likely to provide any meaningful information beyond identifying the need to clean or restencil catch basins, which is already recorded and reported in the City's Annual Report.

5.8

Recommendation: Modify the following sentence of XIV.C as noted below.

Each Co-permittee must prepare a maintenance schedule for the facilities subject to this requirement.

OC Public Works
Integrity, Accountability, Service, Trust
Shane L. Silsby, Director

February 13, 2015

By E-Mail

Mr. Kurt Berchtold, Executive Officer.
California Regional Water Quality Control Board, Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3348

Subject: Comment – Draft Order No. R8-2015-0001, NPDES Permit No. CAS618030

Dear Mr. Berchtold:

6.0 The County of Orange, as Principal Permittee of the Orange County Stormwater Program, appreciates the opportunity to provide comments on *Draft Order No. R8-2015-0001, NPDES Permit No. CAS618030 National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements*. The north Orange County Permittees (Permittees) were involved in the development of these comments and the Cities of Brea, Fullerton, Garden Grove, Huntington Beach, Irvine, La Habra, La Palma, Lake Forest, Orange, Santa Ana, Seal Beach, Tustin, and Westminster, have directed that they be recognized as concurring entities on this letter.

6.1 The Permittees acknowledge the positive changes in *Draft Order No. R8-2015-0001* compared to *Draft Order No. R8-2014-0002*. Nonetheless, the Permittees continue to share two key policy concerns with respect to this Order. First, there is no mention of the State of the Environment analysis provided in our Report of Waste Discharge. Second, while it is your intention to provide a compliance pathway, the Receiving Water Limitations provisions of the Draft Order as written will still likely result in non-compliance for an exceedance of a water quality standard.

6.2 In our State of the Environment analysis we identify north Orange County's water quality priorities of concern which, over the next permit term, will be fecal indicator bacteria from urban and nonurban sources, nutrients from shallow groundwater and toxicity, principally from pesticides. This information needs to be explicitly considered in the Order's Technical Report because it provides the justification for modifying Program priorities, such as the number of industrial facility inspections, which are not directly linked to these constituents of concern. Moreover, the current Technical Report in a number of places observes that feedback is integral to the iterative planning process and should be informing both the development of the Orange County Stormwater Program and future reauthorizations of NPDES Permit No. CAS618030, but then fails to consider information that it says is needed.

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6.3

The Permittees, as noted in our prior comments, appreciate the re-affirmation of an adaptive management approach as the fundamental basis of permit compliance and that is consistent with a plain read of Board Order 99-05. However, in light of the Ninth Circuit decision (National Resources Defense Council Inc. v. County of Los Angeles, 725 F.3d 1194 (2013)), this intent needs to be more robustly expressed. The case for this request is detailed in our State of the Environment analysis. In this analysis, we highlight our success with controlling fecal indicator bacteria in dry weather and are candid about the water quality standard attainment challenge posed by this constituent in wet weather. This knowledge is the principal justification for our request to include a regulatory compliance pathway in the Receiving Water Limitations provision that properly accommodates the uncertainties of the water quality management and protection challenge presented by such constituents as fecal indicator bacteria.

6.4

If the Draft Order is modified in response to comments, we request that an additional written comment period be provided prior to scheduling a hearing for adoption. We also reserve the right to respond to other commenters at a hearing and present evidence for the record.

6.5

Our comments on the Draft Order are organized and submitted as follows:

- Attachment A presents our general observations and detailed comments on the entire permit.
- Attachment B presents a redline/strikeout version of recommended changes to the Tentative Order.

Thank you for your attention to our comments. Please contact each of the undersigned directly if you have any questions. For technical questions, please also contact Chris Crompton at (714) 955-0630 or Richard Boon at (714) 955-0670 as appropriate.

Sincerely,

Mary Anne Skorpanich, Deputy Director
OC Environmental Resources

Ryan Baron, Senior Deputy County Counsel
Office of the County Counsel

Attachments: A – Detailed Comments
B – Redline Version of the Tentative Order

Cc: (Electronic copies only)

North Orange County Permittees
Orange County Technical Advisory Committee
Jason Uhley, Riverside County Flood Control and Water Conservation District
Marc Rodabaugh, San Bernardino County Flood Control District

ATTACHMENT A

COUNTY OF ORANGE REVISED COMMENTS ON

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SANTA ANA REGION

DRAFT ORDER NO. R8-2015-0001 (SECOND DRAFT)

NPDES NO. CAS618030

This document, **Attachment A**, contains the detailed technical and legal comments ("Comments") of the County of Orange and the Orange County Flood Control District (collectively, "County") on the Second Draft of Draft Order No. R8-2015-0001 dated December 22, 2014 ("Draft Order") and the Fact Sheet/Technical Report ("Fact Sheet"). These comments are intended to supplement the County's prior comments to Draft Order R8-2014-0002 submitted on June 20, 2014, and do not replace or supersede those prior comments. The County further incorporates its June 20, 2014 comments into these comments to the extent not inconsistent with the comments herein.

These comments are divided into three sections (*General Comments*, *Findings*, and *Permit Sections*) and address issues relating to specific parts of the Draft Order. At times, the issues and concerns raised will pertain to more than one section of the Draft Order. **Attachment B** identifies the recommended changes to the Draft Order to address the comments raised in Attachment A, as well as, some general edits in order to provide additional clarification where necessary.

6.6

The County of Orange, as the Principal Permittee, the Orange County Flood Control District, and the cities of Anaheim, Brea, Buena Park, Costa Mesa, Cypress, Fountain Valley, Fullerton, Garden Grove, Huntington Beach, Irvine, Laguna Hills, Laguna Woods, La Habra, La Palma, Lake Forest, Los Alamitos, Newport Beach, Orange, Placentia, Santa Ana, Seal Beach, Stanton, Tustin, Villa Park, Westminster, and Yorba Linda collectively refer to themselves as "Santa Ana Region Permittees" or "Permittees." The Draft Order refers to the County, Orange County Flood Control District, and incorporated cities of north Orange County as the "Co-Permittees." However, the comments below use the term "Permittees" to be consistent with the terminology used by cities and the County.

GENERAL COMMENTS

1. THE DRAFT ORDER DOES NOT RECOGNIZE THE REPORT OF WASTE DISCHARGE OR THE SIGNIFICANT WATER QUALITY OUTCOMES THAT HAVE BEEN ACHIEVED IN ORANGE COUNTY AND, THEREFORE, LACKS SUBSTANTIAL EVIDENCE TO SUPPORT NEW OR MODIFIED PROGRAM REQUIREMENTS.

6.7

The Permittees submitted a Report of Waste Discharge (ROWD) to the Santa Ana Regional Water Quality Control Board ("Regional Board") on October 3, 2013. Pursuant to federal law, the Permittees' ROWD is an application to discharge pollutants from a point source to waters of the United States and be covered by a fifth term municipal separate storm sewer system (MS4) National Pollutant Discharge Elimination System (NPDES) Permit.[1] The

[1] 40 C.F.R. § 122.21.

6.7

ROWD evaluates the fourth term MS4 Permit activities and discusses the accomplishments of the Orange County Stormwater Program. Based on the ROWD's assessment and findings, the application identifies the activities that are proposed for the fifth term MS4 Permit, including additional pollutant control initiatives. The ROWD is also the technical basis or substantial evidence for what regulations and activities will be required in the fifth term MS4 permit.

6.8

The Permittees' application for a fifth term MS4 permit is predicated on the assessment of the "State of the Environment" (ROWD Section 2). This assessment describes the results of the long-term monitoring and special studies that are used to examine the condition of the surface water environment in Orange County with an emphasis on recreation and aquatic ecosystem health. The analyses point to bacteria, nutrients, and toxicity as the water quality priorities for the County, and present recommendations for the fifth term MS4 permit intended to ensure further improvements in surface water quality.

6.9

Formulation of the fifth term Permit needs to follow the iterative process, that is: assess what measures have been implemented and how the environment has responded. Despite the detailed activities and accomplishments described in the ROWD, there is no discussion in the Draft Order regarding the "State of the Environment." In fact, the Draft Order Findings and Fact Sheet do not reference the Permittees' application or cite specific areas in the ROWD to provide a basis for or justify particular fifth term stormwater program modifications. Section B of the Findings (Discharge Characteristics and Runoff Management) only contains generic statements about water quality and does not incorporate the key findings presented in the ROWD. Although the Findings within Section B may have been the general factual basis for the Permittees' first and second term permits, they are not appropriate for an advanced fifth term stormwater program, especially if they do not acknowledge the activities and accomplishments to date.

6.10

Omission of the significant water quality outcomes that have been achieved in Orange County (*e.g.*, coastal water quality) creates a false case for increasing regulatory requirements. Without support from specific findings and other evidence, a number of requirements may be perceived as arbitrary and capricious and adopted without substantial evidence in the administrative record.[2]

Action: The Draft Order needs to incorporate the key findings from the Report of Waste Discharge (including the State of the Environment) and use this information as the basis for the Draft Order's requirements.

2.

[2] *City of Rancho Cucamonga v. Regional Water Quality Control Bd.*, 135 Cal.App.4th 1377, 1384–1385 (2006); Code Civ. Proc., § 1094.5(b).

THE DRAFT ORDER SEEKS TO MAKE A NUMBER OF CHANGES TO THE MODEL WQMP. HOWEVER, AFTER JUST OVER THREE YEARS OF IMPLEMENTATION, IT IS SIMPLY TOO EARLY TO REQUIRE CHANGES TO THE MODEL WQMP AND TGD, AND THERE IS NO SUBSTANTIAL EVIDENCE TO DO SO.

6.11

The Draft Fact Sheet indicates that Section XII has been expanded to incorporate synthesized elements of the 2011 Model Water Quality Management Plan ("Model WQMP" or "WQMP") and its' accompanying Technical Guidance Document (TGD). A number of the changes continue to present a concern to the Permittees:

- XII. Changes to BMP lexicon
- XII.B.1 50 Days for implementation
- XII.M.5 Requirements for Non-priority Projects

The effect of these changes is that, not only will the Model WQMP and TGD need to be updated, but protocols at the County and each of the Cities will need to be updated and training will need to be developed and provided to County and City Staff, as well as, the development community so they understand these changes.

Any proposed changes to the Model WQMP are problematic for multiple reasons.

6.12

- First, there is no evidence provided to suggest that all or parts of the current program are ineffective or that the program requires modification. The Model WQMP and TGD have only been in existence for just over three years. This is not enough time to understand if the program is resulting in an improvement to water quality. Orange County was one of the first Phase I programs to modify the Land Development Program consistent with the Low Impact Development (LID) approach. The effects of the program need to be understood before significant changes are made. There has only been limited land development under the new Land Development Program so the effects of the program have not been fully realized due to the relatively small sample size. Land development is a long term process with multiple year life-cycles that takes place over multiple permit-terms. Introducing changes prematurely will prevent an accurate assessment on the effects of the program on a long term basis.

  Without technical justification that further changes will have a measurable improvement to water quality, the time, effort, and cost to update the OC Land Development Program is not warranted. Given the limited time the new OC Land Development Program has been in place, changes at this time are not justified. Therefore, the proposed changes to the Model WQMP and TGD are unsupportable as a matter of law.

6.13

- Second, significant collaborative effort went into the development of the documents and they are successfully being implemented. The Model WQMP and TGD were developed during the last permit term through a collaborative process inclusive of Regional Board staff, Permittees, environmental nongovernmental organizations (NGOs), the land development community, technical consultants, and other interested parties. The Model WQMP Technical Advisory Group (TAG) met for a total of six meetings over 24 months and the Planning Advisory Group (PAG) met

6.13

ten times over 18 months to develop this comprehensive program. A Planning Advisory Committee (PAC) was also formed.[3] The total cost of developing the revised Land Development Program was in excess of $1.5 million. Additionally, the Orange County Stormwater Program has conducted numerous training events and maintains a help desk to provide technical support for implementation of the new land development requirements, which has addressed over 100 inquires since August of 2011.

Action: Revise the Draft Order as indicated in Attachment B.

3. THE DRAFT ORDER NEEDS TO PROVIDE A COMPLIANCE PATHWAY.

The Draft Order should recognize that, in addition to the traditional approach for regulating stormwater Permittees, there is also the option of developing and implementing a watershed-based approach as a compliance pathway for the stormwater permit. This approach was recently supported by the State Water Resources Control Board (SWRCB) draft order in its review of the petitions challenging the 2012 Los Angeles Municipal Separate Storm Sewer System permit (Order No. R4-2012-0175). As a part of that draft order it concluded:[4]

6.14

- "2. …it is appropriate for municipal storm water permits to incorporate a well-defined, transparent, and finite alternative pathway to permit compliance that allows MS4 dischargers that are willing to pursue significant undertakings beyond the iterative process to be deemed in compliance with the receiving water limitations."
- "3….the WMP/EWMP Sections of the Los Angeles MS4 Order….are an appropriate alternative to immediate compliance with receiving water limitations."
- "12. …we lay out several principles to be followed in drafting receiving water limitations compliance alternatives….(4) encourage watershed-based approaches, address multiple contaminants, and incorporate TMDL requirements…."

In addition, a watershed-based approach would help promote watershed-wide solutions to address high priority water quality issues, which in many cases, are the most efficient and cost-effective means to address urban runoff.

[3] The Planning Advisory Committee (PAC) was created in February 2009 at the request of the City Engineers' Technical Advisory Committee (TAC) and the City Managers' Water Quality Committee to serve as a focus for increasingly complex land development and redevelopment requirements in the municipal NPDES stormwater permits. The PAC has delegated authority for private projects The City Engineers' TAC will continue to have delegated authority for public projects. The PAC, when convened, meets with the TAC.

[4] Pages 72-76, http://www.waterboards.ca.gov/public_notices/petitions/water_quality/docs/a2236/a2236_draft_order.pdf.

There is broad support for and many benefits related to a watershed-based approach:

- Nationally, there is a permitting approach shift from the traditional stormwater program (six to eight core program elements) to a more watershed/pollutant-based approach (developing the program to address high priority water quality issues).
  - EPA developed Watershed-based NPDES Permitting Implementation Guidance (2003).[5]
  - The shift is occurring at both the regulatory agency and local levels, as many communities are beginning to develop comprehensive water resources strategic plans to address multiple water-related programs and/or various Total Maximum Daily Loads (TMDLs).
- TMDLs are being incorporated into permits and are being addressed more and more by watershed-based plans.
  - This type of approach is supported within the current stormwater permit for compliance with the selenium and nutrient TMDLs (XVIII. B.8).[6]

6.14

- Watershed-based approaches may encourage collaboration among Permittees to implement regional integrated water resources approaches such as stormwater capture and re-use to achieve multiple benefits.

Consistent with the County's June 20, 2014 comments, the Regional Board should provide a compliance pathway that would allow the Permittees the ability to implement a watershed-based approach to address water quality protection in the Santa Ana region. This would provide a framework for the Permittees to implement the requirements of this Order, including the total maximum daily loads (TMDLs), in an integrated and collaborative fashion to address water quality priorities on a watershed scale.

The Response to Comments (16.6) states that "the Draft Permit is purposefully silent on the spatial scale of the Co-permittees planning documents necessary to carry out the requirements of the Permit…." The County would submit that a watershed-based approach is not just about the scale of the Permittees planning documents, rather it is a paradigm shift in how stormwater programs are developed and managed so that they are more effective at achieving water quality outcomes. Due to the importance of such an approach as an alternative compliance pathway for the stormwater permit, the Permittees request that the Santa Ana Water Board incorporate a watershed-based approach into this Order.

Action: Revise the Draft Order to create a clear compliance pathway. The Permittees offer to meet with Regional Board staff to assist in identifying what modifications would be necessary.

4.

[5] http://cfpub.epa.gov/npdes/wqbasedpermitting/wspermitting.cfm.
[6] Order No. R8-2009-0030.

THE DRAFT ORDER INCORPORATES HIGHLY PRESCRIPTIVE SECTIONS AND, THEREBY, LIMITS THE ABILITY OF THE PERMITTEES TO ADAPTIVELY MANAGE THEIR PROGRAMS.

Although the Draft Order provides some flexibility to the Permittees, in a number of cases, certain sections are overly prescriptive and dictate the method and manner of compliance in conflict with Water Code § 13360, instead of the goals and objectives of the program elements that the Permittees should achieve through the implementation of their programs. Examples include:

- Section XIV. C Municipal Facilities/Activities – this Section now requires that the cleaning frequency be based on the accumulation of "unusually large quantities" of pollutants. Each Permittee is also required to establish objective thresholds for "unusually large quantities" of pollutants. In addition, it is unclear how inspectors would know if there are "accumulated pollutants" in the system and if this term is just meant to reference trash and/or debris or a broad range of pollutants. 6.15

  The Response to Comments (16.66) indicates that the purpose of the new term "unusually large quantities" was to allow the Permittees the ability to prioritize the cleaning frequencies and that the term "accumulated pollutants" should not include mobile pollutants such as pathogens and dissolved wastes. However, the language in the Draft Order does not necessarily convey these concepts. The new terminology could seemingly require the Permittees to address a wide range of materials as a part of the Municipal Facilities/Activities. These new terms add unnecessary complexity to this process. This section also includes new requirements to develop a series of Standard Operating Procedures with prescriptive requirements on when and how they should be reviewed. 6.16

- Section XVI. Training Programs – this Section requires each Permittee to maintain a roster of all personnel whose duties directly or indirectly affect the stormwater program, as well as a County-wide database of training records, and the EO must now approve the mechanism used to maintain the training records.

  Pursuant to the current Permit (Section XVI.), the Permittees conducted an evaluation of the training program and developed a detailed Training Program Framework in June 2008. This framework identifies a training schedule, curriculum content, and defined expertise and competencies for stormwater program managers, authorized inspectors, planners and plan checkers, construction inspectors, commercial inspectors, industrial inspectors, municipal inspectors, and those involved in landscape maintenance and integrated pest management. Since that time, the Permittees have been providing and refining their training modules based on feedback from these programs. Modifying the current training program based on the prescriptive requirements in the Draft Order would negatively impact the current training program and limit the ability of the Permittees to make changes in the future. 6.17

Action: Revise the Draft Order as indicated in Attachment B.

- *Section XIV.C, XIV.E, XIV. F, Municipal Facilities/Activities (pages 66-69)*
- *Section XVI , Training Programs (pages 69-71)*

5. THERE ARE NEW TERMS WITHIN THE DRAFT ORDER THAT NEED TO BE DELETED OR MODIFIED.

The Draft Order includes a number of new terms that are defined in the Glossary that are inconsistent with the current stormwater permit and which may create unnecessary obfuscation in an already complex program. The new terms include:

6.18

- "Storm water control measures" or "SMCs"

  Finding 10 (In-Stream Structural Treatment Control BMPs) introduces a new term "storm water control measure", which appears to be used interchangeably with BMP. Since BMP is a widely accepted term, it is recommended that the term storm water control measure be deleted from the Order.

6.19

- "Unusually large quantities" of pollutants & "Accumulated Pollutants"

  These two terms are used within the Municipal Facilities/Activities section of the Draft Order (Section XIV.C) in reference to the inspection and cleaning of the stormwater conveyance systems.

6.20

- "Interventions"

  This term is used within the Program Effectiveness Assessment (PEA) section of the Draft Order (Section XIX.C) and seems to be interchangeable with the term "best management practices" (BMP).[7] This term is not defined and does not appear to support a new concept within the Draft Order. In fact, within the Fact Sheet (XII.P), the supporting justification for the PEA overwhelmingly uses the term BMP.[8]

Action: Revise the Draft Order as indicated in Attachment B.

- *Finding 10, In-Stream Structural Treatment Control BMPs (page 11)*
- *Section XIV.C, Municipal Facilities/Activities (pages 66-67)*
- *Section XIX, Program Effectiveness Assessments (pages 79-80)*

6. PERMITTING CONSISTENCY IS CRITICAL SINCE SEVERAL PERMITTEES ARE REGULATED UNDER MULTIPLE REGIONAL BOARDS.

6.21

The Orange County Stormwater Program operates a unified countywide program with the County of Orange and the Orange County Flood Control District split between the Santa Ana and San Diego Regional Boards. In addition, in order to have an effective program it is critical that the general public, contractors, land developers, etc. receive consistent messaging and be held to the same standards so that there is less confusion about the stormwater program and what is required. As such, the County's comments seek to create greater uniformity (where possible) between the two sets of regulatory requirements, leading to more effective implementation.

Action: Revise the Draft Order as indicated in Attachment B.

[7] XIX.C.2 states "A list of each of the best management practices (interventions) in the pollution process and where in the process they are intended to be applied."

[8] Fact Sheet, Section XII.P, pages 67 – 69.

7. THE ORDER SHOULD CLARIFY THAT THE SANTA ANA WATER BOARD HAS BEEN DESIGNATED AS THE REGIONAL WATER BOARD FOR REGULATION OF THE ENTIRE JURISDICTIONAL AREA OF THE CITY OF LAKE FOREST AND THE SAN DIEGO WATER BOARD HAS BEEN DESIGNATED AS THE REGIONAL WATER BOARD FOR REGULATION OF THE ENTIRE JURISDICTIONAL AREAS OF THE CITIES OF LAGUNA WOODS AND LAGUNA HILLS.

6.22

The Cities of Laguna Woods, Laguna Hills, and Lake Forest (Cities) are located partially within the jurisdictions of the California Regional Water Quality Control Board, Santa Ana Region (Santa Ana Water Board) and the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board). As a result, these cities have experienced significant administrative and financial burden having to comply with two different MS4 permits that is not contributing to greater overall water quality improvements in either region. Written requests for designation of a single Regional Water Board to regulate matters pertaining to permitting of Phase I MS4 discharges were submitted by the cities to the Santa Ana Water Board. In an effort to address these concerns, the Santa Ana Water Board and the San Diego Water Board are entering into an agreement whereby the San Diego Water Board would be designated to regulate the entire jurisdictional area of the Cities of Laguna Woods and Laguna Hills, including those areas of each City located within the Santa Ana Water Board's jurisdiction, and the Santa Ana Water Board would be designated to regulate the entire jurisdictional area of the City of Lake Forest, including those areas located within the San Diego Water Board's jurisdiction. These designations should be reflected within the language of the Draft Order.

Action: Revise the Draft Order as indicated in Attachment B.

- *Fact Sheet Section V, Designation of a Regional Water Board (pages 5-6)*
- *Table 1 footnote, List of Entities Subject to the Requirements of this Order (page 1)*
- *Finding 2, Regional Water Board Designation (pages 6-7)*
- *Appendix A footnote, Applicability of TMDL Requirements to Co-Permittees (page A-1)*

FINDINGS

8. FINDING 4 (CWA NPDES PERMIT CONDITIONS): FINDING 4 IS NOT CONSISTENT WITH THE LANGUAGE FROM THE CLEAN WATER ACT.

6.23

The language in Finding 4 deviates from CWA Section 402(p)(3)(B) in that it separates the MEP clause from the "other measures" clause as two separate statements, implying that "other measures" are not subject to the MEP standard. Finding 4 states:

> "This Order requires controls to reduce the discharge of pollutants in urban runoff from the MS4s to the MEP. This Order also includes such other provisions that the Regional Board has determined are appropriate to control pollutants."

However, the actual language from CWA Section 402(p)(3)(B) states the following:

> (B) Municipal discharge permits for discharges from municipal storm sewers -
>
> (i) may be issued on a system- or jurisdiction-wide basis;
>
> (ii) shall include a requirement to effectively prohibit non-stormwater discharges into the storm sewers; and

> (iii) shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.

The Response to Comments (16.12) states that Finding 4 is not inconsistent with the Clean Water Act section 402(p)(3)(B), noting that this section articulates two separate permit requirements:

1) require controls to reduce the discharge of pollutants to the maximum extent practicable; and
2) include such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.

The above language is found at section 402(p)(3)(B)(iii), and does not provide for two separate permit provisions regarding the discharge of pollutants from MS4s.

If Finding 4 is attempting to distinguish between non-stormwater and stormwater discharges, it should be noted that although federal law regulates "non-stormwater discharges" into the MS4, Section 402(p)(3)(B)(iii) expressly states that the "discharge of pollutants" shall be reduced to MEP. In drafting this section of the CWA, Congress expressly intended all discharges from MS4s to be subject to MEP as it used the term "pollutant" and did not differentiate between stormwater and non-stormwater, as Finding 4 and Response to Comments 16.12 can be interpreted to do so. Therefore, the duty of the Permittees to reduce the discharge of pollutants from the MS4 to MEP applies to both stormwater and non-stormwater pollutants.

6.23

Furthermore, the focus of the CWA and federal regulations is on a management program that includes a comprehensive planning process to reduce the discharge of pollutants to MEP.[9] One of the elements of the management program is the illicit discharge prevention program.[10] The control and limitation of illicit discharges into the MS4 is intended to achieve the overall MEP standard for discharges from the MS4. This is confirmed by the preamble to EPA regulations that discuss the required elements of the management program. According to EPA:

> [Co-permittees are required] to develop management programs for four types of pollutant sources which discharge to large and medium municipal storm sewer systems. Discharges from large and medium municipal storm sewer systems are usually expected to be composed primarily of: (1) Runoff from commercial and residential areas; (2) storm water runoff from industrial areas; (3) runoff from construction sites; and *(4) non-storm water discharges*. Part 2 of the permit application has been designed to allow [Co-permittees] the opportunity to propose *MEP control measures for each of these components of the discharge*. 55 Fed Reg at 48052 (emphasis added). *See also* 55 Fed Reg at 48045 (stating "Part 2 of the proposed permit application [which includes the illicit discharge prevention requirement] is designed

[9] 40 C.F.R. § 122.26(d)(2)(iv).
[10] 40 C.F.R. § 122.26(d)(2)(iv)(B)(1).

6.23

> to . . . provide municipalities with the opportunity of proposing a comprehensive program of structural and non-structural control measures that will *control the discharge of pollutants, to the maximum extent practicable, from municipal storm sewers*.") (Emphasis added).

EPA's position is consistent with existing State Water Resources Control Board policy which states that discharges into the MS4 are to be controlled through an iterative, BMP based approach that is *less* stringent than the MEP standard.[11] The State Board held:

> An NPDES permit is properly issued for "discharge of a pollutant" to waters of the United States. (Clean Water Act § 402(a)) The Clean Water Act defines "discharge of a pollutant" as an "addition" of a pollutant to waters of the United States from a point source. (Clean Water Act section 502(12)) Section 402(p)(3)(B) authorizes the issuance of permits for discharges "from municipal storm sewers."
>
> We find that the permit language is overly broad because it applies the MEP standard not only to discharges "from" MS4s, but also to discharges "into" MS4s. . . [T]he specific language in this prohibition too broadly restricts all discharges "into" an MS4, and does not allow flexibility to use regional solutions, where they could be applied in a manner that fully protects receiving waters. It is important to emphasize that dischargers into MS4s continue to be required to implement a full range of BMPs, including source control. In particular, dischargers subject to industrial and construction permits must comply with all conditions in those permits prior to discharging storm water into MS4s.[12]

6.24

6.25

The State Board's decision in the *BIA Order* makes clear that the CWA does not include a blanket prohibition on discharges of non-stormwater into the MS4. To the extent the Tentative Order would hold the dischargers liable in the event that any discharge into the MS4 occurs, the Tentative Order exceeds the requirements of the CWA and violates existing State Board policy.

It is also technically infeasible in some cases to differentiate between non-stormwater or stormwater pollutants discharged from the MS4. Thus, just as the discharge of non-stormwater into the MS4 is subject to the effective prohibition standard, the discharge of pollutants in non-stormwater from the MS4 is subject to the MEP standard.

Action: Revise the Draft Order as indicated in Attachment B.

- *Finding 4, CWA NPDES Permit Conditions (pages 7-8)*
- *Finding 32, Economic Considerations (page 19)*

9.

[11] *See* State Water Resources Control Board, Order No. WQ-2001-15, *In the Matter of the Petitions of Building Industry Assoc. of San Diego County and Western States Petroleum Assoc.* (2001) ("BIA Order").
[12] *Id.*, at 9-10.

FINDING 8 (NON-STORMWATER AND STORMWATER DISCHARGES): THE PERMITTEES SHOULD NOT BE REQUIRED TO OBTAIN SEPARATE COVERAGE FOR DE MINIMUS DISCHARGES OUTSIDE OF THE NEWPORT BAY WATERSHED.

6.26

The first sentence of this Finding is unclear: "The discharge of pollutants from the MS4 is subject to the MEP standard and must include other provisions as necessary to reduce pollutants whether the pollutants are transported by storm water or non-storm water." It is unclear what "must include other provisions as necessary to reduce pollutants..." means.

See Comment 19.

Action: Revise the Draft Order as indicated in Attachment B.

- *Finding 8, Non-Storm Water and Storm Water Discharges (pages 9-10)*

10. FINDING 9 (LIMITS OF PERMITTEES' JURISDICTION OVER URBAN RUNOFF): THE DRAFT ORDER SHOULD CONTINUE TO RECOGNIZE THE LIMITS OF THE PERMITTEES' ABILITY TO CONTROL DISCHARGES OF POLLUTANTS.

The current stormwater permit includes a Finding (Finding 10) that recognizes the limits of the Permittees' ability to control the discharge of pollutants. This Finding should be included in the Order.

6.27

The Response to Comments (16.14) does not address the requested language from the Permittees. To clarify, the Permittees are requesting that the following language be added to Finding 9 so that it is recognized that the Permittees do not have control over the generation of many types of pollutants.

> *Similarly, certain activities that generate pollutants present in urban runoff may be beyond the ability of the Co-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.*

This Finding is currently in the fourth-term permit and should be included in the Draft Order.

Action: Revise the Draft Order as indicated in Attachment B.

- *Finding 9, Limits of Co-permittees' Jurisdiction over Urban Runoff (page 11)*

11. FINDING 13 RUNOFF DISCHARGES TO RECEIVING NATURAL WATERS CANNOT LEGALLY BE CLASSIFIED AS PART OF THE MS4, AND CANNOT BE CLASSIFIED AS BOTH A MS4 AND RECEIVING WATER.

6.28

Finding 13 states, "Development generally makes use of natural drainage patterns and features to convey runoff. Rivers, streams, and creeks in developed areas used in this manner and under the ownership and control of the Permittees are part of MS4s regardless of whether they are natural, anthropogenic, or partially modified features. In these cases, the rivers, streams, and creeks in the developed areas of the Permittees' jurisdiction are both an MS4 and receiving water." This finding is legally incorrect.

First, rivers, streams, creeks and other natural water bodies cannot be legally classified as a MS4. The definition of a *municipal separate storm sewer* means "a conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs,

gutters, ditches, man-made channels, or storm drains" "owned and operated" by a municipality.[13]

In California, natural water bodies are not "owned" by the municipality through which they flow. Such water bodies are generally administered by the State of California in the public trust for the right of the people to use such waters for certain purposes.[14] The Legislature, acting within the confines of the common law public trust doctrine, is the ultimate administrator of the trust and may often be the final arbiter of permissible uses of trust lands.

Second, a "receiving water" cannot also be an MS4, as is plain from the CWA regulations. An MS4 is itself defined as discharging to waters of the United States.[15] An MS4 cannot, in essence, discharge to itself. Moreover, an "outfall" from an MS4 (the point at which the discharge enters a receiving water) does not, pursuant to 40 C.F.R §122.26 (b)(9), include conveyances connecting "segments of the same stream or other waters of the United States and are used to convey waters of the United States."

6.28

In EPA's Preamble to the initial version of the MS4 regulations, the agency expressly determined that "streams, wetlands and other water bodies that are waters of the United States are not storm sewers for the purposes of this rule" and that "stream channelization, and stream bed stabilization, which occur in waters of the United States" were not subject to National Pollutant Discharge Elimination System ("NPDES") permits under Section 402 of the CWA.[16] In further support of the point that a MS4 is an artificial, not natural, watercourse, the types of "conveyances" identified in the regulation ("roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains") all refer to anthropogenic structures, not natural streams.[17]

Lastly in *South Florida Water Management District v. Miccosukee Tribe of Indians*, the U.S. Supreme Court opined on the issue of whether a NPDES permit was needed when water from a channelized canal was pumped across a levee into a reservoir. The Court held that if the two water bodies were meaningfully distinct, no permit was needed.[18] Likewise, the Court held in *L.A. County Flood Control District v. NRDC* that the flow of water from an improved portion of a navigable flood control channel into an unimproved portion of the same waterway is not a "discharge of a pollutant" under the CWA.[19] Based on these two

[13] 40 C.F.R. § 122.26(b)(8).

[14] *Marks v. Whitney* (1971) 6 Cal. 3d 251, 259, 260.

[15] 40 C.F.R. § 122.26(b)(8).

[16] 53 Fed. Reg. 49416, 49442 (Dec. 7, 1988).

[17] 40 CFR § 122.26(b)(8).

[18] 541 U.S. 95, 109-112 (2004) (remanding the case to the Florida District Court to determine the hydrological connection between the two waterbodies). After the case was remanded to the Florida District Court, the EPA created an exemption for water transfers based on the Supreme Court's ruling in *Miccosukee Tribe* (*i.e.*, unitary waters theory), which was subsequently upheld by the 11th Circuit Court of Appeals. 40 C.F.R. § 122.3(i). *Friends of the Everglades v. South Fla. Water Management Dist.*, 570 F.3d 1210 (11th Cir. 2009), *cert. denied*, 131 S. Ct. 643 (2010).

[19] *L.A. County Flood Control District v. National Resources Defense Council*, 133 S.Ct. 710 (Jan. 8, 2013).

holdings, there is no discharge of pollutants under the CWA if a water body like a flood control channel is both classified as a MS4 and receiving water.

6.28 This issue is currently being considered by U.S. EPA in Proposed Rules on defining "waters of the United States" under the Clean Water Act.[20] EPA has indicated in meetings and other comments that it did not seek comment and did not intend that MS4s be characterized as waters of the U.S. Therefore, the Regional Board should refrain from issuing this finding until the rules are final and EPA has lawfully established this classification. Otherwise, such a finding is made purely under state law.

Action: Revise the Draft Order as indicated in Attachment B.

- *Fact Sheet VI, Permitted Discharges (pages 6- 7)*
- *Finding 13, Runoff Discharges to Receiving Waters (page 12)*

12. FINDINGS 18, 19, AND 20: THE DRAFT ORDER NEEDS ADDITIONAL FINDINGS REGARDING NEW DEVELOPMENT.

6.29 The Draft Order is in need of additional Findings regarding new development. As such, several Findings have been proposed in Attachment B:

- Finding 18 recognizes the significant progress that has been made through development and implementation of the Model WQMP and TGD.
- 6.30 Finding 19 identifies the importance of the key technical feasibility considerations identified in the TGD developed through comprehensive analysis, extensive BMP and LID implementation experience, and review and comment by the Model WQMP and TGD TAG. Finding 19 also identifies the importance of having technical feasibility alternatives that result in long term effective BMPs, as well as that the intent of Sections in Section XII is to build off of the established technical feasibility criteria within the Model WQMP and TGD.
- 6.31 Finding 20 identifies the value of regional BMPs and the benefit of integrating redevelopment goals with water quality improvement of existing areas with use of regional BMPs.

Action: Revise the Draft Order as indicated in Attachment B.

- *Findings 18 Orange County Model WQMP…., 19 OC Model WQMP and TGD…, and 20 Regional BMPs (page14)*

13. FINDING 31(ECONOMIC CONSIDERATIONS): THE DRAFT ORDER CONTAINS SECTIONS THAT ARE MORE STRINGENT THAN FEDERAL LAW REQUIRING AN ECONOMIC ANALYSIS. IN ADDITION, THE ECONOMIC ANALYSIS IN THE FACT SHEET IS INADEQUATE.

6.32 Finding 31 states "the requirements in this Order are not more stringent than the minimum federal requirements . . . notwithstanding the above; the Regional Board has taken into account economic considerations pertaining to the requirements in this Order, consistent with requirements in section 13241."[21] It was also stated by Regional Board staff at the

[20] *Definition of "Waters of the United States" Under the Clean Water Act*, 79 Fed. Reg. 22188-01 (proposed Apr. 21, 2014).
See also City of Burbank v. State Water Resources Control Bd. (2005) 35 Cal. 4th 613, 618, 626-627.)

January 30, 2015 workshop that section 13241 did not apply to this permit. Despite these assertions, sections of the Draft Order are indeed more stringent than federal law justifying a section 13241 analysis, and the economic analysis in the Fact Sheet is inadequate.

There has not been a full consideration of the section 13241 factors, which would include an analysis of the economic impacts that would result from compliance with the existing stormwater permit compared to the costs of complying with the proposed Draft Order (*i.e.*, the costs of complying with the new requirements). Instead, the Draft Order's analysis begins by stating that a formal economic analysis is not practical at this time due to the limited amount of economic information and/or the large variability in reported costs.[22]

The Fact Sheet also fails to cite any recent cost benefit numbers but relies on inapplicable cost data such as a 1999 EPA study on household costs and a 2005 study on a SWRCB study.

The analysis of costs contained in the Fact Sheet is deficient in two additional ways.

- First, the approach to compliance costs is fundamentally deficient because it tells the public nothing at all about the relationship between the cost of any particular control and the pollution control benefits to be achieved by implementing that control. Under this "generalized" approach, extremely costly requirements that bear little or even no relationship (or even a negative relationship) to the pollution control benefits could be "justified" as long as the "overall" program costs are within what the Regional Board deems to be an acceptable range. This is not a proper way to determine whether a control reduces the discharge of pollutants from the MS4 to the MEP. A more individualized assessment of cost is required. Otherwise, dischargers may be required to implement very costly controls that have no relationship to pollution control benefits, a result inconsistent with MEP.

  6.32

  This analytical flaw in the Fact Sheet is compounded by the approach taken to assess the benefits of the Draft Order. Here again, the assessment approach misses the mark because it tells the public nothing about the pollution control benefits to be achieved by implementation of the controls in the Draft Order. All the Fact Sheet says, in essence, is that people like clean water and in theory may be willing to pay for it, that urban stormwater may contribute to beach closures and that such beach closures have an economic impact. This analysis sheds no light on the relationship between a BMP's costs and the pollution control benefits to be achieved by implementing that BMP.

- Second, the Fact Sheet contains faulty assumptions and relies upon outdated or inapplicable data. The California State University, Sacramento (CSUS) Cost Survey assessed program costs for Phase I cities. Nothing in the Fact Sheet links any of the actual conditions of the Phase I permits of the Phase I cities studied by CSUS with any of the requirements of the Draft Order. Therefore, the study tells the public nothing about the costs to implement the Draft Order. The data included in the Fact Sheet is a decade old. The Fact Sheet uses old data from Phase I programs that have

[22] Fact Sheet, pg. 41.

no linkage to any conditions of the Draft Order. The full costs of implementing the entire program required by the Draft Order in 2015 dollars must be assessed.

- Lastly, stormwater agencies cannot readily establish or raise fees to help pay for the BMPs necessary to comply with either the California Toxics Rule (CTR) criteria or proposed Site Specific Objectives (SSOs) due to the requirements of Proposition 218, Proposition 26 and the Mitigation Fee Act. For instance, Proposition 218 requires that property-related fees be put to a vote, so cities cannot assess fees without the consent of a super-majority (two-thirds) of property owners. Therefore, the costs associated with the implementation and maintenance of the BMPs is more likely to be covered through a municipality's General Funds.

6.32

Action: *Complete an economic analysis that considers the 13241 factors.*

14. FINDING 33 (UNFUNDED MANDATES): THE REGIONAL BOARD HAS NO LEGAL ABILITY TO DETERMINE WHETHER A PARTICULAR MANDATE IS UNFUNDED.

Finding 33 and the supporting arguments in the Fact Sheet are an attempt to address whether the requirements of the Draft Order constitute an unfunded state mandate. That attempt, however, is beyond the scope of the Regional Board's powers, as the *only* agency charged by the Legislature with determining the presence of a state mandate, and whether that mandate is unfunded, is the Commission on State Mandates.

Article XIII B, Section 6(a) of the California Constitution ("Section 6") provides that whenever "any state agency mandates a new program or higher level of service on any local government, the state shall provide a subvention of funds to reimburse that local government for the costs of the program or increased level of service . . . ." Section 6 applies to storm water permits issued by the State Board and the Regional Boards.[23] Thus, Section 6 applies to the Tentative Order.

6.33

Section 6 was added to the California Constitution by voter approval in 1979, as part of a larger effort that had as its goal both limiting state and local spending and restricting the ability of local entities to raise revenue. Section 6 must be viewed as a "safety valve" designed to protect local governments from being placed in the untenable position of being required by the state, on the one hand, to implement certain state mandated programs while also, on the other hand, being prohibited from raising the money needed to pay for those state mandated programs.[24] Recognizing that such a situation was neither a fair nor a wise approach to governing, the voters enacted Section 6 to prevent state government from shifting financial responsibility for carrying out governmental functions to local agencies without the state paying for them.

To implement Section 6, the Legislature created the Commission on State Mandates ("Commission"). The Commission has sole and exclusive jurisdiction to determine whether a state law or order of a state agency is an unfunded state mandate.[25] In accordance with

[23] *County of Los Angeles v. Commission on State Mandates* (2007) 150 Cal.App.4th 898, 920.
[24] *Department of Finance v. Commission on State Mandates* (2003) 30 Cal.4th 727, 735; *County of San Diego v. State of California* (1997) 15 Cal.4th 68, 81.
[25] Gov't Code §§ 17551 and 17552; *Kinlaw v. State of California* (1991) 54 Cal.3d 326, 331-334.

Section 6, Government Code section 17500 et seq., and case law, the Commission on State Mandates has determined that an unfunded state mandate exists when: (a) the state imposes a new program or higher level of service that is; (b) mandated by state law, not federal law; and (c) when the local government lacks adequate fee authority to pay for the new program or higher level of service.

Whether and how individual storm water permit conditions constitute unfunded state mandates is currently the subject of pending litigation. In 2009 and 2010, the Commission on State Mandates determined that parts of the Los Angeles Phase I Permit and major components of the San Diego Phase I Permit constituted unfunded state mandates. The State challenged these two decisions in court, and, in the San Diego matter, the court confirmed that only the Commission on State Mandates could make the ultimate determination of whether a permit condition constituted an unfunded state mandate. Specifically, the court in the San Diego case held that the "Commission has exclusive authority to determine whether the Regional Board has imposed a state mandate." The court in the San Diego case further concluded that the Commission on State Mandates should reconsider its decision to assess whether each of the individual permit conditions were required to achieve the MEP standard. Specifically, the court held that "the Commission must determine whether any of the permit conditions exceed the 'maximum extent practicable' standard." (Emphasis added) Therefore, contrary to the discussion in the Fact Sheet, each permit condition (control) must be assessed to determine whether it is consistent with MEP.

6.33

This issue is currently being addressed by the California Supreme Court in *Department of Finance v. Commission on State Mandates*.[26]

Action: Revise the Draft Order as indicated in Attachment B.

- *Finding 33, Unfunded Mandates (page 20)*
- *Fact Sheet Section VII. E., Unfunded Mandates (page 17)*

[26] (2013) 220 Cal.App.3th 740.

PERMIT SECTIONS

III. DISCHARGE PROHIBITIONS AND LIMITATIONS & IV. RECEIVING WATER LIMITATIONS

15. THE DRAFT ORDER DOES NOT PROVIDE ADEQUATE TECHNICAL JUSTIFICATION AND FINDINGS OF FACT FOR THE EXCLUSION OF SEVERAL CATEGORIES OF NON-STORMWATER DISCHARGES FROM THE DISCHARGE PROHIBITIONS

Section III.A, Table 2, identifies several categories of non-storm water discharges that are presumed to not be a significant source of pollutants and, thus, do not need to be addressed as an illicit discharge.

In comparison, the Code of Federal Regulations states that, as a part of an illicit discharge program, that the Co-permittees shall incorporate a series of items including the following:[27]

> A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system; this program description shall address all types of illicit discharges, however the following category of non-storm water discharges or flows shall be addressed where such discharges are identified by the municipality as sources of pollutants to waters of the United States [Emphasis added]:
>
> - *water line flushing [excluded from the Draft Order]*
> - *landscape irrigation [excluded from the Draft Order]*
> - diverted stream flows
> - rising ground waters
> - uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers
> - uncontaminated pumped groundwater
> - *discharges from potable water sources [excluded from the Draft Order]*
> - foundation drains
> - air conditioning condensation
> - *irrigation water [excluded from the Draft Order]*
> - springs
> - water from crawl space pumps
> - footing drains
> - *lawn watering [excluded from the Draft Order]*
> - individual residential car washing
> - flows from riparian habitats and wetlands
> - dechlorinated swimming pool discharges
> - *street wash water [excluded from the Draft Order]*
>
> (program descriptions shall address discharges or flows from firefighting only where such discharges or flows are identified as significant sources of pollutants to waters of the United States).

6.34

[27] 40 C.F.R. § 122.26(d)(2)(iv)(B)(1).

Although the discharges listed within federal regulations are generally considered to be "conditionally exempt" from the illicit discharge program (unless they are found to be sources of pollutants), the Regional Water Board has determined that several of the categories of these discharges will no longer be allowed without providing adequate findings of fact and technical justification.

The Draft Order excludes *water line flushing, discharges from potable water sources, and street wash water*; however, there is no information contained within the Fact Sheet to identify the technical basis for the finding that they are a significant source of pollutants. Without these findings of fact, it is unclear to the Permittees what the basis is for excluding them.

The Draft Order excludes *landscape irrigation, irrigation water, and lawn watering*; however the fact sheet only describes the rationale for the exclusion of irrigation water. While the Permittees do not dispute that practices to reduce irrigation runoff may reduce the concentrations of some constituents in dry weather runoff and would be consistent with the most recent drought-related regulations and Orders, it is not appropriate to regulate irrigation water as an illicit discharge through the stormwater program when it is not an original source of pollutants. Instead, the Permittees support working cooperatively with water suppliers/purveyors/districts to assist with the implementation of water conservation and education programs so that less potable water is used and is confined to the application site. In fact, water bills that employ a tiered rate structure based on water use have been shown to be very effective at encouraging water conservation.

6.34

The categories irrigation water, lawn watering, and/or landscape irrigation should remain in Table 2.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section III.A, Prohibitions (page 24)*
- *Section III.A, Table 2 Types of Non-stormwater Discharges Presumed to not be a Significant Source of Pollutants (page 25)*
- *Section III.B.2, Limitations (page 26)*
- *Fact Sheet XIII.B, Explanation of Specific Permit Requirements (pages 49-51)*

16. THE PERMITTEES SHOULD NOT BE REQUIRED TO OBTAIN SEPARATE COVERAGE FOR DE MINIMUS DISCHARGES OUTSIDE OF THE NEWPORT BAY WATERSHED.

Section III.B.3 requires that non-stormwater discharges occurring outside of the Newport Bay Watershed from Permittee owned or operated facilities or Permittee activities be in compliance with the conditions and Sections of the General "*De Minimus*" Permit for Discharges to Surface Waters (Order No. R8-2009-0003).

6.35

However, it is unclear and unexplained within the Fact Sheet why the regulatory approach for these types of discharges changed from the fourth term Permit to the Draft Order and why it appears to be inconsistent with the Findings in Order No R8-2009-0003. Pursuant to the fourth term Permit, these types of discharges must be in compliance with the *De Minimus* Permit. Separate permit coverage is not required.

In fact, Order No. R8-2009-0003 states "However, as discussed in the Fact Sheet (Attachment F), certain types of municipal separate storm sewer system (MS4) Permittee discharge activities will no longer be regulated under this Order but will be regulated under the area-

wide MS4 permits when these permits are updated appropriately and renewed during the early part of 2009."[28] The types of Permittee discharges that would no longer require coverage include (this is just a sub-set of the types of discharges):

- Construction dewatering wastes; (except stormwater dewatering at construction sites);
- Dewatering wastes from subterranean seepage, except for discharges from utility vaults;
- Discharges from fire hydrant testing or flushing;
- Air conditioning condensate;
- Swimming pool discharge; and
- Discharges resulting from diverted stream flows.

6.35

Given that these discharges are in fact *de minimus*, the Permittees are already regulated under an MS4 Phase I Permit, and the *De Minimus* Permit recognizes that the Permittees should be regulated pursuant to the area-wide permit, this Section should continue the current regulatory approach (see Finding 68, Order No R8-2009-0003).

Action: Revise the Draft Order as indicated in Attachment B.

- *Finding 8, Non-storm Water and Storm Water Discharges (pages 9-10)*
- *Section B.III.3, Discharge Prohibitions and Limitations (page 26)*
- *Fact Sheet VI, Permitted Discharges (page 7) and XIII.B, Discharge Limitations/Prohibitions (page 49-51)*

VII. ILLICIT DISCHARGES, ILLICIT CONNECTIONS, AND ILLEGAL DUMPING; LITTER DEBRIS AND TRASH CONTROL

17. THE ILLICIT DISCHARGES AND ILLICIT CONNECTIONS PROGRAM DOES NOT RECOGNIZE THE EXISTING SANITARY SEWER OVERFLOW RESPONSE PROGRAM.

Section VII.F requires the Permittees to either comply with the Statewide General Waste Discharge Requirements for Wastewater Collection Agencies or implement an effective program to detect and mitigate SSOs. However, unlike the current permit, the Draft Order does not recognize the fact that the Permittees have been developing and implementing the Countywide Area Spill Control (CASC) Program in collaboration with the Orange County Sanitation District for over 10 years. This permit Section should be modified to recognize the establishment of and be consistent with the CASC program.

6.36

Action: Revise the Draft Order as indicated in Attachment B.

- *Section VII.F, Illicit Discharges, Illicit Connections, and Illegal Dumping; Litter Debris and Trash Control (pages31-32)*

[28] Section I.B.1 (page 3 of 21) and Fact Sheet page F-6 of F-22.

VIII. MUNICIPAL INSPECTIONS OF CONSTRUCTION SITES

18. THE DRAFT ORDER SHOULD NOT REQUIRE INVENTORY OF CONSTRUCTION PROJECTS OF LESS THAN 2 WEEKS IN DURATION.

6.37

Section VIII.A requires each Permittee to maintain an inventory of all construction sites within its jurisdiction; however, this section does not exclude from the inventory construction sites with an expected or actual duration of less than two weeks.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section VIII.A, Municipal Inspections of Construction Sites (page 32)*

19. INVENTORY OF CONSTRUCTION SITES SHOULD BE UPDATED ON A BIANNUAL BASIS.

6.38

Section VIII.A.3 requires a Permittee to update the inventory of all construction sites within its jurisdiction once per month. The frequency of once per month is unreasonably burdensome to the Permittees and does not provide a benefit to water quality. The time allocated to update the inventory monthly would better be served by performing construction site inspections that do have an impact on water quality. An update to the inventory is necessary only on a biannual basis, once in September prior to the wet season and once in May of each year.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section VIII.A.3, Municipal Inspections of Construction Sites (page 32)*

IX. MUNICIPAL INSPECTIONS OF INDUSTRIAL SITES

20. THE RECOMMENDED INSPECTION APPROACH DESCRIBED IN THE ROWD WAS NOT INCLUDED IN THE DRAFT ORDER.

6.39

The ROWD contained an analysis of the industrial inspection program and concluded that the prescriptive nature of the prioritization criteria limited the ability to adaptively manage the program and did not correlate well with changes in behavior (*i.e.*, facilities that are in compliance versus those that are not). The fundamental point raised by the Permittees within the ROWD is that, due to the low rate of non-compliance that has been seen by the inspectors, it is reasonable that the inspection frequency could be modified to reduce the burden of the program. In addition, this would allow the Permittees to better focus their resources on those facilities that posed the greatest risk to water quality and activities related to the broader constituents of concern identified in the State of Environment report. In order to reduce the inspection burden and simultaneously allow for an inspection program that would be focused on the high threat facilities (based on past performance), a revised approach was recommended. The Permittees would like consideration of several options included in the Draft Order:

- Option 1 – A targeted approach with inspection frequencies based on high priority pollutants of concern and past performance of the facility;
- Option 2 – a synoptic approach with no fluctuation in the inspection frequency from year to year;
- Option 3 – a prioritized approach with inspection frequencies based on a prioritization scheme; or

- Option 4 – an alternative approach, which would be approved by the EO.

By allowing optional approaches, the Permittees could tailor the inspections to best fit their individual stormwater programs while still implementing an effective industrial inspection program. Given the fact that industrial facilities are already regulated pursuant to the Industrial General Permit, the Permittees' have identified a low rate of non-compliance for these facilities, and it would be a better expenditure of the Permittees' resources to focus on those facilities that pose the greatest risk to water quality, the Permittees' believe that a revised approach should be considered.

6.39

Action: Revise the Draft Order as indicated in Attachment B.

- *Section IX, Municipal Inspections of Industrial Sites (pages 35-39)*

X. MUNICIPAL INSPECTIONS OF COMMERCIAL SITES

21. THE RECOMMENDED APPROACH OUTLINED IN THE ROWD WAS NOT INCLUDED IN THE DRAFT ORDER.

The ROWD contained an analysis of the commercial inspection program and concluded that the prescriptive nature of the prioritization criteria limited the ability of the Permittees' to adaptively manage the program and did not correlate well with high priority pollutants of concern and/or issues within a watershed. The fundamental point raised by the Permittees within the ROWD is that the resources expended on the commercial inspection program should be focused on those facilities that pose the greatest risk to water quality and those that are not in compliance. In order to reduce the inspection burden and simultaneously allow for an inspection program that would be focused on the high threat facilities (based on the high priority pollutants of concern and/or past performance), a revised approach was recommended. The Permittees would like consideration of several options included in the Draft Order:

- Option 1 – A targeted approach with inspection frequencies based on high priority pollutants of concern and past performance of the facility
- Option 2 – a synoptic approach with no fluctuation in the inspection frequency from year to year
- Option 3 – a prioritized approach with inspection frequencies based on a prioritization scheme; or
- Option 4 – an alternative approach, which would be approved by the EO

6.40

By allowing options, the Permittees could tailor the inspections to best fit their individual stormwater programs while still implementing an effective commercial inspection program.

Although the ROWD proposed options for the inspection program, the Draft Order incorporated a commercial inspection program that was very similar to the fourth term permit. The Response to Comments (16.28) indicated that it was not clear how the reduction in inspections related to a focus on facilities that pose the greatest risk to water quality or how it would reflect improvement in water quality. If the Permittees are allowed to modify their inspection programs so that they can focus on the highest priority facilities (those that present the greatest threat to water quality), then the resources expended on the inspections would have the greatest chance of improving water quality. Conversely,

inspections of facilities that post little or no threat to water quality will be of much lower value than inspecting and correcting deficiencies at those that pose a high threat to water quality.

6.40 Given the fact that there are limited resources within the stormwater program and that they should be focused on the highest water quality issues, it would be a better expenditure of the Permittees' resources to focus on those facilities that pose the greatest risk to water quality. As such, the Permittees' believe that a revised approach for the commercial program be considered.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section X, Municipal Inspections of Commercial Sites (pages 41-43)*

XII. NEW DEVELOPMENT

Section XII of the Draft Order has been revised and restructured in comparison to the 2009 MS4 Permit (Order No R8-2009-0030). The Permittees recognize that the intent of these revisions was to improve clarity and to reinforce the existing land development program that is currently being implemented by the Permittees. Furthermore, the current Draft Order addresses many of the concerns expressed in our June 12, 2014 comment letter and we appreciate this effort.

6.41 However, the Draft Order would still trigger revisions to the Model WQMP, TGD, and associated program documents, computer systems, and training programs. These revisions would not necessarily improve the effectiveness of the technical documentation; however, they could potentially result in a significant disruption to ongoing program implementation and jeopardize the significant investment made by the Permittees to date for program development and training. Therefore, the Permittees request that the Draft Order be further revised to be consistent with and reinforce the existing program.

In response to the 2009 MS4 Permit, the Permittees made an extensive investment in the development of the Model WQMP and TGD, as well as templates, checklists, training modules, and Local Implementation Plans to facilitate consistent implementation. This suite of program documents represents a strong technical foundation for an effective program. However, this program has been in effect for just over three years and, due to the economy, a limited number of projects with approved Project WQMPs have been constructed to date. Therefore, there remains relatively limited practical experience upon which to base an opinion about necessary improvements to the program and the technical guidance. The changes proposed in the Draft Order, and their resulting "ripple effect" through the existing program documents and training

6.42 materials will result in an overall setback for program implementation at this time rather than an improvement.

The Permittees recommend that the Draft Order be revised in a manner that reinforces the adequacy of the existing program and allows the effectiveness of the program to be evaluated through a longer period of time before revisions are made. Alternatively and in lieu of changing the entire Draft Order, the glossary should be modified to ensure that the Draft Order is not in conflict with the Model WQMP and TGD. The Permittees firmly believe in a process for ongoing improvement in Project WQMP development, implementation, and enforcement. However, this process should be based on actual project experience from a representative period of program implementation and should be expressed in terms of regular technical updates to program documents that are led by the results of the effectiveness evaluation, not

driven by unnecessarily increasing the prescriptiveness in the MS4 Permit. The Draft Fact Sheet that accompanies the Draft Order does not present a clear basis for why these technical revisions are necessary; therefore the Permittees recommend that the Draft Order be revised to reinforce the adequacy of the current program documents and the Permittees' current approach for continual improvement. To help achieve these goals, the Permittees suggest have the following comments regarding Section XII.

6.42

22. THE BMP LEXICON IN THE DRAFT ORDER SHOULD BE CONSISTENT WITH THE ORANGE COUNTY MODEL WQMP AND TGD.

Throughout Section XII, the BMP lexicon is inconsistent with the Orange County Model WQMP and TGD. If left unaddressed, the new BMP lexicon will require updates throughout the Model WQMP and TGD, as well as to the associated Model WQMP Template and DAMP sections. Furthermore, the changes in terminology in the Draft Order appear to have no substantive change on the actual permit requirements and would introduce unnecessary confusion. The Draft Fact Sheet identifies that "Section XII has been expanded to incorporate synthesized elements of the 2011 Model Water Quality Management Plan and its accompanying Technical Guidance Document," however, the BMP lexicon in the Draft Order conflicts with the lexicon in the Orange County Model WQMP and TGD.

6.43

Action: Revise the Draft Order as indicated in Attachment B.

23. THE EFFECTIVE DATE FOR SECTION XII.B SHOULD BE 12 MONTHS FOLLOWING ADOPTION OF THE DRAFT ORDER.

With the new elements and change in lexicon identified in Section XII.B, the Permittees will need time to update the Model WQMP and TGD and implement the changes in municipal protocols. The timeframe of 50 days to complete this is unrealistic. As previously stated, updates to the OC Land Development Program are not necessary as the program has been in place for just over 3 years. The current program was developed over a period of 24 months with periodic meetings of the Technical Advisory Group (TAG). Updating the Model WQMP and TGD in order to be consistent with the new requirements of the Draft Order, will require several meetings of the TAG and time to implement the changes in municipal protocols. Thus, at least 12 months is necessary. Since the requirements of the Draft Order are relatively similar to the 2009 permit and Model WQMP and TGD, there would be little impact to water quality if the implementation of the new permit is deferred to allow the appropriate time to ensure effective implementation of the updated program.

6.44

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII. B.1, Classifying and Processing Priority and Non-priority Projects (page 45)*

24. MAINTAINING A RECORD OF THE PROJECT CLASSIFICATION CHECKLIST IS DUPLICATIVE OF INFORMATION CONTAINED IN A PROJECT WQMP OR NON-PRIORITY PROJECT PLAN, AND IS NOT NECESSARY. IF A PROJECT DOES NOT REQUIRE A WQMP OR NON-PRIORITY PROJECT PLAN, A RECORD OF SUCH A PROJECT IS NOT NECESSARY.

Section XII B.3.b requires the Permittees to maintain records for the basis of the classification of projects as Priority or Non-priority for a minimum of five years following the completion of a project. Although the Permittees agree with this approach for those projects that are deemed a Priority, this requirement seems excessive for the majority of projects (likely in the

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6.45

thousands) that may be deemed Non-priority. As such, it is recommended that this requirement solely be focused on Priority projects.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII. B.3.b, Classifying and Processing Priority and Non-priority Projects (page 45)*

25. FOR PROJECTS THAT DO NOT REQUIRE A WQMP OR NON-PRIORITY PROJECT PLAN, IT IS UNNECESSARY FOR THE PROJECT APPLICANT TO SUBMIT THESE DOCUMENTS AS PART OF THE APPLICATION PROCESS.

6.46

As currently drafted, the Draft Order requires all projects to submit a WQMP or Non-Priority Project Plan before a project application is deemed complete. However the Draft Order also allows the Co-permittees to distinguish between non-priority projects that pose a potential water quality concern and those that do not. For non-priority projects that do not pose a water quality concern (and thereby are not required to prepare a Non-Priority Project Plan) it is unnecessary for those projects to submit a Non-Priority Project Plan before being deemed complete.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII. B.6, Classifying and Processing Priority and Non-priority Projects (page 47)*

26. THIRD PARTY VERIFICATION IS A VALID APPROACH TO ADDRESS LONG-TERM MAINTENANCE AND PERFORMANCE OF STRUCTURAL BMPS.

6.47

Section XII.B.16 requires the Permittees to develop guidelines for inspecting structural BMPs to ensure proper design and maintenance. In the current San Diego issued permit for south Orange County (R9-2015-001) the Permittees are allowed to use other verification processes than a Permittee-based inspection to ensure proper design and maintenance. The County requests that such an option be also available for the Santa Ana Region.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII. B.16,Classifying and Processing Priority and Non-priority Projects (page 48)*

27. REQUIRING APPLICANTS TO DEMONSTRATE A SOURCE OF FUNDING FOR LONG-TERM PERFORMANCE, OPERATION AND MAINTENANCE OF SOURCE CONTROL, SITE DESIGN AND ON-SITE STRUCTURAL TREATMENT CONTROL BMPS OVER THE LIFE OF THE PROJECT IS INFEASIBLE.

6.48

In Section XII.C.7, the Draft Order requires project proponents to demonstrate that funding for operation and maintenance is available for the life of the project. Although it is necessary to address the need for adequate funding for proper operation and maintenance, the financial documentation is not required for any aspect of public maintenance (e.g. building or decorative landscaping maintenance per local standards, payment of utilities, etc.). In addition, Co-permittee staff are not qualified to evaluate the veracity of such information.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII. C.7, General Requirements for Priority Projects, (page 49)*

28.

6.49

THE REQUIRED ATTRIBUTES FOR THE WQMP DATABASE IN SECTION XII.C.10 ARE INCONSISTENT WITH THE CURRENT DATABASE AND INCLUDES REDUNDANT REQUIREMENTS THAT DO NOT ADD VALUE TO THE EFFORT.

In Section XII.C.10, the Draft Order specifies certain attributes that must be in the Co-Permittees' electronic database. Some of this information is already being compiled in the WQMP or inspection reports. Requiring double accounting of such attributes seems unnecessary and inefficient.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII. C.10, General Requirements for Priority Projects, (page 50)*

6.50

29. THE REQUIREMENT TO INCORPORATE A MECHANISM TO VERIFY THE LOSS RATE OF THE DESIGN CAPTURE VOLUME OF INFILTRATION LID BMPS IS TECHNICALLY IMPRACTICABLE AND SHOULD BE REMOVED.

Section XII.D.7 requires the Permittees to incorporate a mechanism to indicate the need for maintenance of structural treatment control BMPs. This requirement is technically impracticable and unnecessary given the ongoing inspections of the BMPs.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII. D.7,General Requirements for Structural Treatment Control BMPs (page 52)*

6.51

30. SECTION D.10 IS CONFUSING AND IN CONFLICT WITH THE INTENT OF THE SECTION.

Section XII.D.10 provides flexibility in allowing structural control BMPs that are undersized. However, as currently written the regulatory intent here is unclear. The County offers language that may provide additional clarity regarding the intent of the section.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII. D.10, General Requirements for Structural Treatment Control BMPs (page 52)*

6.52

31. ALLOWANCE FOR NONCONFORMING STRUCTURAL TREATMENT CONTROL BMPS TO BE ACCEPTED BY THE PERMITTEES WOULD BE PROBLEMATIC.

Section XII.D (note that the numbering sequence is off within the Draft Order) allows the Permittees to approve/allow a nonconforming structural treatment control BMP if a number of requirements are met. However, the Permittees do not have the resources to conduct rigorous treatment control BMP testing, which would be necessary in order to meet the requirements listed in the Draft Order. Thus, this Section is impracticable.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII. D, Nonconforming Structural Treatment Control BMPs: Demonstration Facilities (page 53)*

6.53

32. THE REQUIREMENT TO OBTAIN WAIVER FOR TREATING OFFSITE IS EXCESSIVE. THERE ARE MANY PROJECTS WHERE RETENTION ONSITE IS NOT FEASIBLE DUE TO THE NATURE OF THE PROJECT OR PHYSICAL CONSTRAINTS. IF SAME OR GREATER BENEFIT CAN BE ACHIEVED BY TREATING OFFSITE WITHIN THE SAME OWNERSHIP, THIS OPTION SHOULD BE AVAILABLE WITHOUT GOING THROUGH THE WAIVER PROCESS.

In Section XII.H, the Draft Order addresses the option of retrofitting off site. However, it is unclear why a project must receive a waiver when the project capture volume is being treated/retained at another site within the watershed and under the same permit

6.53

requirements (i.e. Section XII), thereby providing the same net environmental benefit. The waiver requirement appears to place a significant disincentive for exploring off site retrofitting opportunities. Also, as currently drafted, the waiver is only available if one can demonstrate that no retrofit opportunity exists, but then in the retrofit section one must obtain a waiver to be allowed to retrofit. This is confusing and seems contradictory.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII. H.3, Fourth Priority Considerations of Offsets through Retrofitting of Existing Development (page 56)*

33. CONSULTATION WITH THE LOCAL GROUNDWATER MANAGEMENT AGENCY SHOULD BE DONE THROUGH A SYSTEMATIC AREA-WIDE PLANNING EFFORT TO DESIGNATE AREAS WHERE INFILTRATION SHOULD NOT OCCUR.

6.54

Section XII.I requires the Co-permittee to confer with local groundwater management agencies when any infiltration BMP is being proposed for a project. Such an approach is labor intensive and can be better addressed through area-wide planning and by requiring the MS4 to confer with local groundwater agencies to identify areas where infiltration should not occur. Such an approach would streamline the review process and provide consistency in project review.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section, XII.I.2, Specific Requirements for Infiltration LID BMPs (page 58)*

34. INDOOR USE OF HARVESTED STORMWATER SHOULD ONLY BE CONSIDERED AS THE APPLICABLE PLUMBING CODE ALLOWS.

6.55

Section XII.J should be modified to allow indoor use of harvested stormwater where the plumbing code allows.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section XII.J.2, Specific Requirements for Harvest and Use LID BMPs (page 60)*

35. OFFSITE STRUCTURAL BMPS SHOULD BE ON THE SAME LEVEL IN THE BMP HIERARCHY AS ONSITE BMPS.

6.56

Section XII.L.1.d.i requires maximized retention of the Design Capture Volume (DCV) onsite. The use of offsite structural BMPs should not be constrained by requirements onsite because as long as the retention of the DCV is met offsite, the retention of the volume of stormwater and associated pollutants are achieved. Offsite structural BMPs should be in the same level in the BMP Hierarchy as Onsite BMPs. This would allow the Permittees the most flexibility in meeting the retention standard and provide opportunities to achieve an integrated water resource approach. This is the approach taken by the recent Los Angeles MS4 permit. If a project has the ability to convey its DCV to an offsite BMP for harvest and use, but is required to infiltrate on site, the full benefits of using stormwater as a resource through the off-site BMP cannot be realized.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section XII.L.1.d, Off-site Structural Treatment Control BMPs… (page 61)*

36. THE REQUIREMENTS FOR NON-PRIORITY PROJECTS SHOULD BE CLEAR AND CONSISTENT WITH THE MODEL WQMP, AND SHOULD NOT BE DEVELOPED BY EACH INDIVIDUAL CO-PERMITTEE.

6.57 Section XII.M.5 requires a plan to be approved under the supervision of a registered civil engineer, which is appropriate for Project WQMPs, but not for Non-Priority Project Water Quality Plan. Non-Priority Project Plans need to be prepared by appropriate qualified individuals based on the complexity of the plan. Non-Priority Project Plans that include structural treatment BMPs will likely require knowledge of hydrological processes or other technical information and should be designed by a civil engineer but plans that do not include such BMPs should not be required to be prepared/approved by a civil engineer. Furthermore such a requirement will add thousands of dollars to a project's costs that are unnecessary. For example, hiring a licensed professional for a simple Non-Priority Project Water Quality Plan that must be approved by a city, such as a small restaurant outdoor patio dining expansion where only a canopy may be used, makes no sense when someone other than a licensed professional can prepare a simple plan.

6.58 Furthermore, policies and procedures to identify non-priority projects that include modifications or improvements that are, or affect areas that are exposed to stormwater and which may be sources of pollution in urban runoff, should be developed by the Principal Permittee to ensure consistency across the permit area.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section XII.M, General Requirements for Non-priority Projects (page 62)*

XIII. PUBLIC EDUCATION AND OUTREACH

37. REQUIREMENT TO DEVELOP EDUCATIONAL CONTENT WITH THE "MOST" POTENTIAL TO APPEAL TO AUDIENCES SHOULD BE MET THROUGH THE DEVELOPMENT OF THE WRITTEN PLAN.

6.59 Section XIII.B.5 requires the Permittees to develop educational content for media with the "most" potential to appeal to audiences. This would be difficult, if not impossible, to demonstrate, and is, therefore, without merit. Prioritizing messages for materials and content using a rationale in the written plan though the process specified in Section XIII.B.5 should be deemed to meeting this requirement.

Action: Revise the Draft Order as indicated in Attachment B.

- *Sections XII.B.5, Public Education and Outreach (pages 64-65)*

XIV. MUNICIPAL FACILITIES/ACTIVITIES

38. THE APPROACH FOR THE DRAINAGE FACILITY MAINTENANCE WAS MODIFIED FROM THE FOURTH PERMIT TERM WITHOUT TECHNICAL JUSTIFICATION.

6.60 See Comment 4.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section XIV.C, Municipal Facilities/Activities (pages 66-69)*

XIX. PROGRAM EFFECTIVENESS ASSESSMENT

39. THE PROGRAM EFFECTIVENESS ASSESSMENT REQUIREMENT DOES NOT REFERENCE ESTABLISHED PEA GUIDANCE MATERIALS.

6.61

This Section requires the Permittees to develop a program effectiveness assessment approach and implement it in order to assess the effectiveness of their stormwater programs. However, there is very little guidance that has been developed by the State or EPA to identify how municipal program managers can assess their programs. Further, the Draft Order does not reference the documents that have been developed by the California Stormwater Quality Association (CASQA) that provide clear guidance to stormwater managers.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section XIX, Program Effectiveness Assessment (page 79)*

40. THE PROGRAM EFFECTIVENESS ASSESSMENT REQUIREMENT IS NOT CONSISTENT WITH ESTABLISHED PEA GUIDANCE MATERIALS.

6.62

This Section requires the Permittees to develop a program effectiveness assessment approach and implement it in order to assess the effectiveness of their stormwater programs. However, the approach that is established within the Order is not consistent with the approach that has generally been utilized within California. For example:

6.63

- The Order requires an assessment of BMPs for each of the program elements. Instead, it is recommended that the Order require an assessment of prioritized BMPs (similar to the public education program) so that it is a focused assessment. It is not a good expenditure of resources to track and assess the effectiveness of all the BMPs employed by the stormwater program or even to assess each of the program elements.

6.64

- The Order requires the development of a conceptual generalized model of how each pollutant is released into the environment. The purpose of this is unclear and appears to be overly burdensome. Instead, it is recommended that the effectiveness assessment focus on the prioritized areas of the stormwater program, such as the TMDLs so that this information is already understood to the extent that it has been developed.

6.65

- The Order requires a description of each of the BMPs in the pollution process and where they are intended to be applied. The purpose of this requirement is unclear and appears to be overly burdensome. Instead, the stormwater program managers should identify a set of prioritized BMPs that are meant to address the highest water quality concerns and develop the effectiveness assessment to focus on them.

Action: Revise the Draft Order as indicated in Attachment B.

- *Section XIX, Program Effectiveness Assessment (page 79)*

XVIII. TOTAL MAXIMUM DAILY LOAD IMPLEMENTATION

41. WLA TABLES ARE UNNECESSARILY CONVERTED, INTRODUCING POTENTIAL CONFUSION AND/OR INCONSISTENCIES WITH THE APPLICABLE BASIN PLAN AMENDMENTS.

6.66

The individual TMDL BPAs include WLAs in table format. These tables, which the Permittees are very familiar with, typically include key information, such as important footnotes, that are part of the WLAs. Although the Permittees greatly appreciate the modifications that have been made in this section, the original tables from the TMDL BPAs are still in a modified form, which introduces potential confusion and inconsistencies with the applicable BPAs. Such an approach is unnecessary and introduces language that is potentially confusing and inconsistent with the Basin Plan Amendments.

Therefore, to ensure consistency with the Basin Plan Amendments and to ensure the WLAs are clearly interpreted, the Permittees have revised each TMDL appendix to remove the modified tables to restore the WLAs tables.

Action: Revise the Draft Order as indicated in Attachment B.

- *Appendices B-H*

42. MONITORING AND REPORTING REQUIREMENTS FOR EACH TMDL ARE UNCLEAR. GIVEN THAT EACH TMDL HAS SPECIFIC REQUIREMENTS, BOTH MONITORING AND REPORTING REQUIREMENTS SHOULD BE SPECIFIED.

6.67

The Basin Plan Amendments for each TMDL specify monitoring and reporting requirements. The Permit must be consistent with each TMDL and the current language in the Draft Order is unclear. Therefore, Permittees are requesting that specific requirements are included. The first preference, as reflected in Attachment B, includes specific Sections in each of the attachments. Alternatively, a Section could be added to Section XVIII that clearly states monitoring and reporting requirements shall be consistent with the applicable BPA.

Action: Revise the Draft Order as indicated in Attachment B.

- *Appendices B-H*

43. THE MS4 PERMIT IS NOT THE APPROPRIATE REGULATORY MECHANISM TO IMPLEMENT THE LOAD ALLOCATIONS OF THE SEDIMENT TMDL.

6.68

While many of the Newport Bay Watershed Permittees have implemented significant sediment control measures over the years, the Sediment TMDL does not establish WLAs for MS4 Permittees. The TMDL is based upon load allocations and control measures to be implemented through the Newport Bay Executive Committee. These actions have been very effective and have resulted in attainment of the load allocations and associated TMDL targets. However, absent wasteload allocations assigned to the MS4 Permittees, the MS4 Permit is not the appropriate regulatory mechanism for this TMDL.

40 C.F.R. § 122.44(d)(1)(vii)(B) states:

> When developing water quality based effluent limits under this paragraph the permitting authority shall ensure that: (B) Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements ***of any available wasteload***

allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7.[29]

6.68 Permittees support continued management actions to ensure sediment does not impair Newport Bay and propose that continued monitoring efforts are instead included as part of Attachment A, Monitoring and Reporting Program.

Action: Revise the Draft Order as indicated in Attachment B.

- *Appendix D*

44. THE TMDL SECTIONS IN THE APPENDICES (APPENDIX A THROUGH H) HAVE INCONSISTENCIES WITH THE RELEVANT BASIN PLAN AMENDMENTS.

- 6.69 Appendix A includes the City of Stanton as a responsible party for the San Gabriel River TMDL – Coyote Creek Metals TMDL. However, this is inconsistent with the adopted Basin Plan Amendment and Table 7-1 within the TMDL. Although the Technical Report recognizes the inconsistency, it is not appropriate to add a new responsible party to this TMDL without going through the public process.
- 6.70 Load allocations (for the Sediment TMDL in the Newport Bay Watershed) have been inappropriately incorporated into the Permit. Federal regulations specify that waste load allocations, not load allocations, are to be incorporated into the Permit (40 CFR 122.44(d)(1)(vii)(B)).
- 6.71 The Toxics TMDL for the Newport Bay Watershed does not mention that certain aspects of the TMDL have been superseded by Basin Plan Amendments adopted by the Regional Board.
- 6.72 The Los Angeles Regional Board adopted an implementation schedule for the Metals TMDL for Coyote Creek. The implementation schedule and actions are not included in Appendix H.

Action: Revise the Draft Order as indicated in Attachment B.

- *Appendices A - H*

MONITORING AND REPORTING PROGRAM (MRP)

45. WET WEATHER SAMPLING REQUIREMENTS SHOULD BE CLARIFIED

6.73 Section II.C.5 states: "wet-weather sampling events may not be consecutive and must be separated by a minimum of two (2) days of dry weather (no precipitation)." As written, the Permittees would not be able to sample a wet weather event if a dry weather sampling event does not occur between the desired wet weather event and a previous wet weather event. The Permittees would like the flexibility to sample any wet weather event as it arises. Removing "*may not be consecutive and*" from the Section would allow flexibility while ensuring a period of dry weather occurs between two wet weather sampling events. Although similar modifications were made in other sections of the MRP, this particular modification may have been missed.

[29] (Emphasis added).

Action: The MRP should be revised as indicated in Attachment B.

- *Section II.C.5, General Water Quality Monitoring Requirements (page 6)*

46. THE PERMITTEES SHOULD BE PROVIDED FLEXIBILITY TO REMOVE ANALYTES FROM THE MONITORING PROGRAM IF THEY HAVEN'T BEEN DETECTED.

Section II.D.7 and Section II.E.5 of the MRP identify the Outfall Monitoring constituents that must be monitored and the manner in which they are supposed to be collected. Language should be included that allows the Permittees to remove an analyte that is not detected upon completion of the annual monitoring. Removal of an analyte should be on a site-by-site basis and on a storm sampling/dry weather sampling basis or both based on the supporting technical justification.

An example of this would be related to sampling certain classifications of pesticides. As documented in the State of the Environment report and 2013-14 PEA, the frequency of detections of organophosphate pesticides is decreasing due to lack of use in the environment. The organophosphate pesticides are being replaced by other pesticide compounds such as synthetic pyrethroids, neonicotinoids, and fipronil based compounds. The permit should allow the Permittees the ability to shift sampling parameters in the sampling programs based on these types of conditions. In addition, the Permittees have begun consulting with the California Department of Pesticide Regulations on their special study of pesticide compounds in urban runoff in South Orange County. Results of this study, along with the Permittees own monitoring, can be presented in the annual work plan to justify changes in pesticide analytes to the various monitoring programs as part of the iterative process.

6.74

Although the Response to Comments (16.80) indicates that the modifications requested to this section were made, the Permittees request that these additional clarifying modifications be made consistent with the previous comment letter.

Action: The MRP should be revised as indicated in Attachment B.

- *Section II.D.7, Outfall Monitoring Requirements (pages 7-9)*
- *Section II.E.5, Receiving Waters Monitoring Requirements (pages 11-12)*
- *MRP Table 3, Parameters for Illicit Discharge and Illicit Connection Discharge Monitoring (page 17) - since Organophosphate pesticides are presently banned for commercial usage, the Permittees recommend that this analysis suite be removed from the required analytical list as there is a low likelihood of detection. As indicated in the Dry Weather Reconnaissance Monitoring section of the 2013-14 PEA, detections of Organophosphates only occurred in 14 of 257 samples collected in 2014 (< 4%). This detection frequency is expected to continue to decrease over time.*

47. THE TOXICITY TESTING REQUIREMENTS SHOULD BE ALIGNED WITH THE CURRENT MONITORING PROGRAM.

6.75

The proposed toxicity testing requirements in Section II.F include an overarching statement: "The water quality monitoring program must include toxicity testing, analyzed using

USEPA's Test of Significant Toxicity Approach." The Test of Significant Toxicity[30] (TST) approach is a new statistical approach to assess the whole effluent toxicity (WET) measurement of wastewater effects. However, Regional Board staff removed the requirement to conduct WET testing on receiving waters as WET testing was developed to assess effluent from publically-owned treatment works, not ambient waters. As WET testing is not required, and will likely not be performed, the TST approach does not seem to necessarily be applicable to receiving water testing. As such, the TST requirement should be removed and current toxicity testing requirements allowed.

In addition, the TST approach differs from what is required for toxicity testing in the current permit. Review and analysis of the TST approach has yielded some issues with the reliability of the approach.

TST tests have been shown to have 5-40% false failures (failing the TST when there is no actual toxicity), placing their regulatory usefulness in question and raising legal issues for permit violations. The USEPA has determined that "the accuracy of toxicity tests cannot be determined."[31] Even if there is only a 5% false failure level (as is set for the TST), this guarantees at least one numeric effluent limit "violation" in the five year permit term, even though there is no actual toxicity for those incidents. But this would still be a violation, while not subject to Mandatory Minimum Penalties (MMPs, Water Code section 13385(i)(1)(D)) if there are other toxic pollutant limits in the permit that is subject to citizen suit enforcement. No reason exists to put permittees in such compliance jeopardy unnecessarily.

6.75

Reanalysis of actual Whole Effluent Toxicity (WET) test data, from a wide variety of real-world samples, demonstrates that the TST technique consistently "detects" the existence of toxicity more frequently than the No Observable Effect Concentration (NOEC) method, especially for tests with relatively small effect levels.[32]

One should not assume that greater statistical sensitivity equates with improved accuracy in WET testing. Reanalysis of data from EPA's inter-laboratory WET variability study indicates that the TST technique also "detects" toxicity in blank samples at a rate up to three times higher than the NOEC.[33] Blank samples are comprised solely of laboratory dilution water than is known to be non-toxic before the test begins. Such inaccuracies demonstrate that the TST does not provide performance equivalent to that of the standard methods that were promulgated in 2002.

In addition, the TST document is only considered to be a guidance document as it has not been approved under 40 C.F.R. Part 136. Although EPA often tries to regulate by guidance,

[30] US Environmental Protection Agency, Office of Wastewater Management, *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*. EPA 833-R-10-003. , (June 2010).
[31] US Environmental Protection Agency, Office of Water, *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*; EPA/600/4-91/002,pp. 139, 193, and 225 (Oct. 2002).
[32] State Water Resources Control Board, *Effluent, Stormwater and Ambient Toxicity Test Drive Analysis f the Test of Significant Toxicity (TST)* (Dec. 2011).
[33] U.S. Environmental Protection Agency, *Final Report: Interlaboratory Variability Study of EPA Short-term Chronic and Acute Whole Effluent Toxicity Test Methods, Vol. 1*; EPA-821-B-01-004 (Sept. 2001).

courts have frowned upon this practice as aptly described in *Appalachian Power Co. v. EPA*[34]. The district court in the *Appalachian Power* case found fault in EPA's regulating by setting aside the guidance in its entirety.[35] "If an agency acts as if a document issued at headquarters is controlling in the field, if it treats the document in the same manner as it treats a legislative rule, if it bases enforcement actions on the policies or interpretations formulated in the document, if it leads private parties or State permitting authorities to believe that it will declare permits invalid unless they comply with the terms of the document, then the agency's document is for all practical purposes 'binding.'"[36]

More recent cases have reached the same conclusion in other instances when EPA tried to regulate through interpretive rules, such as the 2010 TST guidance. One case related to invalidating EPA guidance setting forth air quality attainment alternatives.[37] (Another related to "requirements" contained in letters related to water quality permitting prohibitions related to blending and mixing zones. In this case, the court found that EPA not only lacked the statutory authority to impose the guidance regulations on blending, but also violated the Administrative Procedures Act by implementing the guidance on both issues without first proceeding through the notice and comment procedures for agency rulemaking.[38] The case law is clear that EPA must regulate through rules and not through informal guidance.[39] Similar rules apply to the Water Boards, which also cannot regulate by guidance, particularly where that guidance is contrary to established regulations (e.g., the CCW Toxicity TMDL) and statewide precedential orders.

6.75

Furthermore, the Fact Sheet for the Draft Order does not provide the background information necessary to determine why the use of the TST approach is necessary. Inclusion of the TST approach is inconsistent with existing policies and regulations. As such, toxicity testing requirements should remain the same as the previous permit since no change in law or regulations have occurred to authorize these modifications.

Action: The MRP should be revised as indicated in Attachment B.

- *Section II.F, Toxicity Testing (page 14)*

48. THE MRP SHOULD NOT PREMATURELY REQUIRE CAUSAL ASSESSMENTS.

6.76

The County recognizes and appreciates Regional Board staff revising Section II.J to require only one Causal Assessment (CA) during the term of Order No. R8-2015-0001. However, the County still believes this requirement is premature for the same reasons as provided in the previous comments:

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[34] 208 F.3d. 1015, 1020 (D.C. Cir. 2000).

[35] *Id.* at p. 1028.

[36] *Id.* at p. 1021 [*citations omitted*].

[37] *NRDC v. U.S. EPA*, 643 F.3d 311 (D.C.Cir. 2011).

[38] *Iowa League of Cities v. U.S. EPA*, 711 F.3d 844, 878 (8th Cir. 2013).

[39] *See also United States v. Mead Corp.*, 533 U.S. 218 (2001) (defining a two-part test for when agency guidance documents have the force and effect of law).

- The State Water Resources Control Board is in the process of developing a Biological Integrity Policy (Policy) that will be incorporated into the Inland Surface Waters Plan. Although CAs are a part of the overall Policy, the specific process for triggering the need for, conducting, and interpreting the CA is still being evaluated. The Policy will likely include guidance to the Regional Boards on a number of issues including when a CA should be conducted, how a CA should be conducted, how to interpret the results, and what the follow up actions should be. Until these decisions have been made, it would be difficult to implement this requirement on a consistent basis.
- There is still significant debate about if and how the Policy should apply to "modified" channels. In addition, if the Policy does apply to "modified" channels, there may be a CA "lite" that is conducted to determine if a significant driver for the biological integrity of a site is habitat modification. If this is the case, then a full CA may not be necessary. Given that much of northern Orange County is fully developed and the waterways significantly modified, the outcome of these discussions will be critically important.

6.76 The Regional Board staff indicated, in their Response to Comments, that: "By performing a Causal Assessment the Permittees will be advancing approaches and techniques for regional assessments and advancing our collective knowledge of stressors to receiving waters." This seems to put the onus on the Permittees to provide the resources to develop the approach to use for CAs instead of the State Water Board's process. It is important to note that the limitations of causal assessments and the use of CADDIS for these assessments has been the subject of much conversation with State Water Board staff as a part of the development of the biological integrity plan. In fact, it has been noted that CAs have not been well-vetted in California and that stressor identification designs must be optimized for use in California where there are cumulative stressors, which are difficult to diagnose.

An alternative would be to allow the conductance of a CA to be an optional special study, rather than a required monitoring element. This special study could be conducted in conjunction with Stormwater Monitoring Coalition monitoring if applicable.

It should be noted that the Permittees have already begun participating in a CA with the Santa Ana Water Board and other participants for a portion of San Diego Creek in the Newport Bay watershed. This CA is considered a new special study under the Fourth Term Permit that is anticipated to be completed following adoption of the Fifth Term Permit. Due to the limitations noted above and the work that is being conducted by the State Water Board, it is recommended that the current CA project be incorporated into the Fifth Term Permit as a special study in lieu of a requirement of the Bioassessment Monitoring program.

6.77 In addition, since the toxicity testing requirements were removed from Section II.J, Section II.J.6, which requires Toxicity Identification Evaluations (TIEs) based upon the determination of first-hour toxicity, should be also removed.

Action: The MRP should be revised as indicated in Attachment B.

- *Sections II.J, Bioassessment Monitoring (pages 18-19)*

49.

THE MRP NEEDS CLARIFICATION AND CONSOLIDATION REGARDING THE FREQUENCY OF MONITORING BETWEEN THE OUTFALL MONITORING, RECEIVING WATER MONITORING, AND TOXICITY TESTING PROGRAMS.

The County recognizes and appreciates Regional Board staff allowing greater flexibility in the frequency of monitoring of sites on an applicable even- and odd-year basis. The County has provided additional redline comments in the Outfall Monitoring Requirements, Receiving Waters Monitoring Requirements, and Toxicity Testing sections to better clarify and consolidate the frequency of monitoring at stations in Newport Bay and North Orange County regional watersheds during the applicable even- and odd-year sampling events. These redline comments are based on current monitoring frequencies for the Mass Emissions and Estuary/Wetlands monitoring programs, with some stations sampled semi-annually and others sampled quarterly.

6.78

The County also included clarifications on sampling protocols for storm event compositing in the Outfall Monitoring Requirements section to coincide more closely with current protocols.

Action: The MRP should be revised as indicated in Attachment B.

- *Sections II.D.4 and II.D.5, Outfall Monitoring Requirements (pages 7-9)*
- *Sections II.E.1 and II.E.2, Receiving Waters Monitoring Requirements (pages 11-12)*
- *Section II.F.4, Toxicity Testing (page 14)*

50. FIRST SUBMITTAL DATE FOR ANNUAL PROGRESS REPORT

The approval of the Draft Order No. R8-2015-001 is expected in March 2015. Consequently consideration should be given to making the first annual progress under the new permit on November 15, 2016 rather than 2015 since this would be reflective of just over a year of implementation. Submittal of policies and procedures for non-priority projects could be accomplished as a stand-alone submittal rather than as part of the annual report.

6.79

Action: The MRP should be revised as indicated in Attachment B.

- *Table 5 revised date (page 23)*

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SANTA ANA REGION

3737 Main Street, Suite 500, Riverside, CA 92501-3348
(951) 782-4130 • Fax (951) 781-6288
http://www.waterboards.ca.gov/santaana

ORDER NO. R8-2015-0001
NPDES PERMIT NO. CAS 618030
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM ("NPDES") PERMIT AND WASTE DISCHARGE REQUIREMENTS

Orange County Flood Control District, the County of Orange
And
The Incorporated Cities therein within the Santa Ana Region
Area-wide Urban Runoff, Santa Ana Region

The following Co-permittees, listed in Table 1, are subject to waste discharge requirements as set forth in this Order (or Permit):

Table 1: List of Entities Subject to the Requirements of this Order

County of Orange	City of La Habra
Orange County Flood Control District	City of La Palma
City of Anaheim	City of Lake Forest[1]
City of Brea	City of Los Alamitos
City of Buena Park	City of Newport Beach
City of Costa Mesa	City of Orange
City of Cypress	City of Placentia
City of Fountain Valley	City of Santa Ana
City of Fullerton	City of Seal Beach
City of Garden Grove	City of Stanton
City of Huntington Beach	City of Tustin
City of Irvine	City of Villa Park
City of Laguna Hills[1]	City of Westminster
City of Laguna Woods[1]	City of Yorba Linda

[1] The entire jurisdictional area of the City of Lake Forest, including those areas located in the San Diego Region, will be regulated by the Santa Ana Regional Water Quality Control Board (Santa Ana Regional Board). The entire jurisdictional areas of the City of Laguna Hills and the City of Laguna Woods, including those areas located in the Santa Ana Region, will be regulated by the San Diego Regional Water Quality Control Board (San Diego Regional Board). These designations are subject to the terms of the agreement between San Diego Regional Board and Santa Ana Regional Board and become effective on the later effectiveness date of this Order or the effective date of San Diego Water Board Tentative Order No. R9-2013-0001, as amended by Order No. R9-2015-0001.

Comment [KA1]: The Permittees recognize that the Draft Order is still undergoing revision. Once finalized, the Permittees recommend the following modifications for consistency throughout the Order:
- Use of the term "Co-permittee" instead of "Co-Permittee"
- Only define acronyms the first time used
- Use of "de minimus" as a general term and use of "De Minimis" for permits

Field Code Changed

Formatted: English (U.S.)

ADMINISTRATIVE INFORMATION

This Order was adopted by the Santa Ana Regional Water Quality Control Board ("Regional Board") on:	Month day, 2015
This Order shall become effective on:	Month day, 2015
This Order shall expire on:	Month day, 2020
The U.S. Environmental Protection Agency ("USEPA") and the Regional Board have classified the discharges from the Co-permittees' municipal separate storm sewer systems ("MS4s") as a "large municipal separate storm sewer system"- pursuant to 40 CFR 122.26(b)(4).	

IT IS HEREBY ORDERED that the Co-permittees[2] subject to this Permit, in order to meet the provisions contained in division 7 of the California Water Code (commencing with section 13000) and the provisions of the federal Clean Water Act ("CWA") and regulations and guidelines adopted thereunder, shall comply with the requirements of this Permit.

I, Kurt V. Berchtold, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on MONTH DAY, 2015.

Kurt V. Berchtold
Executive Officer

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[2] This Order refers to all of the Co-permittees collectively as "Co-Permittees", including the Principal Permittee.

Table of Contents

Appendix A: Applicability of TMDL requirements to Co-permittees

Appendix B: Water Quality-Based Effluent Limits for Nutrients in Newport Bay

Appendix C: Water Quality-Based Effluent Limits for Fecal Coliform in Newport Bay

Appendix D: Water Quality-Based Effluent Limits for Sediment in Upper Newport Bay

Appendix E: Water Quality-Based Effluent Limits for Organo-Chlorineg Compounds in Newport Bay and San Diego Creek

Appendix F: Water Quality-Based Effluent Limits for the Diazinon and Chlorpyrifos TMDL for Upper Newport Bay and San Diego Creek

Appendix G: Water Quality-Based Effluent Limits for Toxic Pollutants (Metals and Selenium) into San Diego Creek and Newport Bay

Appendix H: Water Quality-Based Effluent Limits for Coyote Creek

FINDINGS

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Regional Board) finds that:

A. JURISDICTION

1. **MS4 Ownership or Operation**. Each of the Co-permittees owns or operates a municipal separate storm sewer system ("MS4), through which it discharges storm water and non-storm water (collectively "urban runoff") into waters of the U.S. within the Santa Ana Region. These MS4s fall into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) a small MS4 that is "interrelated" to a medium or large MS4; or (3) an MS4 which contributes to a violation of a water quality standard; or (4) an MS4 which is a significant contributor of pollutants to waters of the U.S.

2. **Regional Water Board Designation.** The Cities of Laguna Hills, Laguna Woods, and Lake Forest are located partially within the jurisdictions of the California Regional Water Quality Control Board, Santa Ana Region (Santa Ana Water Board) and the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) and are subject to regulation by both Regional Water Boards. Pursuant to CWC section13228, the Cities of Laguna Hills, Laguna Woods, and Lake Forest submitted written requests that one Regional Water Board be designated to regulate each of the Cities. The Santa Ana Water Board and the San Diego Water Board entered into an agreement, whereby the San Diego Water Board is designated to regulate the entire jurisdictional areas of the Cities of Laguna Woods and Laguna Hills, including those areas of each City located within the Santa Ana Water Board's jurisdiction, and the Santa Ana Water Board is designated to regulate the entire jurisdictional area of the City of Lake Forest, including those areas located within the San Diego Water Board's jurisdiction on the effective date of this Order or San Diego Water Board Order No. R9-2013-0001, as amended by Order No. R9-2015-0001, whichever is later. The agreement provides that the City of Lake Forest is required to retain, and continue implementation of, its over-irrigation discharge prohibition in Section 15.14.030 of the City Municipal Code for regulating storm water quality throughout its jurisdiction. The City of Lake Forest will also be required to actively participate during development and implementation of the Aliso Creek Watershed Management Area Water Quality Improvement Plan required pursuant to San Diego Water Board Order No. R9-2013-0001, as amended by Order No. R9-2015-0001. Each Regional Water Board retains the authority to enforce provisions of the Phase I MS4 permits issued to each city but compliance will be determined based upon the Phase I MS4 permit in which a particular city is regulated as a Copermittee (Water Code section 13228 (b)). Under the terms of the

agreement, any TMDL and associated MS4 permit requirements issued by the San Diego Water Board or the Santa Ana Water Board which include the Cities of Laguna Woods, Laguna Hills or Lake Forest as a responsible party, will be incorporated into the appropriate Phase I MS4 permit by reference. Enforcement of the applicable TMDL will remain with the Regional Water Board which has jurisdiction over the targeted impaired water body. Applicable TMDLs subject to the terms of the agreement include, but are not limited to, the Santa Ana Water Board's San Diego Creek/Newport Bay TMDL and the San Diego Water Board's Indicator Bacteria Project I Beaches and Creeks TMDL. The Santa Ana Water Board will periodically review the effectiveness of the agreement during each MS4 permit reissuance. Based on this periodic review the Santa Ana Water Board may terminate the agreement with San Diego Water Board or otherwise modify the agreement subject to the approval of the San Diego Water Board.

~~2.~~3. **Regulated Sources and Activities**. This Order regulates the discharge of pollutants from anthropogenic sources in urban runoff from MS4s or activities within the jurisdiction and control of the Co-permittees. Except as noted in Finding 8 below, this Order authorizes discharges of urban runoff from MS4s subject to the conditions and provisions herein. This Order is not intended to obligate the Co-permittees to address non-anthropogenic pollutants ~~or flows in receiving waters~~.

~~3.~~4. **Legal and Regulatory Authority**. This Order is issued pursuant to section 402 of the federal Clean Water Act ("CWA") and implementing regulations (Code of Federal Regulations [CFR] Title 40, Part 122 [40 CFR 122]) adopted by the United States Environmental Protection Agency ("USEPA"), and chapter 5.5, division 7 of the California Water Code ("CWC") (commencing with section13370). This Order serves as a National Pollutant Discharge Elimination System ("NPDES") permit for discharges of urban runoff from MS4s to waters of the U.S. This Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260). The Regional Board has the legal authority to issue a system-wide MS4 permit pursuant to its authority under CWA section 402(p)(3)(B) and 40 CFR 122.26(a)(1)(v). The USEPA has established that the permitting authority, in this case the Regional Board, has the flexibility to establish system- or region-wide permits affecting multiple Co-permittees (40 CFR 122.26(a)(3)(ii)). The system-wide nature of this Order will ensure consistency of regulation within watersheds and is expected to result in overall cost savings for the Co-permittees and the Regional Board. The federal regulations make it clear that the Co-permittees need only comply with permit conditions relating to discharges from the MS4s for which they are operators (40 CFR 122.26(a)(3)(vi)). This Order does not require the Co-permittees to manage storm water that originated outside of their jurisdictional boundaries, but rather to work collectively to improve storm water management within the Permit area.

CWA NPDES Permit Conditions. Pursuant to CWA section 402(p)(3)(B),

NPDES permits for ~~storm water~~ discharges from MS4s must include: (1) requirements to effectively prohibit non-storm water discharges into MS4s; (2) controls to reduce the discharge of pollutants to the maximum extent practicable ("MEP"), including management practices, control techniques, and system, design and engineering methods and ~~other such; and (3)~~ such other provisions as the Regional Board determines ~~are~~ appropriate for the control of such pollutants. This Order prescribes conditions to comply with the CWA requirements for owners and operators of MS4s ~~to effectively prohibit non-storm water discharges into the MS4s. This Order requires controls to reduce the discharge of pollutants in urban runoff from the MS4s to the MEP. This Order also includes such other provisions that the Regional Board has determined are appropriate to control pollutants~~.

~~4.~~5. **CWA and CWC Monitoring Requirements**. CWA section 308(a) and 40 CFR 122.41(h),(j)-(l) and 122.48 require that NPDES permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements in 40 CFR 122.26(d)(1)(iv)(D), 122.26(d)(1)(v)(B), 122.26(d)(2)(i)(F), 122.26(d)(2)(iii)(D),122.26(d)(2)(iv)(B)(2) and 122.42(c). CWC section 13383 authorizes the Regional Board to establish monitoring, inspection, data entry, reporting and recordkeeping requirements. This Order establishes monitoring and reporting requirements to implement federal and State requirements.

~~5.~~6. **Total Maximum Daily Loads**. CWA section 303(d)(1)(A) requires that each state "shall identify those waters within its boundaries for which the effluent limitations…are not stringent enough to implement any water quality standard applicable to such waters." The CWA also requires states to establish a priority ranking of impaired water bodies known as Water Quality Limited Segments and to establish Total Maximum Daily Loads ("TMDLs") for such waters. This priority list of impaired water bodies is called the Clean Water Act Section 303(d) List of Water Quality Limited Segments, commonly referred to as the "303(d) List". The CWA requires the 303(d) List to be updated every two years.

TMDLs are numerical calculations of the maximum amount of a pollutant that a water body can assimilate and still meet water quality standards. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point sources (waste load allocations or "WLAs") and non-point sources (load allocations or "LAs"), background contribution, plus a margin of safety. Discharges from MS4s are point source discharges.

The federal regulations (40 CFR 22.44(d)(1)(vii)(B)) require that, when NPDES permits incorporate water quality based effluent limitations ("WQBELs") developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, the WQBELs must be consistent with the assumptions and requirements of ~~any available~~the WLA for the discharge. Consistent with this requirement, this Order includes a process for developing a BMP-based approach (development of a WQBEL compliance plan), which, when adopted by the Regional Board, shall become the final water quality-based effluent limitation(s).

A Permittee or group of Co-permittees may submit a WQBEL compliance plan describing the proposed BMPs and the documentation demonstrating that the BMPs are expected to attain the WLAs when implemented. Once the Regional Board approves this plan the plan becomes the final water quality-based effluent limit that is consistent with the WLAs. The plan will be updated, as necessary, to reflect evaluations of the effectiveness of the BMPs, including evaluations presented in the annual reports.

This Order implements TMDLs that have been adopted by the Regional Board and approved by USEPA as of the time this Order is issued. This Order also implements TMDLs that have been promulgated by the USEPA. This Order establishes WQBELs consistent with the assumptions and requirements of TMDL implementation requirements and WLAs assigned to discharges from the Permittees' MS4s. The WQBELs are expected to be sufficient to cause the responsible Co-permittees to meet the WLAs by the compliance dates specified in their respective TMDLs and shown in Appendices B through H.

6.7. **Permit Modification.** In accordance with 40 CFR 122.41(f), this Order may be modified, revoked or reissued prior to its expiration date for cause. This includes the following reasons:

a. To address significant changes in conditions identified in the technical reports required by the Regional Board which were unknown at the time of the issuance of this Order;
b. To incorporate applicable requirements of state-wide water quality control plans adopted by the State Water Resources Control Board or any amendments to the Basin Plan approved by the Regional Board, the State Board, and, if necessary, by the Office of Administrative Law;
c. To incorporate changes needed for consistency with standard provisions and precedential Orders adopted by the State Water Resources Control Board.
d.c. To incorporate changes needed for consistency with standard provisions and precedential Orders adopted by the State Water Resourced Control Board;
e.d. To comply with any applicable requirements, guidelines, or regulations issued or approved under the Clean Water Act, if the requirements, guidelines, or regulations contain different conditions or additional requirements than those included in this Order;
f.e. Or to incorporate any requirements imposed upon the Co-permittees through the TMDL process.

8. **Non-Storm Water and Storm Water Discharges**. The discharge of pollutants from the MS4 is subject to the MEP standard and must include other provisions necessary to reduce pollutants whether the pollutants are transported by storm water or non-storm water.

This Order requires each Co- Permittee to effectively prohibit discharges of non-

storm water into its MS4 unless such discharges are authorized by an NPDES permit. The MS4s generally contain non-storm water flows such as irrigation runoff, runoff ~~wastewater~~ from non-commercial car washing, ~~wastewater~~ runoff from miscellaneous washing and cleaning operations, and other nuisance flows generally referred to as *de minimis* discharges. Federal regulations, 40 CFR122.26(d)(2)(i)(B), prohibit the discharge of non-storm water containing pollutants into the MS4s and to waters of the U.S. unless they are regulated under a separate NPDES permit, or are exempt, as indicated in Section III, Discharge Prohibitions, of this Order.

Certain non-storm water discharges may be permitted under various NPDES permits adopted by the Regional Board and the State Water Resources Control Board. These permits include NPDES Permit No. CAG998001 (commonly known as the *De Minimis* Permit); NPDES Permit No. CAG990002, Discharges from Utility Vaults and Underground Structures to Surface Waters; and NPDES Permit No. CAG918002, for discharges to surface waters of certain groundwater at sites within the San Diego Creek/Newport Bay watersheds. Non-storm water discharges permitted under these and other NPDES permits do not need to be prohibited by the Co- Permittees.

This Order authorizes the discharge of urban runoff from the Co-permittees' MS4s. This includes authorization for certain non-storm water discharges. The Regional Board adopted a number of NPDES permits to address de-minimus types of pollutant discharges. However, the Co-permittees need not get coverage under the de-minimus permits for the types of discharges listed under Section III (Table 2), except for discharges to the Newport bay watershed (where coverage under the Newport Bay watershed-specific de-minimus permit is required), as long as they are in compliance with the conditions specified under Section III of this Order.

~~Authorized non-storm water discharges are subject to both the requirements herein and the requirements of the *De Minimis* Permit.~~ This Order does not authorize the Co-permittees' non-storm water discharges that are subject to NPDES Permit No. CAG918002. Authorization for such discharges must be obtained through the process described in NPDES Permit No. CAG918002.

Monitoring conducted by the Permittees, as well as the 303(d) List, have identified dry weather, non-storm water discharges from the MS4s as a source of pollutants causing or contributing to receiving water quality impairments in the Santa Ana Region. The federal regulations (40 CFR 122.26(d)(2)(iv)(B)(1)) require Co-permittees to have a program to prevent illicit discharges to the MS4. The federal regulations, however, allow specific categories of unpermitted non-storm water discharges or flows to be regarded as illicit discharges only where such discharges are identified as sources of pollutants to waters of the U.S. Such un-permitted non-storm water discharges are listed in this Order in Section III. However, this list of discharges is subject to modification during the term of this Order.

9. **Limits of Co-permittees' Jurisdiction over Urban Runoff.** The Co-permittees may lack or have limited legal jurisdiction over urban runoff into their MS4s from some state and federal facilities, Native American tribal lands, utilities, special districts, and other entities. The Regional Board recognizes that the Co-permittees can only be held responsible for discharges of pollutants from such entities to the extent that the Co-permittees have the authority to eliminate or control the pollutants. Recognizing these limitations, the Co-permittees are expected to control pollutants in discharges into their MS4s from such entities according to CWA Section 402(p)(3)(B).

   Similarly, certain activities that generate pollutants present in urban runoff may be beyond the ability of the Co-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.

10. **In-Stream Structural Treatment Control BMPs**. Pursuant to federal regulations (40 CFR 131.10(a)), in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S. Authorizing the construction of a structural treatment control BMP within a water of the U.S., or using the water body itself as a structural treatment control BMP or for conveyance to such a facility, would be tantamount to accepting waste assimilation as an appropriate use for that water body. Waters of the U.S. should not be converted into structural treatment control best management practices ("BMPs"~~, a.k.a. storm water control measures or "SMCs~~").

    However, this exclusion does not preclude stream restoration or rehabilitation projects, constructed wetlands, or regional BMPs that have been properly permitted and ~~whose water quality impacts have been fully mitigated~~maintained. Construction, operation, and maintenance of a structural treatment control facility in a water body can otherwise negatively impact the physical, chemical, and biological integrity, as well as the beneficial uses, of the water body.

B. DISCHARGE CHARACTERISTICS AND RUNOFF MANAGEMENT

~~7.~~11. **Potential Beneficial Use Impairment**. The discharge of pollutants from MS4s may cause ~~or threaten to cause~~ the concentration of pollutants in receiving waters to exceed applicable water quality standards. Discharges from MS4s may result in alterations to the hydrology of receiving waters that negatively impact their physical integrity. These conditions may impair or threaten to impair designated beneficial uses resulting in a condition of pollution, contamination, or nuisance.

~~8.~~12. **Pollutants Generated by Land Development**. Land development has created, and ~~continues~~ threatens to create, new sources of non-storm water discharges and pollutants in storm water discharges as human population density increases. This

brings higher levels of automobile emissions, automobile maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, and trash. Development typically converts natural ground cover to impervious surfaces such as paved highways, streets, rooftops, and parking lots. Pollutants deposited on these surfaces are dumped or washed off ~~the~~ by non-storm water or storm water flows into and from the MS4s. As a result of the increased imperviousness in urban areas, less rain water can infiltrate through and flow over vegetated soil where physical, chemical, and biological processes can remove pollutants. Therefore, runoff leaving a developed area can contain greater pollutant loads and have significantly greater runoff volume, velocity, and peak flow rate than pre-development runoff conditions from the same area. Certain best management practices can minimize these impacts to water quality.

~~9.~~13. **Runoff Discharges to Receiving Waters**. The MS4s discharge runoff into lakes, reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within the Santa Ana Region. ~~Development generally makes use of natural drainage patterns and features to convey runoff. Rivers, streams and creeks in developed areas used in this manner and under the ownership and control of the Permittees are part of MS4s regardless of whether they are natural, anthropogenic, or partially-modified features. In these cases, the rivers, streams and creeks in the developed areas of the Permittees' jurisdictions are both an MS4 and receiving water~~. Discharges of runoff from MS4s must occur through outfalls (point sources) into waters of the U.S. Outfalls do not include open conveyances connecting two municipal separate storm sewers. Outfalls also do not include pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. (40 CFR 122.26(b)(9)).

~~10.~~14. **Pollutants in Urban Runoff**. The most common pollutants in urban runoff include total suspended solids, sediment, pathogens (e.g., bacteria, viruses, protozoa), heavy metals (e.g., cadmium, copper, lead, and zinc), petroleum products and polynuclear aromatic hydrocarbons, synthetic organics (e.g., pesticides, herbicides, and PCBs), nutrients (e.g., nitrogen and phosphorus), oxygen-demanding substances (e.g., decaying vegetation, animal waste), detergents, and trash. Pollutants in urban runoff are typically generated by persons or activities over which the Co-permittees may have the authority to enact measures to control those pollutants. The Regional Board recognizes that the Co-permittees' authority is not equal for all persons or activities in their jurisdictions. The limits of the Co-permittees' authority over some persons, such as school districts, are not clear. Nonetheless, the Co-permittees are required to exercise their authority consistent with the requirements of the Clean Water Act and this Order.

~~11.~~15. **Human Health and Aquatic Life Impairment**. Pollutants in runoff discharged from the MS4s ~~risk~~ may adversely affect~~ing~~ human health and/or aquatic organisms. Adverse human health effects include gastrointestinal diseases and infections. Adverse physiological responses to pollutants in runoff include

impaired reproduction, growth anomalies and mortality in aquatic organisms. These responses may be the result of different mechanisms, including bioaccumulation of toxicants. During bioaccumulation, toxicants carry up the food chain and may affect both aquatic and non-aquatic organisms, including human health. Increased volume, velocity, rate, and duration of storm water runoff greatly accelerate the erosion of downstream natural channels. This alters stream channels and habitats and can adversely affect aquatic and terrestrial organisms.

~~12.~~16. **Best Management Practices**. Wastes which are deposited and accumulate in MS4 drainage structures will be discharged from these structures to waters of the U.S. unless they are removed. These discharges may cause or contribute to~~, or threaten to cause or contribute to,~~ a condition of pollution in receiving waters. For this reason, pollutants in storm water discharges from the MS4s ~~can be and~~ must be effectively reduced in runoff by the application of a combination of pollution prevention, source control, and treatment control BMPs. Pollution prevention BMPs are practices that prevent or reduce the generation of potential pollutants, typically at their source. Pollution prevention is the "first line of defense". Source control BMPs (both structural and non-structural) eliminate or minimize the contact between potential pollutants and urban runoff, therefore preventing the transport of pollutants to receiving waters. Treatment control BMPs remove pollutants that have entered into urban runoff.

Certain structural treatment control BMPs, such as constructed wetlands, are or will be waters of the state, and may support beneficial uses. The operation and maintenance of these BMPs may impact the beneficial uses of those waters. Section III of this Order contains provisions to minimize impacts to those beneficial uses as the result of operating and maintaining structural treatment control BMPs. However, it is not the intent of the Regional Board to regulate discharges *within* structural treatment control BMPs in a way that interferes with efforts to comply with the requirements of this Order.

17. **BMP Implementation**. To reduce the discharge of storm water pollutants, to effectively prohibit non-storm water discharges, and to protect receiving waters, the water quality impacts of development need to be addressed during the three major phases of planning, construction, and use. Development which is not guided by water quality planning policies and principles can result in increased pollutant load discharges, flow rates, and flow durations which can negatively affect receiving water beneficial uses. Construction sites without adequate BMP implementation may result in sediment or runoff rates which greatly exceed natural erosion rates of undisturbed lands, causing siltation and potentially impairing the beneficial uses of the receiving waters. In addition, existing development can generate substantial pollutant loads which are discharged in runoff to receiving waters. Retrofitting areas of existing development with storm water pollutant control and hydro-modification management BMPs is necessary to address discharges of urban runoff that may cause or contribute to a condition of pollution or a violation of water quality standards.

18. **Orange County Model WQMP and Technical Guidance Document (TGD).** The Orange County Model WQMP (Model WQMP) and TGD were developed during the last permit term through a collaborative process inclusive of Regional Board staff, Copermittees, environmental nongovernmental organizations (NGOs), the land development community, technical consultants, and other interested people. The result of this process is the Model WQMP and TGD that is a comprehensive an innovative stormwater quality approach to new and redevelopment that integrates the principles of Low Impact Development (LID). Through the development and implementation of the Model WQMP and TGD with comprehensive technical guidance, a training program, and development plan check procedures, the land development program in Orange County has made significant progress toward improving the quality of runoff from new and redevelopment projects. The intent of the new development and significant redevelopment provisions in Section XII is to build off of Model WQMP and TGD.

19. **OC Model WQMP and TGD Technical Feasibility Criteria**. The Model WQMP and TGD has developed critical technical feasibility criteria developed through comprehensive analysis, extensive BMP and LID implementation experience, and review and comment by the Model WQMP and TGD Technical Advisory Group. To maintain the technical feasibility criteria identified in the Model WQMP and TGD will ensure that long-term effective BMPs can be maintained and do not contribute to risks to people, property, or the environment. The intent of provisions in Section XII is to build off of the established technical feasibility criteria with in the Model WQMP and TGD.

~~13.~~20. **Regional BMPs.** Regional BMPs consist of a critical tool to help achieve improvement in stormwater quality and ultimately receiving waters. Regional BMPs can provide similar retention and treatment to onsite BMPs for development. One of the benefits of regional BMPs is that maintenance can be better monitored and most regional BMPs are maintained by a Copermitee or an HOA ensuring that maintenance is actually performed. Regional BMPs also provide a better opportunity for implementation of harvest and use of stormwater as more water demands and storage is available usually than onsite harvest and use systems. Additionally regional BMPs can be placed in areas where groundwater recharge is desired, where this resource can be used as a future water supply, as opposed to distributed infiltration, where this may not be able to be realized. Regional BMPs can also be increased in size to meet the redevelopment criteria to improve water quality from existing developed areas by treatment or retention. An example of this is the San Diego Creek Natural Treatment System Master Plan that has integrated these principles and serve as a complex system of constructed wetlands that provide invaluable treatment implemented to provide treatment for new development and redevelopment. Regional BMPs have been included in Section XII as a method to achieve compliance with the new and redevelopment provisions based in this understanding.

~~14.~~21. **Water Quality Improvements**. Since 1990, the Permittees have been developing and implementing programs and BMPs intended to effectively prohibit non-storm water discharges into the MS4s and control pollutants in ~~storm water~~ discharges from the MS4s to the MEP. As a result, beach closures have been significantly reduced, public awareness of water quality issues has increased, and several water body / pollutant combinations are being considered for removal from the CWA Section 303(d) List. The Permittees have been able to achieve improvements in water quality in some respects, but significant improvements to the quality of receiving waters and discharges from the MS4s are still necessary to meet the requirements and objectives of the CWA.

~~15.~~22. **Long Term Planning and Implementation**. Federal regulations require municipal storm water permits to expire 5 years from adoption, after which the permit must be renewed and reissued. The Regional Board recognizes that water quality degradation and impacts to beneficial uses in the Santa Ana Region occurred over several decades and will not be undone easily. The Regional Board subsequently recognizes that multiple permit terms may be necessary before water quality objectives are consistently achieved in the Santa Ana Region.

~~16.~~23. "**Iterative Process"**. This Order is based on an iterative approach that, in summary, is comprised of planning, implementing, evaluating, and improving BMPs carried out as part of the Co-p ~~P~~ermittees' storm water programs. Multiple iterations will occur during this permit term, and are likely to occur over multiple permit terms, to achieve water quality standards. To fully effectuate the "iterative process", this Order includes ~~prescriptive~~ requirements for conducting program effectiveness assessments ("PEAs"). PEAs are a necessary component of the "iterative process". As part of the ~~performance of~~ PEAs, Co-permittees must compare the outcomes of program activities to the requirements of this Order and ~~to objective~~ performance standards developed by the Co-p~~P~~ermittees. The purposes of conducting PEAs include:

a. assessing compliance with the requirements of this Order;
b. tracking progress towards meeting performance standards and/or water quality standards;
c. justifying the Permittees' commitment of resources, including the cessation of ineffective management practices;
d. providing feedback to Permittees' program managers, in part, to identify the "best" or most effective management practices undertaken; and
e. assessing reductions in pollutant loads to receiving waters and any relationship to management practices.

It is not the intent of the Regional Board that ~~objective~~ performance standards that are developed exclusively by the Permittees as part of PEAs, be used as the basis for enforcement action against any of the Permittees for failure to satisfy those standards. The intent of the Regional Board is that the Permittees constructively use those performance standards, and the related monitoring, to iteratively improve the performance of their storm water programs in a timely way to remove

pollutants in urban runoff to the maximum extent practicable. Permittees are also required to periodically evaluate the validity of their performance standards and methods of measurement and make modifications accordingly.

C. WATER QUALITY STANDARDS

22. **Basin Plan**. The Regional Board adopted the *Water Quality Control Plan for the Santa Ana River Basin* (Basin Plan) on January 24, 1995. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters addressed through the plan. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Water Board, the Office of Administrative Law, and where appropriate, the USEPA. The requirements of this Order implement the Basin Plan.

    The Basin Plan identifies the following existing and potential beneficial uses for surface waters in the Santa Ana Region: Municipal and Domestic Supply (MUN); Agricultural Supply (AGR); Industrial Process Supply (PROC); Industrial Service Supply (IND); Ground Water Recharge (GWR); Navigation (NAV); Hydropower Generation (POW); Water Contact Recreation (REC1); Non-contact Recreation (REC2); Commercial and Sport Fishing (COMM); Warm Freshwater Habitat (WARM); Limited Warm Freshwater Habitats (LWRM); Cold Freshwater Habitat (COLD); Preservation of Biological Habitats of Special Significance (BIOL); Wildlife Habitat (WILD); Rare, Threatened, or Endangered Species (RARE); Spawning, Reproduction, and Development (SPWN); Marine Habitat (MAR); Shellfish Harvesting (SHELL); and Estuarine Habitat (EST).

23. **Ocean Plan**. The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, 2005, and 2009. The State Water Board adopted the latest amendment on October 16, 2012 and it became effective on August 19, 2013. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The requirements of this Order implement the Ocean Plan. The Ocean Plan identifies the following beneficial uses of ocean waters of the state to be protected: Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance; rare and endangered species; marine habitat; fish spawning and shellfish harvesting.

24. **Sediment Quality Control Plan**. On September 16, 2008, the State Water Board adopted the *Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality* (Sediment Quality Control Plan). The Sediment Quality Control Plan became effective on August 25, 2009. The Sediment Quality Control Plan establishes: 1) narrative sediment quality objectives for benthic community protection from exposure to contaminants in sediment and to protect human health, and 2) a program of implementation using a multiple lines of evidence approach to

interpret the narrative sediment quality objectives. Requirements of this Order implement the Sediment Quality Control Plan.

25. **National Toxics Rule and California Toxics Rule**. USEPA adopted the National Toxics Rule (NTR) on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the California Toxics Rule (CTR). The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. The CTR and NTR contain water quality criteria for priority pollutants in discharges to surface water. However, the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* states that the Policy does not apply to regulation of storm water discharges. The Regional Board believes that compliance with Water Quality Standards through implementation of BMPs is appropriate for regulating urban runoff. The USEPA articulated this position on the use of BMPs in storm water permits in the policy memorandum entitled, ''Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits'' (61 FR 43761, August 9, 1996). The USEPA also has articulated this position with respect to implementing TMDLs in their policy memorandum entitled "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on those WLAs", November 22, 2002.

26. **Anti-degradation Policy**. Federal anti-degradation policy is applicable to all NPDES permits. 40 CFR 131.12 requires that State water quality standards include an anti-degradation policy consistent with the federal policy. The State Water Resources Control Board established California's anti-degradation policy in State Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal anti-degradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Santa Ana Water Board's Basin Plan implements, and incorporates by reference, both the State and federal anti-degradation policies. This Order requires the Co-permittees to implement programs and policies necessary to improve water quality; the Order does not allow any degradation of existing water quality. Therefore, this Order is consistent with the anti-degradation provisions of 40 CFR 131.12 and State Board Resolution No. 68-16 as discussed further in the Technical Report.

27. **Anti-Backsliding Requirements**. Section 402(o)(2) of the CWA and federal regulations at 40 CFR 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as effluent limitations in the previous permits. Further discussion regarding anti-backsliding is in the Technical Report to this Order.

D. CONSIDERATIONS UNDER FEDERAL AND STATE LAW

28. **Coastal Zone Act Reauthorization Amendments**. Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) requires coastal states with approved coastal zone management programs to address non-point source pollution impacting or threatening coastal water quality. CZARA addresses five sources of non-point source pollution: agriculture, silviculture, urban, marinas, and hydro-modification. This Order addresses the management measures required by CZARA for the urban category, with the exception of septic systems. The programs developed pursuant to this Order fulfill the need for coastal cities to develop a runoff non-point source plan identified in the Non-Point Source Program Strategy and Implementation Plan. The Regional Board addresses septic systems through the administration of other programs.

29. **Endangered Species Act**. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 USC sections 1531 to 1544). This Order requires compliance with receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Permittees are responsible for meeting all requirements of the applicable Endangered Species Act.

30. **Report of Waste Discharge Process**. The waste discharge requirements set forth in this Order are based upon the Report of Waste Discharge submitted by the Orange County Permittees prior to the expiration of Order No. R8-2009-0030 (NPDES No. CAS618030). The federal regulations (40 CFR 122.21(d)(2)) and CWC section 13376 impose a duty on the Permittees to reapply for continued coverage through submittal of a Report of Waste Discharge no later than 180 days prior to expiration of a currently effective permit. This requirement is set forth in Provision XXIII.1. of Order No. R8-2009-0030. Order No. R8-2009-0030 (NPDES No. CAS618030) expired on May 22, 2014 but was administratively extended pursuant to 40 CFR 122.6(d). Once adopted and in effect, this Order supersedes Order No. R8-2009-0030, except for purposes of enforcement, and is subject to any necessary revisions to its requirements made after the Regional Board considers the Report of Waste Discharge through the public process provided in 40 CFR Part 124.

31. **Integrated Report and Clean Water Act Section 303(d) List**. The Santa Ana Regional Water Quality Control Board and the State Water Resources Control Board submit an Integrated Report to USEPA to comply with the reporting requirements of CWA sections 303(d), 305(b) and 314, which lists the attainment status of water quality standards for water bodies in the Santa Ana Region. USEPA issued its Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act on July 29, 2005, which advocates the use of a five-category approach for classifying the

attainment status of water quality standards for water bodies in the Integrated Report. Water bodies included in Category 5 in the Integrated Report indicate at least one beneficial use is not being supported or is threatened, and a TMDL is required. Water bodies included in Category 5 in the Integrated Report are placed on the 303(d) List. The most recent 303(d) List was issued in 2010.

Surface water bodies may be included in Category 4 of the Integrated Report if a TMDL has been adopted and approved by the USEPA for all identified pollutants or impairments (Category 4a); if other pollution control requirements required by a local, state or federal authority are stringent enough to implement applicable water quality standards within a reasonable period of time (Category 4b); or, if the failure to meet an applicable water quality standard is not caused by a pollutant, but caused by other types of pollution (Category 4c). According to the 2010 Integrated Report, no water bodies in the Santa Ana Region are identified in Category 4.

Information acquired as part of implementing this Order may be used by the Regional Board to include surface waters impaired by discharges from the Permittees' MS4s in Category 4and Category 5 in the Integrated Report. The inclusion of those waters will allow for their consideration during the next 303(d) List submittal by the State to USEPA.

32. **Economic Considerations**. The California Supreme Court has ruled that, although CWC section 13263 requires the State and Regional Water Boards (collectively Water Boards) to consider factors set forth in CWC section 13241 when issuing an NPDES permit, the Water Board may not consider the factors to justify imposing pollutant restrictions that are less stringent than the applicable federal regulations require. (City of Burbank v. State Water Resources Control Bd. (2005) 35 Cal.4th 613, 618, 626-627.) However, when pollutant restrictions in an NPDES permit are more stringent than federal law requires, CWC section 13263 requires that the Water Boards consider the factors described in CWC section 13241 as they apply to those specific restrictions.

As noted in the following finding, the Regional Board finds that the requirements in this Order are not more stringent than the minimum federal requirements. The minimum federal requirements include: (1) the effective prohibition of ~~on the discharge of~~ non-storm water discharges into the MS4; and (2) controls to reduce the discharge of pollutants ~~in storm water~~ from the MS4 to the MEP, including management practices, control techniques and system, design and engineering methods; and ~~(3)~~ such other provisions as~~that~~ the Regional Board ~~has~~ determine~~sd~~ appropriate for the control of such pollutants. The minimum federal requirements also include requirements for limitations consistent with any applicable waste load allocation. Therefore, considerations pursuant to CWC section 13241 are not required. Notwithstanding the above, the Regional Board has taken into account economic considerations pertaining to the requirements in this Order, consistent with requirements in section 13241. The economic consideration is described in the accompanying Technical Report.

33. ~~**Unfunded Mandates**. This Order does not constitute an unfunded local government mandate subject to subvention under Article XIIIB, Section (6) of the California Constitution for reasons detailed in the accompanying Technical Report.~~

34. **California Environmental Quality Act**. The issuance of this NPDES permit for the discharge of runoff from MS4s to waters of the U.S. is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, section 21000 *et seq*.) in accordance with CWC section 13389.

E. STATE WATER RESOURCES CONTROL BOARD DECISIONS

35. **Compliance with Prohibitions and Limitations**. The receiving water limitation language specified in this Order is consistent with language recommended by the USEPA and established in State Water Board Order WQ 99-05 (amending WQ 98-01), Own Motion Review of the Petition of Environmental Health Coalition to Review Waste Discharge Requirements Order No. 96-03, NPDES Permit No. CAS0108740, adopted by the State Water Board on June 17, 1999.

36. **Special Conditions for Areas of Special Biological Significance**. On March20, 2012, the State Water Board approved Resolution No. 2012-0012 approving an exception to the Ocean Plan prohibition against discharges to Areas of Special Biological Significance ("ASBS") for certain nonpoint source discharges and NPDES permitted municipal storm water discharges. State Water Board Resolution No. 2012-0012 requires monitoring and testing of marine aquatic life and water quality in several ASBS to protect California's coastline during storms when rain water overflows into coastal waters. Specific terms, prohibitions, and special conditions were adopted to provide special protections for marine aquatic life and natural water quality in ASBS. The Special Protections contained in Attachment B to Resolution No. 2012-0012, applicable to discharges to ASBS', are hereby incorporated into this Order as if fully set forth herein (See Provision IV.E.).

F. ADMINISTRATIVE FINDINGS

38. **Executive Officer Delegation of Authority**. The Regional Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to CWC section 13223. Therefore, the Executive Officer is authorized to act on the Regional Board's behalf on any matter within this Order unless such delegation is unlawful under CWC section 13223 or this Order explicitly states otherwise.

39. **Standard Provisions**. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified

categories of permits in accordance with 40 CFR 122.42, are provided in this Order.

40. **Fact Sheet/Technical Report**. The Technical Report for this Order contains background information, regulatory and legal citations, references and additional explanatory information and data in support of the requirements of this Order. The Technical Report serves as a fact sheet described in Parts 124.8 and 124.56 of the Code of Federal Regulations. The Technical Report is hereby incorporated into this Order and constitutes part of the Findings of this Order.

41. **Public Notice**. In accordance with State and federal laws and regulations, the Regional Board notified the Co-permittees, and interested agencies and persons of its intent to prescribe waste discharge requirements for the control of discharges into and from the MS4s to waters of the U.S. and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Technical Report.

42. **Public Hearing**. The Regional Board held a public hearing on MONTH(S), DATE(S) 2014, and heard and considered all comments pertaining to the terms and conditions of this Order. Details of the public hearing are provided in the Technical Report.

43. **Effective Date**. This Order serves as an NPDES permit pursuant to CWA section 402 or amendments thereto, and becomes effective fifty (50) days after the date of its adoption, provided that the Regional Administrator, USEPA, Region IX, does not object to this Order.

44. **Review by the State Water Board**. Any person aggrieved by this action of the Regional Board may petition the State Water Board to review the action in accordance with CWC section 13320 and California Code of Regulations, title 23, sections 2050, *et seq*. The State Water Board must receive the petition by 5:00 p.m., 30 days after the Regional Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday or State holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions will be provided upon request or may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

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PERMIT REQUIREMENTS

IT IS HEREBY ORDERED that the Co-permittees[3], in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act, as amended, and regulations and guidelines adopted thereunder, must comply with the following:

I. GENERAL RESPONSIBILITIES OF THE CO-PERMITTEES

A. The Co-permittees (inclusive of the Principal Permittee), shall be responsible for the management of storm drain systems within their jurisdictions. To carry out the requirements of this Order, the Co-permittees must:

1. Accurately document and effectively implement best management practices, including programs, policies, and procedures, within each of their respective jurisdictions.
2. Develop and apply ~~valid objective~~ performance measures to track and assess the effectiveness of individual best management practices or systems of best management practices and execute timely program improvements necessary to improve the effectiveness of those practices.
3. ~~Annually e~~Evaluate the validity of performance measures and the methods used to measure achievement of performance measures.
4. Participate with one another in the development of necessary programs, plans, procedures, strategies, and reports that are of mutual interest.
5. Coordinate the relevant plans, policies, procedures, and standards of their internal agencies, departments, and divisions.
6. Develop and execute necessary interagency agreements.
7. Establish and maintain adequate legal authority, as required by the Federal Storm Water Regulations.
8. Maintain records and submit reports that are adequate to determine compliance with the requirements of this Order.
9. Monitor and report the progress of any plans, projects, and programs implemented to control the discharge of pollutants in urban runoff to their MS4s. Reports must include comparisons of outcomes to objectives, performance measures, or milestones prescribed by this Order or developed pursuant to Provision I.A.2. by the Co-permittees.

II. GENERAL RESPONSIBILITIES OF THE PRINCIPAL PERMITTEE

A. In addition to the General Responsibilities in Section I above, the Principal Permittee (County of Orange) is responsible for the overall management of the storm water program. To carry out the requirements of this Order, the Prinicpal

[3] As described in the Glossary of this Order, the term "Co-permittees" includes the Principal Permittee.

Permittee must:

1. Coordinate the planning and execution of necessary common programs, plans, policies, procedures, and strategies among the Co-permittees.
2. Monitor and report the progress of any plans, projects, and programs of mutual interest to the Co-permittees.
3. Conduct chemical and biological water quality monitoring and conduct any additional monitoring as directed by the Executive Officer and authorized by this Order.
4. Coordinate the preparation of written reports, programs, plans, and procedures, including the Annual Progress Report, and their submittal to the Executive Officer.

III. DISCHARGE PROHIBITIONS AND LIMITATIONS

A. Prohibitions

1. In accordance with the requirements of 40 CFR § 122.26(d)(2)(i)(B) and (F), the Co-permittees must effectively prohibit illicit/illegal discharges from entering into the municipal separate storm sewer system ("MS4") unless such discharges are authorized by an NPDES permit or are not prohibited according to Provision III.A.2., below.
2. The non-storm water discharges in Table 2 ~~below~~ do not need to be prohibited by the Co-permittees unless such discharges are identified by the Co-permittee(s) or the Executive Officer as a significant source of pollutants[4]~~.~~
3. Except for those discharges described in Table 2 ~~below~~, non-storm water discharges from Co-permittees' activities into waters of the U.S. are prohibited unless the discharge is authorized under an NPDES Permit.
4. With the recommendation of the Co-permittees or based on Substantial Evidence, the Executive Officer is authorized to add other types of discharges to Table 2 ~~below~~, by way of written notice to the Co-permittees and after providing a minimum of 30 days for public comment.
5. Discharges of urban runoff from MS4s owned or operated by the Co-Permittees must be in compliance with the applicable discharge prohibitions contained in Chapter 5 of the Basin Plan.
6. Discharges of urban runoff into waters of the U.S. from MS4s owned or operated by the Co-permittees which cause or contribute, ~~or which threaten to cause or contribute~~ to a condition of pollution, contamination, or nuisance (see CWC Section 13050) are prohibited.
7. The discharge to waters of the U.S. of any substance(s) in concentrations that are toxic to animal or plant life is prohibited.
8. The discharge to waters of the U.S. of any radiological, chemical, or biological warfare agent, or high-level radiological waste, is prohibited.

[4] ~~Note that this Order now requires the effective prohibition of irrigation runoff into the MS4.~~

Table 2: Types of non-storm water discharges presumed to not be a significant source of pollutants

Water line flushing
Landscape irrigation
Air conditioning condensate
Discharges from potable water sources
Irrigation water
Passive foundation or footing drains
Lawn watering
Water from crawl space pumps
Individual residential car washing and charity car washing events conducted by non-profit 501(c)organizations
De-chlorinated water from swimming pools (except cleaning wastewater and filter backwash)
Diverted stream flows
Rising ground water and natural springs
Ground water infiltration (as defined in 40 CFR § 35.2005(20)
Uncontaminated pumped groundwater
Flow from riparian habitats and wetlands
Street wash water
Temporary non-storm water discharges authorized by USEPA pursuant to Sections 104(a) or 104(b) of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA")[5]
Emergency firefighting flows necessary for the protection of life and property
Water not otherwise containing "waste", as defined in CWC Section 13050(d)

B. Limitations

1. The Co-permittees must implement an effective public education and

[5] These discharges must comply with water quality standards as applicable or relevant and appropriate requirements ("ARARs") under Section 121(d)(2) of CERCLA; or must be subject to either a written waiver of ARARs by USEPA pursuant to Section 121(d)(4) of CERCLA, or a written determination by USEPA that compliance with ARARs is not practicable considering the exigencies of the situation pursuant to 40CFR300.415(j).

outreach program for the purpose of reducing the volume of the anthropogenic non-storm water discharges included in Table 2 to the MS4s.

~~1.~~2. Each Co-permittee must implement an effective water conservation program to minimize irrigation runoff from facilities that they own or control.

~~2.~~3. For discharges outside the Newport Bay watershed the de minimus types of discharges listed in the Regional Board's General De Minimus Permit for Discharges to Surface Waters, Order No. R8-2009-0003, NPDES No. CAG 998001 (General De Minimus Permit), shall be in compliance with the terms and conditions of the ~~General~~ General De Minimus Permit~~MS4 Permit~~. Separate coverage under the General De Minimus Permit is not required. For discharges within the Newport Bay watershed, separate permit authorization for these de minimus discharges will be required when the discharges contain selenium, nitrogen or other pollutants at levels of concern.~~Non-storm water discharges occurring outside of the Newport Bay watershed from Co-permittee-owned or operated facilities or Co-permittee activities must be in compliance with the conditions and provisions of the General *De Minimis* Permit for Discharges to Surface Waters, Order No. R8-2009-0003, NPDES Permit No. CAG998001 (General *De Minimis* Permit) or subsequent reauthorizations or amendments~~.

~~3.~~4. Discharges to waters of the U.S. from swimming pools that are owned or operated by the Co-permittees must not be composed of pool cleaning wastewater or filter backwash.

~~4.~~5. The volume and velocity of non-storm water discharges must be controlled to prevent causing hydrologic conditions of concern.

~~5.~~6. Discharges from facilities owned or controlled by Co-permittees that extract, treat, and discharge water diverted from waters of the U.S. must meet the following requirements:

a. The discharge to waters of the U.S. must not contain any pollutants added by the treatment process or contain pollutants in greater concentration(s) than the influent.
b. The discharge must not cause or contribute to a condition of erosion or cause the suspension and discharge of pollutants already in the conveyance.
c. The extraction and treatment must be in compliance with Section 404 of the Clean Water Act or with the conditions or provisions of any applicable permit, license, or CWA Section 401 Water Quality Standards Certification.

~~6.~~7. For discharges associated with water body pollutant combinations addressed in a TMDL, the Permittees shall achieve compliance as outlined in Section XVIII and Appendices A-H.

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IV. RECEIVING WATER LIMITATIONS

A. Except as provided for in Provision IV.B, d~~D~~ischarges of urban runoff from the Co-permittees' MS4s must not cause or contribute to a condition of nuisance or exceedances of water quality standards for surface waters and groundwaters.

B. Discharges of urban runoff from the Co-permittees' MS4s must comply with Provision IV.A. through timely implementation of ~~storm water control measures~~best management practices and other actions to reduce pollutants in discharges according to the conditions and provisions of this Order. If exceedances of receiving waters limitations persist, notwithstanding implementation of ~~storm water control measures~~best management practices and other actions, the responsible Co-permittees must achieve compliance with prohibitions and receiving waters limitations according to Subsection IV.D. below.

C. Determinations that discharges are causing or contributing to exceedances of water quality standards will be based, in part, on assessments of water quality data which are performed according to scheduled cycles of monitoring, analysis, and reporting required in attached Monitoring and Reporting Program No. R8-2015-0001 (Attachment A).

D. Upon a determination by a Co-permittee or the Executive Officer that a discharge is causing or contributing to the exceedance of an applicable water quality standard, the responsible Co-permittee(s) must submit a draft plan to the Executive Officer describing actions that will be taken to achieve compliance. A plan to achieve compliance with TMDL-related water quality-based effluent limits related to the exceeded water quality standard, and prepared according to Section XVIII of this Order, also satisfies this Provision.
    1. The draft plan must be submitted to the Executive Officer within 6 months of the Co-permittees becoming aware that a discharge is causing or contributing to the exceedance.
    2. Where a draft plan is requested in writing by the Executive Officer, the plan must be submitted by a date specified in the request.
    3. The plan must:
        a. describe the pollutant(s) that are known or suspected of causing or contributing to the exceedance(s);
        b. describe the persons or activities believed to cause or contribute to the pollutant(s);
        c. describe the BMPs that are being employed to control the pollutant(s);
        d. describe any proposed new BMPs, or modification of currently-employed BMPs, along with a time schedule for their implementation to prevent or reduce the pollutant(s);
        e. include an objective analysis which provides a reasonable assurance that the new or modified BMPs can be expected to cause discharges to comply with the applicable water quality standard(s) as soon as possible[6]. The analysis must be supported, in part, by

[6] Taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the BMPs necessary to comply with the water quality standard.

peer-reviewed models that are in the public domain where such models are available and appropriate. Alternatively, the analysis can include trend analyses that demonstrate that no additional actions are necessary.; AND

f. include a monitoring program and periodic review to characterize the exceedance(s) and to objectively assess the effectiveness of BMPs employed to address them; OR
g. provide objective evidence, acceptable to the Executive Officer, that there is a trend indicating that relevant pollutant loads or concentrations are decreasing and that the applicable water quality standard(s) are expected to be satisfied without further intervention; OR
h. provide evidence, acceptable to the Executive Officer, that the cause of pollution is not within the jurisdiction or control of the Co-permittees.

4. The draft plan is subject to review by the Executive Officer. The Co-Permittees must make any such modifications to the plan within 60-days of written notification by the Executive Officer.
5. The draft plan becomes a final plan and must be fully implemented by the responsible Co-permittees upon approval by the Executive Officer. In the event that the Executive Officer determines that the Co-permittees have failed to fully implement the final plan, the Executive Officer may provide written Notice to the responsible Co-permittees and provide 60-days from the date of the Notice to correct the deficiencies.
6. The Executive Officer will provide a 30-day public review period prior to approving and finalizing the draft plan.
7. If, despite the implementation of the approved final plan described above in this Section, cycles of monitoring, analysis, and reporting continue to result in determinations that there are continuing or recurring exceedances of water quality standards caused or contributed to by discharges from the Co-permittees' MS4s, the Co-permittees must reinitiate the procedure in this Section[7]. Successive iterations must include in the new draft plan: (1) an updated objective analysis, which provides a reasonable assurance ~~analysis~~; (2) modifications to BMPs, (3) additional BMPs, and (4) if appropriate, changes to the monitoring program.
8. The Co-permittees must make the final plan accessible to the public by posting the plan to the responsible Co-permittees' web sites, the Principal Permittee's web site, or another method acceptable to the Executive Officer.
9. Except for inconsequential grammatical or technical corrections, the final plan may be amended by the Co-permittees only with the approval of the Executive Officer.
10. Where the Co-permittee(s) believe that additional time is necessary to

[7] Pursuant to Provision II.B.3.a. of MRP No. R8-2015-0001, the cycle of adaptive planning must occur not less than once every 5 years.

comply with a deadline in the implementation schedule of the final plan, and the Co-permittee(s) fail to timely request, or is not granted an extension, Co-permittees may request a time schedule order pursuant to California Water Code Section 13300.

E. The Special Protections contained in Attachment B to Resolution No. 2012-0012, as amended or reauthorized by the State Water Resources Control Board, are hereby incorporated into this Order as if fully set forth herein. The Special Protections are specifically applicable to discharges of urban runoff from the City of Newport Beach's MS4 to Newport Coast and Crystal Cove (ASBS 32 and ASBS 33, respectively) which are authorized by this Order. Where there are conflicts between this Order and the Special Protections, the most protective requirements, as determined by the Executive Officer, shall prevail. The Special Protections are accessible at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0012.pdf

V. IMPLEMENTATION AGREEMENT

The Co-permittees must execute inter-agency and inter-Co-permittee agreements necessary to satisfy the requirements of this Order.

VI. LEGAL AUTHORITY/ENFORCEMENT

A. Each Co-permittee must secure and maintain legal authority adequate to control the discharge of pollutants in urban runoff to their MS4s pursuant to the requirements of this Order.

B. Each Co-permittee must track and evaluate challenges to their authority to control the discharge of pollutants in urban runoff to their MS4s.
   1. Where a formal or informal challenge indicates a weakness in the Co-Permittees' authority, the Co-permittee must act in good faith and in a timely manner to make their authority adequate.
   2. The Co-permittees must report any discovered weaknesses in their legal authority in their Program Effectiveness Assessment. The report must include a plan, with a schedule of action(s), to make their authority adequate.

C. Each Co-permittee must secure and maintain legal authority, to the extent allowed by State and Federal Law, and subject to limitations on municipal action under the constitutions of the state of California and the United States, that is adequate to enter, inspect, and gather evidence (including pictures, video, samples, statements, and documents) from industrial, construction, and commercial establishments to determine compliance with ordinances, permits, conditions, and other requirements of the Co-permittees related to the control of discharges of pollutants to their MS4s.

D. Each Co-permittee must maintain adequate legal authority to impose a series of

effective, progressive sanctions to compel compliance with their regulatory requirements related to the control of discharges of pollutants to their MS4s.

E. Within 90-days of the effective date of this Order, each Co-permittee must develop a formal, written program, which describes supporting policies and procedures that effectively promote the consistent and decisive use of their sanctions, and describes performance measures to track and objectively evaluate the sanctions' effectiveness.

VII. ILLICIT DISCHARGES, ILLICIT CONNECTIONS, AND ILLEGAL DUMPING; LITTER DEBRIS AND TRASH CONTROL

A. Each Co-permittee must effectively prohibit illicit discharges and illicit connections to their respective MS4s through their ordinances and other appropriate mechanisms.

B. Each Co-permittee must employ an effective mechanism for the public to report known or suspected illicit discharges, illicit connections, and illegal dumping. The reporting mechanism must be continuously advertised to the public by each Co-Permittee using a minimum of two media outlets (i.e. newsprint, internet, telephone directory, etc.).

C. Each Co-permittee must advertise the availability of mechanisms for residents to dispose of wastes that have the potential to be discharged to their MS4s.

D. The Co-permittees must implement an effective program to detect illicit discharges and illicit connections; to abate illegal dumping that has the potential to result in a discharge of pollutants to their MS4s; to trace the source of illicit discharges and connections; and to eliminate or permit such discharges and connections. The Co-permittees' program must be fully described in written processes and procedures. Sanitary Sewer Overflows shall be treated as a sub-class of illicit discharges subject to additional requirements of Subsection VII.F.

1. Co-permittees must provide mutual assistance to one another in detecting known or suspected illicit discharges, illicit connections, and illegal dumping.
2. Each Co-permittee must maintain an electronic database that tracks instances of known or suspected illicit discharges, illicit connections, and illegal dumping within their respective jurisdictions.
    a. The database must be designed and used to track compliance with the requirements of this Section (Subsection VII.D.).
    b. The database must be designed and used to guide the Co-Permittees' most effective use of resources towards satisfying the requirements of this Section.
3. Each Co-permittee must identify the personnel or staff positions that are responsible for satisfying the requirements of Subsection VII.D. of this Order in their written program.
4. The Co-permittees must maintain maps of their respective MS4s that contain information of sufficient detail and quality to trace the source of suspected illicit discharges in a timely manner.
    a. The maps must be distributed in a format that is readily available to personnel responsible for satisfying the requirements of Subsection

VII.D. of this Order.

b. The maps must be reviewed and updated annually.

5. The Co-permittee that is the local jurisdiction must initiate (or cause to be initiated) a source investigation where bacterial monitoring (see Monitoring and Reporting Program No. R8-2015-0001) indicates AB411 receiving water standards are exceeded in ocean outfalls/tributaries and in the nearby surf zone.
6. A source investigation must occur in substantial conformance with a common set of written techniques and procedures developed by the Permittees as part of the written program described in Provision VII.D.
    a. When the source of an illicit discharge or illicit connection is discovered, the Co-permittee(s) must take immediate action to eliminate the discharge or connection or require that it be subject to appropriate NPDES permit(s) within 120 calendar days of discovery.

E. Each Co-permittees must implement an effective program to reduce and/or eliminate the discharge of trash and debris to waters of the U.S.
    1. Measures employed for the control of trash and debris must be reported and reviewed annually by the Co-permittees to objectively evaluate the measures' effectiveness and/or the effectiveness of the overall trash and debris program. The results of the reviews must be provided ~~annually~~ in the Annual Progress Reports.
    2. The principle Co-permittee must demonstrate that the Co-permittees have formally evaluated new technologies for the control of trash and debris, as they become aware of them, and report the findings in the Annual Progress Reports.
    3. Co-permittees may discontinue control measures for trash and debris that they deem to pose ~~an unmitigable~~a health and/or safety hazard or to be ineffective provided that the measure is replaced by an equal or more-effective measure.
        a. The permanent substitution of control measures must be reported in the Annual Progress Report and approved by the Executive Officer. The proposed substitution must be supported by substantial objective evidence. This applies to program-level changes and not to the day-to-day operation of control measures.
        b. Co-permittees must satisfy any conditions imposed by the Executive Officer as part of the approval of any substitution.

F. For those Co-permittees that own or operate sanitary sewer systems over one mile in length, the State Board has established minimum requirements to prevent and mitigate sanitary sewer overflows ("SSOs") in Order No. 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Wastewater Collection Agencies". The Co-permittees that are not subject to the requirements of Order No. 2006-0003-DWQ, or subsequent renewals, must implement an effective program to detect and mitigate SSOs, such as the Countywide Area Spill Control Program ("CASC") and collaborate with the Orange County Sanitation District and Irvine Ranch Water District. The SSO program should include the ~~as~~

followings:

1. The Co-permittees' SSO program(s) must be comprised of the following elements:
   a. Procedures for responding to SSOs.
   b. A hands-on field training program for Co-permittees' staff responsible for responding to SSOs.
   c. An awareness-level training program for Co-permittees' field staff most likely to initially detect SSOs.
   d. If necessary, executed Memorandum/Memoranda of Understanding ("MOU") for delineating jurisdictional and financial responsibilities for the program.
   e. ~~Objective program performance measures comprised, at a minimum, of SSO response time targets, training targets, and spill recovery targets~~.
2. Co-permittees must respond to SSOs according to the formal written response procedures unless there is cause to believe that such a response would not be most effective under the circumstances.
3. Co-permittees must maintain records adequate to demonstrate that they implemented the SSO program and its elements; records must be maintained for a minimum of five (5) years.
4. The Principal Permittee is responsible for developing a model SSO program and its elements; and for documenting and reporting the program(s') outcomes in the Annual Progress Report.

VIII. MUNICIPAL INSPECTIONS OF CONSTRUCTION SITES

A. Each Co-permittee must maintain an inventory of all construction sites. except for construction projects that are less than two weeks in duration, within its jurisdiction.
   1. The construction sites inventory must include sites where building or grading permits are applicable and where activities at the site include the following:
      a. Soil movement;
      b. Uncovered storage of materials or wastes, such as dirt, sand, fertilizer, or landscaping materials; OR
      c. Exterior mixing of cementitious products (i.e. concrete, mortar, or stucco).
   2. All construction sites shall be included in the Co-permittees' inventory regardless of whether the site is subject to the Statewide General Construction Permit or an individual NPDES permit.
   3. The inventory of construction sites must be updated ~~once per month~~, at a minimum on a biannual basis (September and May).
   4. Each Co-permittees' inventory of construction sites must be maintained in an electronic-format database. The database records must include information on site/project ownership, project area, General Construction Permits WDID (if any), and location (latitude/longitude in decimal-degrees

or NAD83/WGS84 format).

B. Each Co-permittee must inspect construction sites in their inventory, subject to the limitations on municipal action under the constitutions of the State of California and the United States. Each Co-permittee must have written policies and procedures that describe how inspections and related enforcement actions are carried out. Inspections and related enforcement actions must be carried out in a manner that enforces compliance with applicable ordinance(s), plans, permits, or other requirements related to the control of discharges of pollutants to their MS4s.
   1. Co-permittees must categorize all construction sites in their inventory as either "high-priority", "medium-priority", or "low-priority". Construction sites with an expected or actual duration of more than two weeks must be inspected according to the following schedule:
      a. May 1st through September 30th of each year (dry season): all construction sites must be inspected at a frequency where sediment and other pollutants are properly controlled and that unauthorized, non-storm water discharges are prevented.
      b. October 1st through April 30th of each year (wet season):
         i. High-priority sites must be inspected once every two (2) months in their entirety.
         ii. Medium-priority sites must be inspected twice during the wet season.
         iii. Low-priority sites must be inspected once during the wet season.
      c. Where a Co-permittee determines that BMPs or their maintenance are inadequate or out of compliance, the site must be inspected once per month until the deficiency is corrected.
   2. A construction site must be considered "high priority" if it meets any of the following minimum criteria:
      a. The site is 20-acres or larger;
      b. The site is over one acre and tributary to a water body listed according to Clean Water Act Section 303(d), as being impaired by sediment or turbidity; OR
      c. The site is tributary to, and within 500-feet of, an area defined by the Ocean Plan as an Area of Special Biological Significance ("ASBS").
   3. A construction site must be considered "medium-priority" if it consists of between 5 and 20 acres of disturbed soil and is not otherwise a high-priority site. All other sites may be considered "low-priority".
   4. Co-permittees must consider other factors or circumstances that could cause a construction site to fall into a higher priority. These factors include, but are not limited to, soil erosion potential, site slope, proximity to a receiving water, and the sensitivity of the receiving water to potential pollutants from the site.
   5. Co-permittees must inspect construction sites according to a checklist. The checklist must document, at a minimum, that the inspector:
      a. Verified that the site has been covered by the General Construction Permit, if applicable, during the initial inspection;

b. Reviewed an Erosion and Sediment Control Plan, to verify that the BMPs on the site are appropriate for the phase of construction;
c. Identified, through visual observation, any non-storm water discharges and potential pollutant sources;
d. Assessed the effectiveness of BMPs implemented at the site; and
e. Identified and communicated to the site representative non-compliance with requirements related to the control of discharges of pollutants to the Permittee's MS4s.

6. Co-permittees must address non-compliance with applicable ordinance(s), plans, permits, or other requirements related to the control of discharges of pollutants to their MS4s with a series of effective, progressive actions in order to compel compliance.
7. Completed inspections must be recorded in an electronic-format database. The database must be organized in a manner that is adequate to determine compliance with the requirements of this Order. Inspection records must be maintained a minimum of three (3) years from the date of the project's completion.
8. Construction site inspectors must be trained according to Section XVI of this Order; inspectors must undergo training once per year.
9. The Executive Officer must be notified of any known, suspected, or threatened violation of applicable waste discharge requirements (i.e. State-wide General Construction Permit, etc.), discovered during inspections of construction sites according to Section XVII.C. of this Order. Such violations include, but are not limited to:
    a. Failure to obtain coverage under the applicable waste discharge requirements.
    b. Unauthorized discharges.
10. Except as provided for in Section XVII of this Order, Co-permittees must investigate complaints regarding construction sites, received by internal departments or divisions, external agencies, or the public, within three (3) business days of the complaint being brought to their attention.

IX. and X. INSPECTIONS OF INDUSTRIAL AND COMMERCIAL SITES

The industrial and commercial site inspection program is outlined in the table below. Additional detail is provided in Sections IX. and X.

Task	Option 1		Option 2	Option 3
	Industrial	Commercial	Industrial/Commercial	Industrial/Commercial
Inventory (Section IX. A and X.A)	See Section IX.A.	See Section X.A	See Section IX.A and X.A	See Section IX.A and X.A
Prioritization (Section IX.B and X.B)	Based on past performance	Based on pollutants of concern and past performance	None	Low, medium and high based on criteria and risk factors
Inspections (Section IX.B and X.B)	- On site - individual - Drive by + Outreach - Outreach only	- On site – individual - On site – property based - Drive by + Outreach - Outreach only	- On site - individual	- On site - individual
Frequency (Section IX.B and X.B)	- High priority – Annual - Medium/Low priority – As needed	- High priority – Annual on site - Medium – Annual drive by + outreach - Low priority – 2x per permit term outreach	- 20% of inventory per year - 100% of inventory over permit term	- High priority – Annual - Medium – every 2 years - Low priority every 5 years
Follow Up (Section IX.B and X.B)	As needed	As needed	As needed	As needed
Minimum (Section IX.B and X.B)	20% of high priority per year	None	20% per year 100% over permit term	None

IX. MUNICIPAL INSPECTIONS OF INDUSTRIAL SITES

A. Inventory: Each Co-permittee must continue to maintain an inventory of ~~all~~ industrial sites with the potential to discharge pollutants to the MS4 within its jurisdiction.

1. Industrial sites shall be included in the Co-permittees' inventory regardless of whether the site is subject to the Statewide Industrial General Permit or other NPDES permit.
2. The inventory of industrial sites must be updated ~~once every three months~~annually, or more frequently, as needed.
3. Each Co-permittees' inventory of industrial sites must be maintained in an electronic-format database. The database records must include information on site/project ownership, project area, Industrial General Permits WDID (if any), and location (latitude/longitude in decimal-degrees or NAD83/WGS84 format).

B. Prioritization and Inspections: There are four options for the prioritizations and inspections of the industrial sites:

- Option 1 – A targeted approach with inspection frequencies based on high priority pollutants of concern and past performance of the facility;
- Option 2 - A synoptic approach with no fluctuation in the inspection frequency from year to year;
- Option 3 - A prioritized approach with inspection frequencies based on a prioritization scheme; or
- Option 4 – Alternative approach, which would be approved by the EO.

Each option is outlined below.

No matter which option is utilized, eEach Co-permittee must inspect industrial sites in their inventory, subject to limitations on municipal action under the constitutions of the State of California and the United States. Each Co-permittee must have written policies and procedures that describe how inspections and related enforcement actions are carried out. Inspections and related enforcement actions must be carried out in a manner that consistently enforces compliance with applicable ordinance(s), plans, permits, or other requirements related to the control of discharges of pollutants to their MS4s. The requirements listed in Sections B.4-B.9 apply to all options.

The options listed below may be used by the Permittees for the facilities listed within their industrial inventory.

1. Option 1 – Targeted approach for industrial site inspections.
   a. The Permittees shall develop a targeted approach for the facilities that is based on the past performance of that facility and high priority pollutants of concern. The Permittees will identify the high, medium, and low priority facilities based on this approach.
   b. At a minimum, 20% of the high priority facilities would be inspected each year.
      The Permittees will conduct one of the following types of inspections:
      (a) On-site individual inspections; or
      (b) Drive by inspections.
      Where a business does not receive a formal inspection, outreach should be provided periodically.
   c. The medium and low priority facilities shall be inspected on an as needed basis. Each site that is not inspected should receive outreach information, including BMP Fact Sheets twice per permit term.
   ~~a.~~d. An inspection of an industrial site that is covered by the General Industrial Permit or other NPDES storm water permit and performed by Regional Board staff may be substituted for any one of the above-required inspections for the same site.
   e. Where a Co-permittee determines that a site is out of compliance with requirements, the industrial site must be inspected, at a minimum, once per month until the site is in compliance.

2. Option 2 – Synoptic approach for industrial site prioritizations and inspections.
   a. The Permittees shall annually inspect 20% of the facility inventory, with 100% of the inventory inspected over the permit term.
   b. The Permittees will conduct on site-individual inspections.
   c. An inspection of an industrial site that is covered by the General Industrial Permit or other NPDES storm water permit and performed by Regional Board staff may be substituted for any one of the above-required inspections for the same site.
   e. Where a Co-permittee determines that a site is out of compliance with requirements, the industrial site must be inspected, at a minimum, once per month until the site is in compliance.

3. Option 3 – Prioritized approach for industrial site inspections.

Co-permittees must categorize all industrial sites in their inventory as either "high-priority", "medium-priority", or "low-priority". Industrial sites must be inspected according to the following schedule:

a. High-priority sites must be inspected once per year in their entirety.
b. Medium-priority sites must be inspected once every two years.
c. Low-priority sites must be inspected once every five years.
d. An inspection of an industrial site that is covered by the General Industrial Permit or other NPDES storm water permit and performed by Regional Board staff may be substituted for any one of the above-required inspections for the same site.
e. Where a Co-permittee determines that a site is out of compliance with requirements, the industrial site must be inspected, at a minimum, once per month until the site is in compliance.

An industrial site must be prioritized as high priority if the site meets any of the following criteria:

a. The site is subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 ("SARA");
b. The site requires coverage under the General Industrial Permit or other NPDES storm water permit;
c. The site has a history of unauthorized non-storm water discharges;
d. The site is tributary to, and within 500-feet of, an area defined by the Ocean Plan as an Area of Special Biological Significance ("ASBS").

Co-permittees must consider additional site- specific risk factors that could cause an industrial site to be categorized into a higher priority. These risk factors include, but are not limited to:

a. quantity of materials or wastes used or stored outside;
b. the potential for pollutants to be mobilized by storm water;
c. facility size;
d. proximity to a receiving water;
e. the presence of an infiltration LID BMP that accepts "storm water associated with industrial activity"[8];

[8] See the Industrial General Permit for a detailed definition of "storm water associated with industrial activity".

f. the sensitivity of the receiving water to potential pollutants from the site (e.g. water bodies listed on the 303(d) List); AND
g. any other relevant factors.

h. An inspection of an industrial site that is covered by the General Industrial Permit or other NPDES storm water permit and performed by Regional Board staff may be substituted for any one of the above-required inspections for the same site.

i. Where a Co-permittee determines that a site is out of compliance with requirements, the industrial site must be inspected, at a minimum, once per month until the site is in compliance.

3.Option 4 – Alternative approach for industrial site inspections.

Any Co-permittee may propose an alternative priority category distribution of their industrial sites and implement the related inspection schedule within their jurisdiction subject to the written approval of the Executive Officer.

a. The approved alternative distribution and schedule must be implemented in lieu of the distribution and inspection schedule prescribed in this Section subject to any conditions of approval established by the Executive Officer.
b. The Executive Officer may rescind that approval for cause with written notification to the Co-permittee(s).

4. Co-permittees must conduct inspections of industrial sites according to a checklist. The checklist must document the following items as they apply~~, at a minimum, that~~:
   a. During the initial inspection, the inspector verified that the site has been covered by the General Industrial Permit, if applicable;
   b. The inspector identified, through visual observation, any non-storm water discharges and potential pollutant sources;
   c. The inspector assessed the effectiveness of BMPs implemented at the site;
   d. The inspector documents evidence of non-compliance or threatened non-compliance with requirements related to the control of discharges of pollutants to the Co-permittee's MS4s.
5. Industrial site inspections must be recorded in an electronic-format database in a manner that is adequate to determine compliance with the requirements of this Order. Inspection records for a facility operator must be maintained for a minimum of five (5) years while in business and three (3) years following termination of business at the site.
6. Co-permittees must address instances of non-compliance with a series of effective, progressive actions to ultimately compel compliance.
7. Industrial site inspectors must be trained according to Provision XVI of this Order; inspectors must undergo training once per year.
8. The Executive Officer must be notified of any known, suspected, or

threatened violation of applicable waste discharge requirements (i.e. State-wide General Industrial or Construction Permits, etc.), discovered during inspections of industrial sites according to Provision XVII.C. of this Order. Such violations include, but are not limited to:

a. Failure to obtain coverage under the applicable waste discharge requirements.
b. Unauthorized discharges.

9. Except as provided for in Provision XVII of this Order, Co-permittees must investigate complaints regarding industrial sites, received by internal staff, external public agency staff, or the public, within three (3) business days of the complaint being brought to their attention.

X. MUNICIPAL INSPECTIONS OF COMMERCIAL SITES

A. Inventory: Each Co-permittee must maintain an inventory of commercial sites listed in Subsection X.A.3 below within its jurisdiction.
   1. The inventory of commercial sites must be updated annually or more frequently as needed ~~once every three months, at a minimum~~.
   2. Each Co-permittees' inventory of commercial sites must be maintained in an electronic-format database. The database records must include information on the following attributes:
      a. site/business ownership;
      b. site area;
      c. any related approved Water Quality Management Plans and associated structural treatment control BMPs; AND
      d. location (latitude/longitude in decimal-degrees or NAD83/WGS84 format).
   3. Commercial sites include, but are not limited to those engaged in the following:
      a. Aircraft maintenance, fueling, or cleaning;
      b. Animal care facilities such as petting zoos and boarding and training facilities;
      c. Automobile and other motor vehicle body repair or painting;
      d. Automobile impound and storage facilities;
      e. Automobile mechanical repair, maintenance, fueling, or cleaning;
      f. Botanical or zoological gardens;
      g. Building material retail and storage facilities;
      h. Cemeteries;
      i. Eating or drinking establishments, including food markets and restaurants;
      j. Golf courses, parks, and other recreational areas or facilities;
      k. Landscape and hardscape installation;
      l. Machinery and equipment repair, maintenance, fueling, or cleaning;
      m. Marina operations;
      n. Nurseries and greenhouses;
      o. Painting and coating;
      p. Pest control service facilities;
      q. Pool, lake and fountain cleaning;
      r. Portable sanitary service facilities;
      s. Transportation services for passengers, parcels or freight;
      t. Watercraft maintenance, fueling, or cleaning;
      u. Any commercial sites that is tributary to, and within 500-feet of, an area defined by the Ocean Plan as an Area of Special Biological Significance; AND
      v. Other commercial sites that the Co-permittee determines may be a significant contributor of pollutants to the MS4.

B. Prioritizations and Inspections: There are four options for the prioritizations and inspections of the commercial sites:

- Option 1 – A targeted approach with inspection frequencies based on high priority pollutants of concern and past performance;
- Option 2 - a synoptic approach with no fluctuation in the inspection frequency from year to year;
- Option 3 - A prioritized approach with inspection frequencies based on a prioritization scheme; or
- Option 4 – Alternative approach, which would be approved by the EO.

Each option is outlined below.

No matter which option is utilized, e~~E~~ach Co-permittee must inspect commercial sites in their inventory. Inspections must occur according to written processes and procedures, and in a manner to enforce compliance with ordinance(s), plans, permits, WQMPs, or other requirements related to the control of discharges of pollutants to their MS4s. The requirements listed in Sections B.6-B.11 apply to all options.

The options listed below may be used by the Co-permittees for the facilities listed within their commercial inventory, with the exception of the food facilities, which is addressed within Section X.X below.

1. Option 1 – Targeted approach for commercial site inspections.
   a. The Permittees shall develop a prioritization process for the commercial facilities that is based on the watershed pollutants of concern and the past performance of that facility. The Permittees will identify the high, medium, and low priority facilities based on this approach.
   b. At a minimum, 20% of the high and medium priority facilities would be inspected each year.
   The Permittees will conduct one of the following types of inspections:
      i. On-site individual inspections;
      ii. On-site property-based inspections; or
      iii. Drive by inspections.
   Where a business does not receive a formal inspection, outreach should be provided periodically.
   c. The commercial inspection program under this option would be structured as illustrated in the Orange County ROWD Table 3.6.2.
   d~~b~~. Where a Co-permittee determines that BMPs or their maintenance is inadequate or out of compliance, the commercial site must be re- inspected monthly until BMPs and their maintenance is adequate and in compliance.
   e~~c~~. If Regional Board staff inspects a commercial site, the Co-permittee may substitute Regional Board staff's inspection for an inspection required under this Order for the same site.

2. Option 2 – Synoptic approach for commercial site inspections.
   a. The Permittees shall annually inspect 20% of the commercial facility inventory, with 100% of the inventory inspected over the permit term.
   b. Where a Co-permittee determines that BMPs or their maintenance is inadequate or out of compliance, the commercial site must be re-inspected monthly until BMPs and their maintenance is adequate and in compliance.
   c. If Regional Board staff inspects a commercial site, the Co-permittee may substitute Regional Board staff's inspection for an inspection required under this Order for the same site.

2. Option 3 – Prioritized approach for commercial site inspections.

1. Co-permittees must prioritize all commercial sites (except for eating or drinking establishments, see Subsection X.C. below) in their inventory as either "high-priority", "medium-priority" or "low-priority".

~~1.~~2. Co-permittees must exercise their discretion and consider site-specific factors that could cause a commercial site to be categorized into a higher priority. These factors include, but are not limited to, soil erosion potential, site slope, proximity to a receiving water, and the sensitivity of the receiving water to potential pollutants from the site.

~~2.~~3. Each Co-permittee must categorize a minimum of 5% of their inventoried commercial sites as "high-priority"; a minimum of 15% of their inventoried commercial sites as "medium-priority"; and the remainder as "low-priority".

~~3.~~4. Prioritized commercial sites must be inspected according to the following schedule:
   a. High-priority sites must be inspected once per year in their entirety.
   b. Medium-priority sites must be inspected once every two years.
   c. Low-priority sites must be inspected once every five (5) years.
   d. Where a Co-permittee determines that BMPs or their maintenance is inadequate or out of compliance, the commercial site must be re- inspected monthly until BMPs and their maintenance is adequate and in compliance.
   e. If Regional Board staff inspects a commercial site, the Co-permittee may substitute Regional Board staff's inspection for an inspection required under this Order for the same site.

3.Option 4 – Alternative approach for commercial site inspections.

Any Co-permittee may propose an alternative priority category distribution of their commercial sites and implement the related inspection schedule within their jurisdiction subject to the written approval of the Executive Officer.

~~a.~~c. The approved alternative distribution and schedule must be implemented in lieu of the distribution

and inspection schedule prescribed in this Section subject to any conditions of approval established by the Executive Officer.

d. The Executive Officer may rescind that approval for cause with written notification to the Co-permittee(s).

~~4. Where a Co-permittee determines that BMPs or their maintenance is inadequate or out of compliance, the commercial site must be re-inspected within two weeks until BMPs and their maintenance is adequate or in compliance.~~

~~5. If Regional Board staff inspects a commercial site, the Co-permittee may substitute Regional Board staff's inspection for an inspection required under this Order for the same site.~~

5. ~~Co-permittees must exercise their discretion and consider site-specific factors that could cause a commercial site to be categorized into a higher priority. These factors include, but are not limited to, soil erosion potential, site slope, proximity to a receiving water, and the sensitivity of the receiving water to potential pollutants from the site.~~

6. Co-permittees must conduct inspections of commercial sites according to a checklist. The Co-permittees must use the checklist to document~~, at a minimum, that~~ the following items as they apply:
    a. The inspector identified, through visual observation, any non-storm water discharges, evidence of non-storm water discharges, and potential pollutant sources;
    b. The inspector assessed the effectiveness of BMPs implemented at the site;
    c. The inspector documented evidence of non-compliance or threatened non-compliance;
    d. If the inspector identifies non-compliance or a threat of non-compliance with relevant requirements, or determines that BMPs are ineffective; the inspector notified the site operator and provided the applicable BMP Fact Sheet(s) and any other relevant published educational materials.
7. Commercial site inspections must be recorded in an electronic-format database in a manner that is adequate to determine compliance with the requirements of this Order. Inspection records for a site operator must be maintained for a minimum of five (5) years while in business and three (3) years following the termination of business at the site.
8. Co-permittees must address non-compliance with a series of effective, progressive actions to ultimately compel compliance.
9. Commercial site inspectors must be trained according to Provision XVI of this Order; inspectors must undergo training once per year.
10. The Executive Officer must be notified of any known, suspected, or threatened violation of applicable waste discharge requirements (i.e. State-wide Construction Permit, etc.), discovered during inspections of commercial sites according to Provision XVII of this Order.

11. Except as provided for in Provision XVII of this Order, Co-permittees must investigate complaints regarding commercial sites, received by internal departments or divisions, external agencies, or the public, within three (3) business days of the complaint being brought to their attention.

B. The Co-permittees must inspect eating or drinking establishments annually or cause such inspections to occur on their behalf by another party. These third-party inspections are anticipated to occur as part of the Orange County Health Care Agency ("HCA") restaurant inspection program.
   1. The inspections must occur, in part, to enforce the local Co-permittee's requirements related to the control of discharges of pollutants to their MS4s (See Section III).
   2. Where the inspecting agency staff observes known or suspected violations of a local Co-permittee's requirements related to the control of discharges of pollutants to their MS4s, the known or suspected violation must be referred to the Co-permittee within two (2) business days.
   3. Co-permittees must respond to referrals from the HCA or other third-party within three (3) business days of the matter being brought to their attention.

C. Mobile Businesses: The Co-permittees must implement an enforcement and outreach program for the following mobile businesses operating in the permit area: automobile wash/detail services, carpet cleaners, and pet services. The purpose of the program must be to identify potential dischargers and eliminate illicit non-storm water discharges into the MS4.

XI. RESIDENTIAL PROGRAM (INCORPORATED INTO PUBLIC EDUCATION)

XII. NEW DEVELOPMENT (INCLUDING SIGNIFICANT REDEVELOPMENT)

A. Planning Requirements

1. Each Co-permittee must adopt policies and procedures that are effective at integrating source control, site design and structural treatment control BMPs as early in the land-use planning and development process as practicable.
2. The Executive Officer or his designee, must be given the appropriate notices where a Co-permittee initiates an amendment or update of their General Plan which may directly, indirectly, or cumulatively impact beneficial uses, consistent with the requirements of Government Code Section 65350 *et seq*. This requirement does not diminish any other obligations of the Co-permittees' to provide notice to the Regional Board as a Responsible Agency pursuant to CEQA.
3. Within 12-months of the effective date of this Order, the Principal

Permittee must review, update and submit to the Executive Officer any studies performed to examine feasible opportunities to retrofit existing storm water conveyance systems, parks, and other recreational areas with regional or sub-regional structural treatment control BMPs. The update shall expand the scope of the examination to include areas owned or controlled by the Co-permittees. If necessary, work necessary to complete only the expanded scope may be phased, but all phases must be completed no later than 36-months from the effective date of this Order.

4. Within 12 months of the effective date of this Order, the Principal Permittee must, in coordination with the groundwater management agencies, develop a water quality monitoring project to assess the potential impacts of storm water infiltration on groundwater quality. The project shall consider other similar studies that have been conducted to ensure that this project will complement those studies and add new data and/or information. The monitoring project may be conducted by: (1) analyzing the quality of the runoff prior to infiltration; (2) by monitoring the quality of the infiltrate through the vadose zone; and/or (3) by monitoring groundwater quality upstream and downstream of the infiltration systems. The project shall be implemented over the permit term and reported on within the Annual Progress Report.

B. Classifying and Processing Priority and Non-priority Projects

1. The requirements of Section XII.B., and subsequent sub-sections of Section XII., apply to initial project applications received by the Co-Permittees beginning 12 months ~~90-days~~ after the effective date of this Order ~~(50-days following adoption)~~ and thereafter. For projects initiated by the Co-permittees, the requirements apply to projects and project phases that are deemed complete for processing ~~approved~~ 12 months ~~90-days~~ after the effective date of this Order and thereafter. In the interim, the relevant requirements of Order No. R8-2009-0030 shall apply.
2. Each Co-permittee must classify development and redevelopment projects over which they have approval authority as “priority projects” (see Subsection XII.B.5. below) or “non-priority projects”. Non-priority projects may be further subdivided by the Co-permittees into those requiring Non-priority Project Plans and those that do not, as described in Subsection XII.M.
3. Each Co-permittee must employ a standardized form, checklist, or similar mechanism to document the basis for classifying a project as a priority project ~~or a non-priority project~~.
    a. Each Co-permittee is responsible for ensuring the accuracy of information relied on in support of the Co-permittee’s classification.
    b. ~~The Co-permittees must maintain records of the basis for classification for a minimum of five years following the completion of the project~~.
4. Co-permittees must consider the whole of the project in classifying a project; the Co-permittees must not piecemeal a project.

5. Each Co-permittee must regard projects that fit any of the following categories of projects as priority projects; all other projects may be regarded as non-priority projects:
    a. Significant redevelopment projects that include the addition or replacement of 5,000 square feet or more of impervious surfaces on a developed site.
        i. Redevelopment projects do not include those areas where impervious surfaces are replaced as part of routine maintenance activities, or as part of activities that are conducted to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.
        ii. Redevelopment projects do not include those areas where impervious surfaces are replaced as part of the replacement, upgrade, or installation of dry utilities (e.g. gas, electric, and telecommunications), sanitary sewer, petroleum pipelines, or water distribution lines in existing rights of way.
        iii. Where a redevelopment project results in the addition or replacement of 50% or less of the impervious surfaces of an existing developed site, and the existing development was not subjected to a properly-implemented and properly-approved WQMP, the numeric sizing requirements for structural treatment control BMPs apply only to runoff from the impervious areas added or replaced and not from the entire developed site.
        iv. Where a redevelopment project results in the addition or replacement of more than 50% of the impervious surfaces of an existing developed site, the numeric sizing requirements must be applied to runoff from the entire development.
    b. New developments that create a total of 10,000 square feet or more of impervious surfaces, including commercial, industrial, and mixed-use developments; public and private capital improvement projects; and subdivisions for single and multi-family dwelling units. This category includes public or private land development projects subject to the planning and building authorities of the Co-permittees.
    c. New automotive repair shops that engage in activities described by Standard Industrial Classification ("SIC") codes 5013, 5014, 5541, 7532 through 7534, and 7536 through 7539.
    d. Restaurants where the area of land development is 5,000 square feet or more.
    e. Hillside developments affecting 5,000 square feet or more, in areas with known erosive soil conditions or where the natural slope is 25% or more.
    f. Development that includes the construction of 2,500 square feet or more of impervious surface that is located within 200 feet of, or which discharges the site's runoff into, an environmentally sensitive area where the discharge is not commingled with discharges from other sites.

g. Parking lots, or other land areas or facilities for the temporary storage of motor vehicles, that includes the construction of 5,000 square feet or more of impervious surface exposed to storm water.
h. Street, road, highway and freeway improvement or construction projects affecting 5,000 square feet or more of paved surface used for the transportation of vehicles.
    i. This category excludes routine maintenance to restore or preserve the surface type and line and grade.
    ii. Project WQMPs for this category must be consistent with the USEPA's "Managing Wet Weather with Green Infrastructure Municipal Handbook: Green Streets"[9].
i. New retail gasoline outlets of 5,000 square feet or more and with a projected average daily traffic of 100 or more vehicles per day.

6. Each Co-permittee must require a preliminary WQMP or a non-priority project plan for any applicable non-priority projects as part of a complete application for a project. Both the preliminary WQMP and non-priority project plan must be subject to the Co-permittee's approval. A preliminary WQMP must be approved prior to the project's approval by the Co-permittee's decision-making body (e.g. city council, Board of Supervisors, etc.).
7. A WQMP or Non-Priority Project Plan is not required for a project which, in its entirety, is necessary to mitigate an emergency.
8. The Co-permittees' staff, contractors, or vendors responsible for preparing, reviewing or approving WQMPs or non-priority project plans or for enforcing their implementation must be trained according to Section XVI of this Order.
9. Each Co-permittee must employ an effective mechanism to inform potential project applicants of the need for a preliminary WQMP or a non- priority project plan as part of a complete application prior to the submittal of an application.
10. A Co-permittee must not allow precise grading or final construction work to proceed on the subject phase of a project prior to approval of a final project WQMP or non-priority project plan for that phase.
11. Each Co-permittee must have an effective process that enforces substantial conformance between relevant project plans (i.e. grading plans, drainage plans, landscaping plans, etc.) and the approved preliminary and final project WQMP or non-priority project plans.
12. Each project WQMP or non-priority project plan approved by the Co-Permittees must contain sufficient information to demonstrate that the final WQMP or non-priority project plan was approved according to the requirements of this Order.
13. Each Co-permittee must have effective standard processes to ensure that

[9] Lukes, Robb and Kloss, Christopher, "Managing Wet Weather with Green Infrastructure Municipal Handbook: Green Streets", USEPA, Low Impact Development Center, EPA-833-F-08-009, December 2008. Available at: http://water.epa.gov/infrastructure/greeninfrastructure/upload/gi_munichandbook_green_streets.pdf

the final project WQMP and non-priority project plan is internally consistent and free of material contradictions.

14. As part of the project approval process, each Co-permittee must apply standard conditions of approval, or some other effective measure(s), that requires the proper operation and maintenance of all source control, site design, and structural treatment control BMPs by the project applicant, their successors and assigns over the life of the project.
15. Each Co-permittee must have an effective inspection program to identify and correct missing, damaged, or deficient source control, site design, and structural treatment control BMPs during the construction or development of priority and non-priority projects.
16. In addition to using published and generally-accepted engineering design criteria (see Subsection D below), each Co-permittee must develop, publish, and apply guidelines developed for the purpose of providing that site design and structural treatment controls to be readily inspected and maintainable and generally of a quality that is satisfactory to the Co-permittee. For verifications performed through a means other than direct Co-permittee inspection, adequate documentation must be required by the Co-permittee to provide assurance that the required maintenance of structural BMPs is provided.
17. Co-permittees are prohibited from permitting final occupancy or otherwise effectively issuing final approval of a priority or non-priority project site requiring a project WQMP or Non-Priority Project Plan respectively until all source control, site design, and, where applicable, structural treatment control BMPs are constructed, serviceable, and satisfactory to the Co-permittee or otherwise certified as such by a licensed professional engineer on behalf of the project applicant.
    a. Serviceable facilities must operate as intended; where the Co-Permittee is unable to conclusively determine that a facility is serviceable, the Co-permittee must require that the project applicant conduct a satisfactory field demonstration.
    b. Where deficiencies exist, the Co-permittee may permit final occupancy or issue final approval only if written enforcement action is taken and a time schedule to bring the site into compliance with its WQMP or non-priority project plan has been approved by the Co-permittee.
    c. Co-permittees must require that certifications by the licensed professional engineer be affixed with said engineer's stamp and maintained as part of the WQMP or non-priority project plan.
18. Each Co-permittee must have effective standard processes that provide the following:
    a. Approved final project WQMPs and non-priority project plans are retained using a system that allows for their ready retrieval for the life of the project.
    b. The Co-permittee is able to validate the authenticity of approved final project WQMPs and non-priority project plans.
    c. Approved final WQMPs and non-priority project plans are protected

by the Co-permittee's standard record protection practices in the event of fire, information system failure or attack, or other loss or damage.

C. General Requirements for Priority Projects

1. The Co-permittees must require priority projects to use source control, site design, and structural treatment control BMPs to remove pollutants in urban runoff [10]. These BMPs and other information necessary to demonstrate compliance with this Order must be documented in a project WQMP.
2. Project WQMPs must be prepared in substantial conformance with uniform written technical guidance[11]. The technical guidance must implement the requirements of this Order for the benefit of persons responsible for preparing, reviewing and approving, enforcing, and implementing WQMPs.
3. Project WQMPd must be prepared by or under the supervision of a registered civil engineer or licensed landscape architect (See Provision XII.D.8. below).
4. Final project WQMPs must be approved by or under the supervision of a registered civil engineer acting on behalf, and with the expressed permission, of the Co-permittee.
5. Each Co-permittee must employ effective, uniform mechanisms to provide efficiency and consistency in their WQMP-approval process. The mechanisms must be subject to a bi-annual review by the Co- Permittees for the purpose of promoting the mechanisms' continual improvement. Such mechanisms may include the following:
    a. Use of written standard instructions, processes, procedures, and methods.
    b. Use of standardized paper forms, checklists, and worksheets.
    c. Use of model language for project WQMPs or categories of project WQMPs.
    d. Use of standardized models, electronic spreadsheets, web-based tools, and other software.
    e. Prepared maps, tables and other sources of information necessary for preparers and reviewers to evaluate the feasibility of structural treatment control BMPs.
6. The Co-permittees must provide and promote a mechanism for stakeholder input in the continual improvement process for the preparation, review, enforcement, and implementation of WQMPs.
7. The Co-permittees must require project proponents to ~~demonstrate~~ state in each approved project WQMP that there is a source of funding available and a party responsible for the long-term performance, operation, and maintenance of source control, site

[10] See Glossary for the meaning of "structural treatment control BMP".
[11] This guidance is anticipated to consist of the 2011 Model Water Quality Management Plan and its accompanying Technical Guidance Document as amended or revised by the Co-permittees to satisfy the requirements of this Order.

design, and on-site or off-site structural treatment control BMPs over the life of the project.

8. The Co-permittees must provide that approved WQMPs are maintained in public records in a manner that allows for their discovery by interested parties and facilitates the transfer of responsibility in the event of the sale, lease, or other transfer of ownership or control of the affected site (e.g. a lease).
9. The Co-permittees must provide that any covenants, conditions, and restrictions, easements or other similar mechanisms necessary for the implementation of an approved WQMP are properly maintained in public records with the County and/or the relevant city.
10. The Co-permittees must maintain an electronic database adequate to identify sites affected by an approved WQMP.
    a. The database must be established within 6-months of the effective date of this Order. The database must include records identifying all structural treatment control BMPs installed after May 22, 2009 and their following attributes:
        i. Type of structural treatment control. If a 'type' does not comply with Provision XII.C.5., the facility must be identified as "undetermined".
        ~~ii. For infiltration LID BMPs: depth of invert and screen interval, if applicable.~~
        ~~iii. Standards applied to the design of the facility.~~
        ~~iv.~~ii. Location by watershed and by a scale sufficient for location in the field.
        ~~v.~~iii. Date of construction or date first placed in service.
        ~~vi.~~iv. Party responsible for maintenance and their contact information, including emergency contact information.
        ~~vii. Source of funding for operation and maintenance.~~
        ~~viii. Actual or alleged performance, maintenance, or nuisance problems identified during any site inspections by the Co-Permittees or brought to their attention.~~
    b. Information regarding WQMPs that were approved prior to May 22, 2009 must populate the database on an opportunistic basis.
    c. Sites that are part of the Co-permittees' industrial and commercial inspection program inventories and which are subject to any approved WQMPs must have their information populated in the database no later than 60 months from the effective date of this Order.
11. The Co-permittees must refer nuisance problems associated with structural treatment control BMPs to the Orange County Vector Control District within 5 business days of the problem becoming known. The Co-Permittees must cooperate in good faith with the Orange County Vector Control District to remedy any confirmed nuisance problems.

D. General Requirements for Structural Treatment Control BMPs

1. Structural treatment control BMPs must be sized to infiltrate, filter, or remove pollutants from the design capture volume or design capture flow from their respective ~~tributary~~ project areas as required by this Subsection (Subsection XII.D.). This requirement can be met through BMPs located either on-site, or off-site as described in Subsection XII.L.
2. The Co-permittees must have effective processes and policies in their written technical guidance that provide that the selection of structural treatment control BMPs conforms to the requirements of Subsections XII.E. through M. of this Order (See also ProvisionXII.C.2.).
3. A singular or set of structural treatment control BMPs that are volume-based must be sized to infiltrate, filter, or remove pollutants from any of the following design capture volumes from their ~~tributary~~ project area:
    a. The volume of runoff produced by a 24-hour, 85th percentile storm event. The volume must be calculated using the County of Orange's 85th Percentile Precipitation Isopluvial map.
    b. The volume of annual runoff produced by the 85th percentile, 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/American Society of Civil Engineers Manual of Practice No. 87 (1998).
    b. 80% or more of the annual runoff volume, based on published and generally accepted methods (e.g. California Stormwater Best Management Practices Handbook – Industrial/Commercial).
    c. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as would be achieved by treatment of the volume of runoff produced by an 85th percentile, 24-hour rain event.
4. A singular or set of structural treatment control BMPs that are flow-based must be sized to infiltrate, filter, or remove pollutants from any of the following design flows from their ~~tributary~~ project area:
    a. The maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event.
    b. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two.
    c. The maximum flow rate of runoff, as determined from the local historical rainfall record, which achieves approximately the same reduction in pollutant loads and flows as would be achieved by treatment of the flow produced by the 85th percentile hourly rainfall intensity multiplied by a factor of two.
5. Structural treatment control BMPs intended to retain the design capture volume must be designed to infiltrate, evaporate, evapotranspire, or use

the volume over a period not to exceed 48-hours; this drawdown period may be extended or shortened provided that the combination of design capture volume and drawdown time achieve retention of 80% or more of the average annual storm water runoff. Any remaining volume must be passed on to another structural treatment control BMP selected according to the requirements of this Order.

6. The design capture volume or flow may be treated by routing the runoff through multiple structural treatment control BMPs organized in series or parallel. Co-permittees must require that the design capture volume or flow be calculated for each project area ~~tributary~~ to a structural treatment control or group of structural treatment control BMPs.
7. ~~Co-permittees must require practical and durable mechanisms designed to indicate the need for maintenance of structural treatment control BMPs for the benefit of the party responsible for long-term maintenance. The mechanism(s) must be readily identifiable and located on, within, or in close proximity to structural treatment control BMPs; such mechanisms must be documented in the related approved project WQMP.~~
8. Structural treatment control BMPs must be sized and designed by, or under the direction of, a registered civil engineer.
9. Structural treatment control BMPs must incorporate design features to minimize the entrainment and bypass of captured pollutants in the course of routine maintenance, normal operation, or overflow.
10. Where a structural treatment control BMP satisfies all ~~the~~ requirements of this Order except that it ~~but~~ is undersized relative to the volume or flow that it accepts from its ~~tributary~~ project area, Co-permittees must require that the WQMP disclose any unconventional operation and maintenance requirements for the facility that are necessary to maintain the performance of the facility or to address unusual hazards .
11. The Co-permittees must conduct inspections of all approved structural treatment control BMPs according to the following schedule:
    a. All privately-owned or operated structural treatment control BMPs, must be inspected a minimum of once every 5 years[12].
    b. All Co-permittee-owned or operated structural treatment control BMPs must be inspected annually prior to the wet season (October 1st).
12. Structural treatment control BMPs must not cause a condition of nuisance or pollution, as defined in CWC Section 13050.
13. Structural treatment control BMPs must not cause or contribute to an exceedance of groundwater quality objectives.
14. Structural treatment control BMPs must not be approved in a final WQMP if they are located within waters of the U.S. unless the related discharges have been authorized pursuant to a Clean Water Act Section 401 Water Quality Standards Certification or waste discharge requirements.

[12]Structural treatment controls that are part of sites in the Co-permittees' industrial and commercial inventories are required to be inspected as part of the requirements of Sections IX and X of this Order. This requirement does not supersede the inspection schedules in those Sections.

15. Except as permitted by Subsection E, below, structural treatment control BMPs must:
    a. Be identified using standard nomenclature; AND
    b. Must be sized and designed in substantial conformance with standards and methods found in published and generally-accepted engineering design manuals; unnecessary deviations from those standards and methods are prohibited. Where those manuals conflict with the requirements of this Order, this Order shall prevail; Or
    c. Have had their expected performance substantiated in field tests using published and recognized protocols.
16. All requirements in this Order for the design of structural treatment control BMPs apply to both on-site or off-site facilities.

~~D. Nonconforming Structural Treatment Control BMPs: Demonstration Facilities~~

~~1. The Co-permittees are prohibited from approving or allowing to be placed into service structural treatment control BMPs which do not substantially conform to published and generally-accepted engineering design criteria or whose expected performance has not been substantiated in field tests using published and recognized protocols (nonconforming structural treatment control) unless the following requirements are satisfied:~~
    ~~a. The design of the nonconforming structural treatment control BMP is based on sound principles of operation and pollutant-removal mechanisms exhibited by similar conforming structural treatment control BMPs.~~
    ~~b. The tributary area of any single nonconforming structural treatment control BMP is three (3) acres or less.~~
    ~~c. The Co-permittees approve no more than three (3) such similar nonconforming structural treatment control BMPs in total until and unless the results of a performance monitoring plan substantiates the expected performance of the facility, using published and recognized protocols, such that the facility performs in a similar or better manner as compared to the most similar conforming structural treatment control.~~
    ~~d. The nonconforming structural treatment control BMP is subject to all other requirements of this Order.~~
~~2. Co-permittees must report both the application for approval and approval or denial of any nonconforming structural treatment control BMPs within their jurisdiction to the Principal Permittee.~~
~~3.~~1. ~~The Principal Permittee is responsible for coordinating the Co-permittees in complying with the requirements of this Subsection.~~

~~E.~~D. First Priority Consideration of Retention LID BMPs in WQMPs

1. The Co-permittees must require that low impact development (“LID”)

controls that employ harvest and use, evaporation/transpiration, infiltration (collectively "retention LID BMPs") , or any combination thereof, of the entire design capture volume be given preference and first consideration in all WQMPs. That consideration must be demonstrated in the approved final WQMP in substantial conformance with uniform written technical guidance (see Provision XII.C.2.).

2. The Co-permittees must require retention LID BMPs for the design capture volume, or the maximum portion thereof, unless such controls are:
    a. Technically infeasible;
    b. Economically infeasible; OR
    c. where environmental and public health hazards cannot be mitigated to an acceptable level.
3. Co-permittees must document the specific basis for their rejection of retention LID BMPs in the approved final WQMP. The rejection of retention LID BMPs must be supported with Substantial Evidence[13].
4. The Co-permittees must require project applicants to mitigate the environmental and public health hazards of retention LID BMPs to an acceptable level where the absence of such mitigation would, by itself, make the use of retention LID BMPs infeasible. Mitigation is limited to activities that may be reasonably undertaken as part of the development project and are within the authority of the Co-permittees to mandate. Mitigation is not necessary if the costs disproportionately outweigh the pollution control benefits; any such finding must be documented in the final WQMP and be supported with Substantial Evidence.

~~F.~~E. Second Priority Consideration of Biotreatment Control BMPs in WQMPs

1. The Co-permittees must require that structural treatment control BMPs that employ biological uptake, transformation, or degradation of pollutants and incidental infiltration and evapotranspiration ("biotreatment control BMPs") be given secondary consideration in the project final WQMP, when, based on Substantial Evidence, any of the following conditions exist:
    a. Retention LID BMPs have been demonstrated to be technically or economically infeasible;
    b. The hazards of using retention LID BMPs cannot be mitigated to an acceptable level; OR
    c. A retention LID BMP is proposed but cannot be sized to treat the ~~tributary~~ project area's entire design capture volume and a complementing biotreatment control BMP can be designed to treat the remainder of the design capture volume or a portion thereof.

~~2.~~1. The Co-permittees must ensure that the final approved project WQMP demonstrates preferential consideration of biotreatment control BMPs over non-LID BMPs.

[13] See Glossary.

~~3.~~2. When retention LID BMPs are demonstrated to be infeasible according to Section XII.G.1. above, the Co-permittees must require biotreatment control BMPs unless such controls are:
   a. Technically infeasible;
   b. economically infeasible; OR
   c. where the environmental and public health hazards cannot be mitigated to an acceptable level.

~~4.~~3. Where biotreatment control BMPs cannot meet the above criteria, the Co-Permittees must document the specific basis for their rejection in the approved final WQMP. The rejection of biotreatment control BMPs must be based on Substantial Evidence.

~~5.~~4. The Co-permittees must mitigate the environmental and public health hazards of biotreatment control BMPs to an acceptable level where the absence of such mitigation would, by itself, make the use of biotreatment control BMPs infeasible. Mitigation is not necessary if the costs disproportionately outweigh the pollution control benefits; any such finding must be documented in the final WQMP and be supported with Substantial Evidence.

~~6.~~5. Biotreatment control BMPs must be designed to maximize the infiltration of the design capture volume or flow.

~~7.~~6. Biotreatment control BMPs must be sized and designed to treat 1.5 times the design capture volume not retained or using an alternative sizing factor acceptable to the Executive Officer.

~~G.~~F. Third Priority Consideration of All Other Structural Treatment Control BMPs: Non-LID BMPs

1. The Co-permittees must maintain and employ a common schedule which rates the expected performance of specific structural treatment control BMPs, or categories of structural treatment control BMPs.
   a. Any category of structural treatment control BMPs must include only those controls that employ the same principal of operation; use similar treatment mechanisms, and which can reasonably be expected to exhibit generally similar performance in the removal of pollutants.
   b. The performance of structural treatment control BMPs must be rated based on the reasonably-expected level of removal of categories of pollutants. The performance ratings must be classified as “high”, “medium”, and “low” level of removal. These ratings must be distinguished by fixed numeric thresholds.
   c. The Co-permittees’ assignment of the expected level of performance for the structural treatment control BMPs must be based on the best available objective evidence (e.g. International BMP Database). The evidence must include field performance test data specific to the BMP and the data must have been collected according to published and recognized protocols.

d. The categorizations of structural treatment control BMPs and their performance ratings must be reviewed and updated within 12-months of the effective date of this Order so that they are supported by the best available information.

2. Structural treatment control BMPs, which are not LID BMPs ("non-LID BMPs") may be necessary to complement LID BMPs. Non-LID BMPs must not be accepted in an approved project WQMP in lieu of LID BMPs unless LID BMPs cannot be employed pursuant to Sections XII.F. and XII.G. above.
3. The Co-permittees must maintain and employ a common schedule of project types and a corresponding common list of pollutants which can reasonably be expected to be found in urban runoff from those project types.
4. If non-LID BMPs are the only type of structural treatment control BMP employed to treat the design capture volume from a ~~tributary~~ project area of a project, the Co- Permittees must only accept the use of non-LID BMPs that provide either a "medium" or "high" level of treatment for the expected pollutants.
    a. The Co-permittees must use the performance rating schedule in Provision XII.H.1. above and the project category schedule in Provision XII.H.3. above to identify acceptable non-LID BMPs for a project.
    b. Approved WQMPs must reflect the use of this prescribed methodology.
5. If a project does not propose to use any LID BMPs on-site and a regional or sub-regional off-site LID BMP, that meets the requirements in Section XII.K. below, is planned to serve the project, the Co-permittees may require the use of the regional or sub-regional facility. The Co-permittees must require any BMPs that are needed to satisfy pre-treatment requirements for that facility where applicable.

~~H.~~G. Fourth Priority Consideration of Offsets through Retrofit of Existing Development

1. Co-permittees must require that project proponents give fourth priority consideration to offsetting all or any portion of the untreated design capture volume with treatment of the same or greater design capture volume using structural treatment controls (according to Subsections XII.F. XII.G., and XII.H. above) through retrofits of existing development at an off-site location.
2. The retrofit site must be located within the same watershed of the nearest receiving waters of the U.S.
~~3. If the entire design capture volume cannot be treated on-site, the project must be eligible for and receive a Waiver (see Subsection XII.L).~~
~~4.~~3. The off-site location must not have a pending or submitted

development application which would produce similar structural treatment controls on its own.

~~5.~~4. The structural treatment control(s) selection process at the off-site location must be subject to the requirements of Section XII as applicable.

~~6.~~5. The operator of the structural treatment control(s) at the retrofit site must be subject to requirements in the project WQMP or another equally-effective mechanism that provides for its proper operation and maintenance.

~~7.~~**6.** The retro-fit option applies only to the subject project and not to future redevelopment of the same site; future redevelopment projects must consider incorporation of structural treatment controls.

L. Waiver of Structural Treatment Control BMPs and Credit Programs

1. Co-permittees are authorized to waive their requirement to provide structural treatment control BMPs (see Provision XII.C.1 above) to remove pollutants and subsequently approve a WQMP if all of the following conditions are met:
   a. Employing structural treatment control BMPs has been demonstrated in the project WQMP to be technically and economically infeasible; or there is no structural treatment control BMP available for which the environmental and public health impacts can be mitigated to an acceptable level;
   b. No feasible opportunities are available to retrofit existing development in the ~~tributary~~ project area of the same receiving water to treat the untreated design capture volume;
   c. Source and site design BMPs have been incorporated to maximize the infiltration of urban runoff;
   d. If a schedule has been designed to mitigate the water quality impacts of the untreated design capture volume and has been approved by the Executive Officer, the Co-permittee has collected the related impact fees or services from the project proponent;
   e. The Executive Officer has been provided written notice of the Co-Permittee's intent to issue the waiver, along with adequate supporting documentation, at least 30-days prior to issuance by the Co-permittee; AND
   f. The Executive Officer approves the proposed waiver or 30-days has elapsed without action by the Executive Officer on the proposed waiver, whereby it is "deemed approved".
2. Co-permittees are authorized to allow transactions of design capture volume or flow "credits" between projects within the same watershed of the nearest receiving water of the U.S. The "credit" shall be generated when a LID BMP has been designed to treat the design capture volume or flow from an area that is outside of the project boundaries. Credits must be generated and traded subject to the following additional limitations:
   a. Credits may not be generated by oversizing the LID BMP relative to its ~~tributary~~ project area.

b. The receiving project must be eligible for a waiver as described above.
c. The credit may only be used for the receiving project; it may not be re-used for future projects in the same site as the original project receiving the credit. The selection of structural treatment controls for future projects must be based on the merits of the project alone and not on credits allowed for past projects in the same space.
d. The Co-permittees where the affected projects are located must have and employ an effective system of accounting and tracking for the credit transfers.

~~I.~~H. Specific Requirements for Infiltration LID BMPs

1. The requirements of this Section apply to retention LID BMPs that are intended to infiltrate the entire design capture volume or a portion thereof (infiltration LID BMPs). The requirements of this Section are not intended to apply to bio-treatment control or other structural treatment control BMPs that incidentally infiltrate a portion of the design capture volume or flow.
2. Co-permittees must designate, in conjunction with ~~provide~~ the local groundwater management agency ~~with an opportunity for consultation on the potential impacts of any proposed infiltration LID BMPs prior to the approval of the final WQMP. If the agency requests consultation, the Co-permittee must provide the agency with adequate information to review~~ areas where infiltration BMPs are not allowed due to the potential impacts of the BMP on groundwater quality.
3. The vertical separation from the bottom of the infiltration LID BMPs to the seasonal high groundwater must be a distance of 10-feet or more unless the facility is known to pose a low risk of contaminating groundwater; if the facility is low risk or an embedded pretreatment layer has been provided, the vertical separation may be reduced to 5 feet according to criteria established in the Co-permittees' written technical guidance. Where the groundwater does not support, or does not have the potential to support, beneficial uses, the Co-permittee may approve infiltration LID BMPs with less vertical separation, provided that groundwater quality is maintained and that other potential hazards presented by such facilities can be mitigated to an acceptable level.
4. Infiltration LID BMPs must be located a minimum horizontal distance of 100-feet from any water supply wells.
5. Where an infiltration LID BMP overlies known groundwater or soil contamination, infiltration facilities must not be used for storm water runoff associated with industrial activity, storm water runoff from highways subject to motorized vehicular traffic of 25,000 average annual daily traffic, automotive repair shops, car washes, motorized fleet vehicle storage, nurseries, or other land uses or activities that pose a high-threat toground water quality.
6. Infiltration LID BMPs must incorporate one or more practical mechanisms to allow verification of the loss rate of the design capture volume. The

mechanisms must be durable and useful over the life of the project and designed for the benefit of the party responsible for the operation of the facility.

7. Infiltration LID BMPs which constitute Class V Injection Wells must comply with all applicable County and municipal well construction or destruction ordinances and standards, and USEPA's Class V Rule, as amended or revised[14].
8. Structural treatment control BMPs must be provided to pre-treat and remove pollutants that could unreasonably diminish the performance of the infiltration LID BMP for the duration of the project unless pre-treatment mechanisms are incorporated into the facility design itself.
9. The Co-permittees must develop, publish, and employ a common factor(s) of safety in their written technical guidance that must be used to size infiltration facilities. The factor(s) of safety must be based on those recommended in published and generally- accepted engineering design manuals.
10. The Co-permittees must develop, publish, and employ a uniform protocol in their written technical guidance for estimating the loss or draw-down rate used for designing LID BMPs that infiltrate.
    a. The protocol must be consistent with those used in published and generally-accepted engineering design manuals.
    b. The protocol must employ the best available information for estimating the loss rate.
    c. The Co-permittees must require that the following categories of projects use relevant site-specific methods to estimate soil infiltration rates:
        i. Residential projects affecting more than 10-acres or greater than 30 dwelling units.
        ii. Commercial or institutional projects affecting more than 5-acres or greater than 50,000 square feet of floor space.
        iii. Industrial projects affecting more than 2-acres or greater than 20,000 square feet of floor space.

~~J.~~I. Specific Requirements for Harvest and Use LID BMPs

1. The Co-permittees must not accept insufficient demand for harvested storm water as the sole basis for rejecting harvest and use LID BMPs unless the basis is supported by water demand calculations. Calculated estimates must demonstrate that the expected wet season water demand is insufficient to use the harvested design capture volume within a 48-hour period according to the following:
    a. The Co-permittees must publish and employ tables of daily average wet-season (October 1st through April 30th) demand rates and objective project characteristics necessary to provide sufficient

[14] USEPA, Office of Water, "Revisions to the Underground Injection Control Regulations for Class V Wells", 64 FR 68545-68573, December 7, 1999 (or as amended or revised)

demand for harvested storm water. The demand rates must be used for estimating anticipated non-potable uses of harvested storm water.

i. The rates and thresholds must be based on published and generally accepted rates or methods for calculating average daily demand of harvested storm water for non-potable uses such as toilet and urinal flushing, landscape irrigation, industrial process supply, evaporative cooling, and vehicle washing.

ii. The rates and thresholds must account for the off-setting effects of rainfall, reclaimed water, water conservation or the inconsistent nature of demand.

iii. Reclaimed water supplies must be based on available supplies, not speculative supplies.

b. Where demand rates are dependent upon variable site occupancy, average daily occupancy during the wet season must be used.

2. Indoor use of harvested stormwater shall only be considered as the applicable plumbing code allows.

L. Off-Site Structural Treatment Control BMPs: Regional and Sub-Regional Facilities

1. Co-permittees must require that structural treatment control BMPs be located on the project site except under the following conditions:

a. A regional or sub-regional structural treatment control BMP has been planned as part of a WQMP for a Specific Plan, parcel map, master tract map, master plan of drainage, or similar larger plan of development that was approved prior to the effective date of this Order and all of the following requirements will be met:

i. The project and the regional or sub-regional structural treatment control BMP are both located within the approved Specific Plan, parcel map, or similar larger plan of development.

ii. The WQMP for the larger plan of development has been prepared and approved according to the requirements of this Order, Order No. R8-2009-0030 or Order No. R8-2002-0010, whichever was in force at the time.

iii. The WQMP for the project complies with all other requirements of this Order to the extent that those requirements do not conflict with this Subsection (Subsection XII.K.).

iv. The regional or sub-regional facility is constructed, serviceable, and satisfactory to the Co-permittee prior to final occupancy or use of the project site(s) in its tributary area.

b. A regional or sub-regional retention LID BMP has been planned by the Co-permittees,another public agency, or other legal entity and the following requirements will be met:

i. Site design and source control BMPs have been provided in

the project WQMP.

ii. Any structural treatment control BMPs deemed necessary by the party responsible for the facility's performance ("Operator") to pre-treat and remove pollutants that could unreasonably diminish the performance of the facility or cause or contribute to a condition of nuisance over its service life have been provided in the project WQMP.

iii. An Operator will maintain ownership or control over the facility over the life of projects located within the facility's tributary area.

iv. The facility complies with, and/or is subject to, the requirements in Section XII.D. and, if an infiltration facility, Section XII.J. above.

v. The regional or sub-regional facility is constructed, serviceable, and satisfactory to the Co-permittee prior to final occupancy of the project site(s) in its tributary area.

vi. The project WQMP is otherwise prepared according to the requirements of this Order.

c. A regional or sub-regional biotreatment control BMP has been planned by the Co-permittees, another public agency, or other legal entity and the following requirements will be met:

i. Retention of the design capture volume has been maximized on the project site using site design and source control BMPs.

ii. The requirements in Section XII.L.1.b. (for regional or sub-regional retention LID BMPs above) have been or will be met as appropriate.

d. There is an infiltration LID BMP located offsite for which the Co-permittees' approval for use would not otherwise cause the Co-permittee to violate any provision of this Order[15]. The requirements include, but are not limited to, the requirements to:

i. ~~maximize retention of the site's design capture volume on-site~~;

ii. demonstrate the capacity of the off-site facility to serve the project;

iii. demonstrate adequate funding for the off-site facility's construction, and/or operation and maintenance for the life of the project; AND

iv. place the facility in service prior to final occupancy or use of the project site.

[15] In other words, the Co-permittee is faced with the choice of approving a WQMP where either a retention LID control could be located on-site or off-site, or where an eligible biotreatment control could be located on-site or off-site. Except for the facility's location, the approval would not violate the requirements of this Order

M. General Requirements for Non-Priority Projects

1. Where a non-priority project includes modifications or improvements that are, or affect areas that are exposed to storm water and which may be sources of pollution in urban runoff, Co-permittees must require non-priority projects (see Section XII.B.) to implement source control and site design BMPs to remove pollutants in urban runoff consistent with the maximum extent practicable standard[16].
    a. ~~Each Co-permittee~~The Lead Permittee must develop policies and procedures to identify non-priority projects that include modifications or improvements that are, or affect areas that are exposed to storm water and which may be sources of pollutants in urban runoff. Such projects will be required to ~~that have the potential to~~ incorporate source control or site design BMPs.
    b. ~~Each Co-permittee~~The Lead Permittee must report the policies and procedures used to comply with this Subsection in the first Annual Report due not less than 6-months from the date of the adoption of this Order. Updates must be reported in subsequent Annual Reports thereafter.
2. BMPs must be documented in a Non-Priority Project Plan. The Non-Priority Project Plan must include a summary rationale for BMP selection.
4. Source and site design BMPs must generally conform to published and generally-accepted designs or methods.
~~4.~~5. Non-Priority Project Plans must be developed by a person qualified to complete the plan based on the complexity of the plans. Non-Priority Project Plans must be approved by the applicable Co-permittee.
~~5. Non-priority project plans must be approved by or under the supervision of a registered civil engineer or licensed landscape architect acting on behalf of, and with the expressed permission of, the applicable Co-permittee.~~
6.

N. Hydrologic Conditions of Concern

1. Co-permittees must address the changes in a priority project site's hydrology in the project WQMP according to the requirements of this Section except under any of the following conditions:
    a. The runoff volume and time of concentration for the two-year frequency, 24-hour storm event are not significantly affected by the project. A significant effect must be deemed to occur only where:
        i. The calculated runoff volume from the site increases by 5% or more over the pre-project condition and/or

[16] This requirement must not be construed to mean that structural treatment control BMPs are not required for non- priority projects; only that there is no presumption requiring rebuttal that treatment control BMPs are economically or technically feasible.

ii. The calculated time of concentration for runoff from the site decreases by 5% or more over the pre-project condition.

b. All downstream conveyance channels that will receive runoff from the project are engineered and regularly maintained to accommodate the necessary design flow capacity as dictated by the latest version of the Orange County Hydrology Manual, and no sensitive stream habitat areas have the potential to be adversely affected by discrete or cumulative changes in hydrology.

c. The project has the demonstrated capacity to infiltrate, harvest and use, evaporate, or evapotranspire the volume of runoff produced by a two-year storm event within a 48-hour period.

d. The Executive Officer grants an individual or general variance in writing to the Permittee(s).

i. The granting of such variances must be supported by objective and relevant studies.

ii. The Co-permittees must comply with any conditions placed on the issuance of the variance by the Executive Officer.

iii. The Executive Officer and the requesting Co-permittee(s) must provide the public an opportunity to comment on the proposed variance for a period of not less than 30-days prior to its issuance.

2. For those priority projects that do not meet the conditions in Subsection XII.N.1. above, the Co-permittees must apply the following conditions:

a. The project WQMP must include a hydrology study that quantifies the pre- and post-project runoff volumes, peak flow rates, and times of concentration for a 2-year, 24-hour storm event.

b. Except as provided in Section XII.N.2.c.,the project WQMP must provide BMPs that modify runoff volumes and times from the project site for the 2-year, 24-hour storm event such that:

a. Post-project runoff volumes for the 2-year, 24-hour storm event do not increase by more than 10% compared to the pre-project runoff volumes for the 2-year, 24-hour storm event; AND

b. Post-project times of concentration for the 2-year, 24-hour storm event do not decrease by more than 10% compared to the pre-project times of concentration for the 2-year, 24-hour storm event.

c. The provisions of Section XII.N.2.b. above apply unless any of the following have occurred:

i. A Clean Water Act Section 401 Water Quality Standards Certification has been issued authorizing discharges of fill associated with channel modifications that would accommodate the project's changes in hydrology while protecting beneficial uses.

ii. Site design and/or structural treatment control BMPs proposed for the site to reduce pollutants in urban runoff already effectively modify runoff volumes and times of

concentration such that they satisfy Provision XII.N.2.b. above.

iii. The Project WQMP has demonstrated that it is infeasible to satisfy the criteria of Provision XII.N.2.b. above and there are site design, structural treatment control, and/or flow-control BMPs such that the post-project peak runoff flow rates for the 2-year, 24-hour storm event are not increased by more than 10% compared to the pre-project peak runoff flow rates for the 2-year, 24-hour storm event.

2. Co-permittees must prepare a set of watershed maps that identify management areas tributary to drainages that have not been engineered and regularly maintained to accommodate the design flow capacity, as dictated by the latest version of the Orange County Hydrology Manual, and and management areas that are tributary to sensitive stream habitat areas have the potential to be adversely affected by discrete or cumulative changes in hydrology (see Provision XII.N.1.b. above).
    a. The Co-permittees must submit the watershed maps in draft form to the Executive Officer for approval no later than 6 months following the effective date of this Order.
    b. The Co-permittees must make changes requested by the Executive Officer within 30-days of receipt of the request. The Executive Officer is authorized to approve the watershed maps conditioned upon completion of the changes.
    c. Upon approval by the Executive Officer, the Co-permittees must consistently use the applicable maps to identify projects that will be subject to the limitations on changes in runoff volumes, peak flow rates, and times of concentration provided in this Section (Section XII.N.).

XIII. PUBLIC EDUCATION AND OUTREACH

A. The Co-permittees must implement an effective public education program that ~~both~~ raises awareness of pollution-prevention best practices and ~~causes~~ encourages the audience to take action to reduce pollution of urban runoff. The program must include a general audience, consisting of residents of school age and older and commercial and industrial establishments, and a target audience selected from the general audience to address high- priority urban runoff pollution issues identified by the Co-permittees.

B. ~~The public education program must be described in a written plan.~~ The Co-permittees must:
    1. Make a minimum of 10 Million annual impressions on the general audience using educational content in multiple media to raise awareness of pollution in urban runoff;
    2. Identify goals and related measurable objectives that address ~~a minimum of three~~ high-priority urban runoff pollution issues over the term of this

Order. Issues must be identified for the entire permit area, for each watershed, or for each city. The Permittees shall initiate public education campaigns that address the high-priority urban runoff pollution issues[17];

3. Identify ~~and analyze~~ target behaviors and target audiences for specific behavior-based outreach to address ~~believed to have the greatest influence on the selected~~ high-priority urban runoff pollution issues;
4. Create specific messages that are appropriate to the target audiences and to ~~identified~~ sub-groups within the general audience, where appropriate;
5. Develop educational content for media ~~with the most potential to appeal to the audiences~~ as defined by the Co-permittees in a written plan;
6. Determine the methods and processes of distributing the educational content;
7. Objectively evaluate the effectiveness of the program; AND
8. Provide opportunities for public input, and demonstrate consideration of that input, in the development of ~~the program~~outreach campaigns addressing high-priority urban runoff pollution issues identified within written plans.

C. The Co-permittees must provide a rationale in a written plan to justify the selected high-priority urban runoff issues and related target audiences.
D. During the term of this Order, the Co-permittees must distribute the educational content, using one or more of the selected methods and procedures determined most appropriate by the Co-permittees. The content must be distributed in a manner that is designed to communicate the program's messages to the general and target audiences annually, beginning with the next full monitoring and reporting period after the effective date of this Order.
E. The Co-permittees must implement an effective program to measure the achievement of the objectives and requirements in this Section XIII.
   1. The program must include an annual assessment of progress towards meeting the goals and objectives of the education program.
   2. The Co-permittees must adapt their educational program in response to any shortcomings found as a result of the annual assessment.
   3. The program must include a statistically valid survey to measure:
      c. the general audiences' knowledge regarding the sources of urban runoff pollution;
      d. the general audiences' knowledge of the impacts of the pollutant(s) on the environment; awareness of what the general audience can do to help prevent urban runoff pollution; AND
      e. specific changes in the general audiences' behavior(s) to prevent urban runoff pollution.
   3. The survey must be completed no later than 60 months from the effective date of this Order.
   4. The survey results must be made available to the public through a press-release, web site, or similar method acceptable to the Executive Officer.

[17] The Permittees are only required to initiate the public education campaigns. The campaigns may extend into another permit term.

XIV. MUNICIPAL FACILITIES/ACTIVITIES

Each Permittee shall continue to implement the Model Maintenance Activities Program developed by the Permittees for fixed facilities, field operations, and drainage facilities to ensure that public agency facilities and activities do not adversely impact water quality.

A. Each Co-permittee must maintain an inventory of fixed facilities, owned or controlled by the Co-permittee, that have the potential to discharge pollutants in urban runoff.
   1. The inventory must include the following:
      a. Catch basins, storm drain inlets, and open channels;
      b. Municipal landfills;
      c. Waste incinerators;
      d. Solid waste transfer facilities;
      e. Land application sites;
      f. Sewage collection and treatment facilities;
      g. Hazardous waste treatment, disposal, and recovery facilities;
      h. Corporation, maintenance, and storage yards;
      i. Airfields;
      j. Parks, golf courses, and recreation areas;
      k. Cemeteries;
      l. Public buildings (police and fire stations and training facilities, libraries, etc.)
      m. Stadiums and other special event venues;
      n. Equestrian facilities;
      o. Animal shelters and kennels;
      p. Boat yards and marinas;
      q. Public parking facilities; and
      r. Areas or facilities that discharge directly to lagoons, the ocean, or environmentally sensitive areas.

B. The Principal Permittee may propose a schedule for visual inspection and mechanical or physical cleaning (as needed) of catch basins, storm drain inlets, and open channels (also referred to as "systems") under the Co-Permittees' control. The proposed schedule is subject to the approval of the Executive Officer. If approved, the schedule will serve as an alternative to the schedule prescribed by Subsection XIV.C. below.

C. Each Co-permittee must visually inspect a minimum of 80% of catch basins, storm drain inlets, and open channels under their control annually. 100% of the systems must be inspected every two years. Each Co-permittee must prepare a ~~written inspection and~~ maintenance schedule for ~~each~~ the facilities~~y~~ subject to this requirement.
   1. Accumulated ~~pollutants~~ trash and debris must be physically removed from the systems in a timely manner when found.
   2. Where other agencies' authorization is required to remove ~~pollutants~~ trash and debris from the systems (i.e. CWA Section 404 permit), the Co-permittee must make a good faith effort to secure the necessary authorizations and remove the accumulated ~~pollutants~~ trash and debris in

a timely manner.

3. Co-permittees must exercise their discretion and increase the inspection and cleaning frequency as necessary for those portions of the systems which tend to accumulate trash and debris~~"unusually large quantities" of pollutants~~.

~~4. Each Co-permittee must establish objective thresholds to define "unusually large quantities" of pollutants in systems that they own or control.~~

~~5.~~4. Each Co-permittee must have an effective ~~management system~~approach to identify portions of the systems which tend to accumulate ~~unusually large quantities of pollutants~~trash and debris.

~~6.~~5. Each Co-permittee must have a program ~~an effective management system~~ in place to detect and eliminate or minimize the seepage of wastewater from sanitary sewers to the storm drain system.

D. Except for catch basins, storm drain inlets, and open channels, each Co-Permittee must categorize fixed facilities that they own or control into "high-priority", "medium-priority", and "low-priority" sites.

1. The Co-permittee must inspect each fixed facility according to the following schedule:
   a. High-priority sites must be inspected once per year.
   b. Medium-priority sites must be inspected once every two years.
   c. Low-priority sites must be inspected once every five years.
2. The following fixed facilities must be categorized as "high-priority" sites:
   a. Municipal landfills
   b. Publicly-owned treatment works
   c. Waste incinerators
   d. Solid waste transfer facilities
   e. Land application sites
   f. Corporation, maintenance, and storage yards
   g. Hazardous waste treatment, disposal , and recovery facilities
   h. Land-side areas of airfields
   i. Facilities that are located adjacent or within an environmentally sensitive area or that discharge directly to an environmentally sensitive area.
3. Co-permittees must categorize all other fixed facilities according to a uniform objective ranking system developed by the Principal Permittee. The ranking system must be based on the following factors:
   a. The degree to which potentially polluting activities occur in areas exposed to storm water.
   b. The quantity of potentially polluting materials used or stored at the facility.
   c. Whether or not the activities at a site could produce pollutants that cause or contribute to the impairment of a water body listed according to CWA Section 303(d).
   d. The risk of a release of a pollutant.
   e. The occurrence of known or suspected non-storm water discharges.
   f. ~~The size of a facility, the number of employees assigned to the~~

~~facility, and the number of visitors~~.

4. Co-permittees must carry out inspections of fixed facilities to: identify and correct observed violations of the municipal code or ordinance related to protecting water quality; identify and correct unnecessary deviations from standard operating procedures (see Section XIV.E. below); internally enforce relevant discharge requirements; and identify and eliminate known or suspected unauthorized non-storm water discharges.

E. Co-permittees must implement an effective program to prevent the discharge of pollutants from Co-permittees' field activities and fixed facilities.

1. ~~The program must include the imposition of written standard requirements on the person(s) performing field activities on behalf of Co-permittees. The requirements must direct the person(s) to effectively employ BMPs that are specific and relevant to the activity to prevent the discharge of pollutants to storm water.~~
   a. The program must include written standard operating procedures for Co-Permittees' staff that engage in field activities and activities at fixed facilities that have the potential to discharge pollutants in urban runoff.
      a. The standard operating procedures must incorporate BMPs to prevent or minimize such discharges of pollutants.
      ~~b. The standard operating procedures must be subject to an annual review to verify their relevance and effectiveness. Each standard operating procedure must display the date of the last review, the identity of the reviewing personnel, and the due date for the next review.~~
2. The program must include a training program to provide Co-permittees' staff with an awareness of the responsibilities described in standard operating procedures relevant to their duties (See Section XVI below).
3. The program must include an inspection program for field activities ~~to: identify and correct observed violations of the municipal code or ordinance related to protecting water quality; identify and correct unnecessary deviations from standard operating procedures; internally enforce compliance with relevant waste discharge requirements; and identify and eliminate or minimize known or suspected non-storm water discharges~~.

F. Each Co-permittee must implement an effective program: to reduce the use of unwarranted or excessive applications of pesticide and fertilizer at facilities that they own or control; to ensure that pests are controlled using the best available methods while protecting water quality; and to ensure that pesticides are used in accordance with Federal, State, and local laws and regulations[18].

1. Each Co-permittee must develop and implement Integrated Pest Management, Pesticide and Fertilizer Guidelines.
2. Each Co-permittee must review pesticide applications ~~conduct annual integrated pest management audits for~~ of chemicals known or suspected of impairing water quality to enforce the use Integrated Pest Management Strategies that reduce their potential entry into MS4s.

[18] The term "pesticide" includes herbicides, rodenticides, insecticides, etc., consistent with the common meaning of the term.

3. Each Co-permittee must ~~conduct~~ review annual fertilizer use ~~audits~~ to verify that application rates do not exceed those recommended by University of California Integrated Pest Management Research, or similarly qualified organizations, and to enforce fertilizer application methods that eliminate or minimize fertilizer entry into MS4s.

XV. MUNICIPAL CONSTRUCTION PROJECTS AND ACTIVITIES

A. This Order authorizes the discharge of storm water runoff from construction projects that are under the ownership or direct responsibility of any of the Co-Permittees and that may result in land disturbance of one acre or more; or less than one acre if the project is part of a larger common plan of development or sale which is one acre or more.

B. All construction activities must be in compliance with the conditions and provisions of the latest version of the State Board's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (NPDES Permit No. CAS000002) as amended or revised with the following exceptions:

1. A Notice of Intent must be submitted in an electronic format acceptable to the Executive Officer.
2. No additional fees are necessary to authorize discharges associated with construction and land disturbance activities.
3. The conditions and provisions in this Order pertaining to post-construction BMPs prevail.

XVI. TRAINING PROGRAMS

A. Each Co-permittee must have an effective training program for their staff, contractors and vendors whose duties or responsibilities directly or indirectly affect the Co-permittee's capacity to satisfy the requirements of this Order (collectively, "personnel").

1. Those personnel include, but are not limited to, the following:
   a. Storm water program managers;
   b. CEQA practitioners;
   c. Inspectors;
   d. Maintenance personnel;
   e. Plan checkers;
   f. Planners;
   g. The division heads of all of the above staff;
   h. Contractors and vendors who perform duties similar to the above staff.

~~2. Each Co-permittee must maintain a roster of personnel or staff positions whose duties or responsibilities directly or indirectly affect the Co-Permittee's capacity to satisfy the requirements of this Order.~~

~~3.~~2. Except for industrial, commercial, and construction site inspectors, personnel must undergo training a minimum of once every two years.

New hires must receive their initial training within 6 months of their initial hire date.

~~4.~~3. The training program must be subjected to an annual review, for the purpose of achieving continual improvement of its effectiveness, and must be updated accordingly.

~~5.~~4. Training materials must be written in plain, straightforward language, avoiding technical terms as much as possible, and using a coherent and easily readable style.

~~6.~~5. The Co-permittees must employ a method that objectively demonstrates that personnel individually have the necessary level of expertise and competence commensurate with their duties and responsibilities.

~~7.~~6. The Co-permittees must maintain records demonstrating that personnel have satisfied the requirements of the training program; records must be maintained for a minimum of three (3) years.

~~8.~~7. Training records must be maintained for staff, ~~and~~ contractors, and vendor ~~record~~s, as part of a region-wide training registry, or through another mechanism ~~acceptable to the Executive Officer~~.

B. The Principal Permittee must establish a written training curriculum for use by the Co-permittees. The contents of the curriculum must be commensurate with the duties and responsibilities of the affected personnel.

1. The Co-permittees should consider training ~~At a minimum, all~~ affected personnel ~~must be trained~~ in the following subject matter:
   a. An overview of Federal, state and local water quality laws and regulations pertaining to urban runoff.
   b. The potential direct and indirect impacts of urban runoff on receiving waters.
   c. Current water quality impairments.
   d. The potential sources of pollutants in urban runoff.
   e. Specific actions that personnel are obligated to take to reduce pollutants in urban runoff.
2. The Co-permittees should consider training~~At a minimum,~~ personnel who are responsible for inspecting construction sites ~~must be trained~~ in the following subject matter:
   a. Federal, state and local water quality laws and regulations pertaining to construction and grading activities.
   b. The potential effects of construction and grading activities and urbanization on water quality.
   c. The proper application and use of erosion and sediment control BMPs.
   d. The Co-permittee's enforcement tools and procedures.
3. The Co-permittees should consider training ~~At a minimum,~~ personnel responsible for inspecting commercial and industrial sites ~~must be trained~~ in the following subject matter:
   a. Federal, state and local water quality laws and regulations pertaining to commercial and industrial activities.
   b. The potential effects of commercial and industrial activities and

urbanization on water quality.
c. The proper application and use of non-structural and structural treatment control BMPs.
d. The Co-permittee's enforcement tools and procedures.

4. The Co-permittees should consider training ~~At a minimum,~~ personnel responsible for inspecting restaurants ~~must be trained~~ in the following subject matter:
   a. Proper oil and grease disposal.
   b. Proper housekeeping of trash bins and trash bin enclosures.
   c. Proper cleaning of floor mats, mops, filters, and garbage containers and proper disposal of related waste water.
   d. Proper methods of cleaning parking lot areas.
   b. Proper spill clean-up methods.
   c. Proper operation and maintenance of devices designed to separate fat, oil, and grease from wastewater.
   d. The Co-permittee's enforcement tools and procedures.
5. The Co-permittees should consider training ~~At a minimum,~~ personnel responsible for investigating, eliminating or permitting illicit discharges and illicit connections ~~must be trained~~ in the following subject matter:
   a. The potential effects of illicit discharges and illicit connections on water quality.
   b. SSO and general spill response and coordination procedures.
   c. Investigation techniques and procedures.
   b. The Co-permittee's enforcement tools and procedures.
6. The Co-permittees should consider training ~~At a minimum,~~ personnel responsible for preparing, reviewing or approving Water Quality Management Plans or non-priority project plans or for ensuring their implementation ~~must be trained~~ in the following subject matter:
   a. The requirements found in Section XII of this Order.
   b. The related written processes, procedures, and methods for selecting, sizing, and designing source control, site design, and structural treatment control BMPs.
   c. Investigation techniques and procedures.
   d. The Co-permittee's enforcement tools and procedures.

XVII. NOTIFICATION REQUIREMENTS

A. When Co-permittees become aware of a site or incident within their jurisdiction that poses an imminent threat to human health or the environment, the Co-Permittee(s) must take the following actions:
   1. Provide oral or electronic mail notification to Regional Board staff of the imminent threat within 24 hours of becoming aware.
   2. Submit a written report within five (5) business days following the initial notification to Regional Board staff. The report must provide the following information:
      a. Details of the location, nature and circumstances of the threat to

human health or the environment.
b. Details of any corrective action(s) taken or planned to mitigate the threat and prevent its reoccurrence.
c. Identity of the responsible parties.
d. Describe any enforcement actions taken or planned by the Co-Permittee.

3. Record incidences and the related report in the applicable construction, industrial or commercial site database.

B. For the purposes of this Section, sewage spills in excess of 1,000 gallons and all reportable quantities of hazardous waste spills, as per 40 CFR § 117 and 40CFR § 302, constitute imminent threats to human health or the environment.

C. If, during the course of a site inspection or complaint investigation, Co-permittees or their representatives become aware of a known, suspected, or threatened violation of applicable waste discharge requirements (i.e. State-wide General Industrial or Construction Permits, etc.), the Permittee must provide written notice to Regional Board staff~~the Executive Officer~~.

1. Where circumstances do not pose an imminent threat to human health or the environment, the written notice must be provided on a quarterly basis. For the purposes of this Provision, each quarter of the monitoring and reporting period constitutes a reporting period, with the notice due within 30-days of the end of each period.
2. The notice must include the location, nature and circumstance of the known, suspected, or threatened violation(s); prior history of any relevant violations of state and local requirements; and action(s) taken or planned by the Co-permittee(s) to bring the site operator into compliance.

XVIII. TOTAL MAXIMUM DAILY LOAD IMPLEMENTATION

The provisions in this section require compliance with water quality-based effluent limits ("WQBELs") that implement waste load allocations ("WLAs"). USEPA guidance[19, 20] provides discretion regarding how TMDLs are incorporated into permits for NPDES-regulated municipal stormwater discharges, including expressing effluent limitations as BMPs or other similar requirements rather than as numeric effluent limitations.

The WLAs have been established in Total Daily Maximum Loads ("TMDLs") that have been adopted and approved by the Regional Board or promulgated by USEPA and are now effective. Consistent with USEPA's recommendation, this Section implements TMDLs though an iterative BMP-based approach capable of achieving the WLAs in accordance with the associated compliance schedule. Consistent with this requirement, this Order includes a process for developing a BMP-based approach (development of a WQBEL compliance plan), which, when adopted by the Regional Board, shall become the final water quality-based effluent limitation(s)[21]. The WLAs can be used to assess if additional BMPs are necessary.

The Co-permittees that are subject to each TMDL are shown in Appendix A. The applicable WQBELs are specified in Appendices B through H.

A. General TMDL Provisions

1. The TMDL provisions implement and are consistent with the assumptions and requirements of the WLAs established within the TMDLs including implementation plans and schedules where provided for in the State adoption and approval of the TMDL (40 CFR 122.44(d)(1)(vii)(B); CWC 13263 (a)).
~~1.~~2. The responsible Co-permittees identified in Appendix A must comply with the applicable WQBELs shown in Appendices B through H according to the methods described in this Section (Section XVIII).
~~2.~~3. The TMDLs shown in Appendices G and H were promulgated by USEPA and, as of the adoption of this Order, do not have implementation plans or schedules. Unless and u~~U~~ntil implementation plans and schedules are developed~~provided~~, Co-permittees responsible for complying with the WQBELs in Appendices G and H must either: (1) demonstrate that the applicable WQBELs have been achieved by the effective date of this Order; OR (2) demonstrate compliance through any one of the means identified in Subsections XVIII.B. through XVIII.D~~E~~. below.

[19] USEPA, 2002. Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those TMDLs.
[20] USEPA, 2014.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".
[21] Examples of WQBELs compliance plans include plans such as the *BMP Strategic Plan for the Santa Ana-Delhi and San Diego Creek Sub-Watersheds (December 4, 2013)* and the *Newport Bay Fecal Coliform Source Management Plan (December 31, 2009),*

~~3.~~4. A Co-permittee may comply with WQBELs through any lawful means.
5. The responsible Co-permittees must submit reports to the Regional Board which are consistent with the requirements of the TMDL.
~~4.~~6. Compliance with the requirements in Section XVIII satisfies the requirements for the relevant water quality standards in Sections IV.A through IV.C.

B. Provisions for WLAs in State-Adopted TMDLs Where Final Compliance Deadlines Have Passed

1. Appendices B, C, D and F include WQBELs where the final compliance deadline established by the ~~underlying~~ TMDL has passed[22]. The responsible Co-permittees must comply immediately with these final WQBELs. Compliance with final WQBELs shall be determined using one of the following methods:
    a. The responsible Co-permittees may demonstrate compliance with final WQBELs using monitoring data as follows:
        i. Demonstrat~~e~~ing that there are no exceedances of receiving water limitations using monitoring data that has been collected and analyzed pursuant to an approved TMDL monitoring plan or the Monitoring and Reporting Program R8-2015-0001; OR
        ii. Demonstrat~~e~~ing that there are no exceedances of WLAs ~~at MS4 outfalls~~ which have been designated pursuant to the requirements of an approved TMDL monitoring plan or Monitoring and Reporting Program R8-2015-0001; OR
        iii. Demonstrat~~e~~ing that there is no discharge from the responsible Co-permittees' MS4(s) to the receiving water during the time period subject to the WLA. OR
        iv. Exceedances of a WLA occur at a frequency that is less than the frequency specified in the "Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List" (September 2004) as amended or revised.

    b. Co-permittee(s) may fully implement a Time Schedule Order ("TSO)" issued by the Regional Board pursuant to California Water Code Section 13300. The TSO must include a WQBEL compliance plan consistent with Section X.VIII.C.i.a.v. The responsible Co-permittees may request a TSO if they believe that additional time to comply with final WQBELs is necessary.

[22] Appendix C contains compliance dates where some have passed and others have not. Consequently, Appendix C appears in both Subsections XVIII.B. and XVIII.C.

C. Provisions for WLA's in State-Adopted TMDLs Where Final Compliance Deadlines Have Not Passed

i. WQBELs set forth in Appendices C and E are based on TMDLs where the final compliance deadlines have not passed[23]. The responsible Co-permittees must achieve compliance with the WQBELs by the final compliance dates set forth in Appendices C and E by one of the following methods:

a. The responsible Co-permittees may demonstrate compliance with applicable WQBELs using monitoring data as follows:

i. Demonstrat~~e~~ing that there are no exceedances of receiving water limitations using monitoring data that has been collected and analyzed pursuant to an approved TMDL monitoring plan or Monitoring and Reporting Program R8-2015-0001; OR

ii. Demonstrat~~e~~ing that there are no exceedances of WLAs ~~at MS4 outfalls~~ which have been designated pursuant to the requirements of an approved TMDL monitoring plan or Monitoring and Reporting Program R8-2015-0001; OR

iii. Demonstrat~~e~~ing that there is no discharge from the responsible Co-permittees' MS4(s) to the receiving water during the time period subject to the WLA. OR

~~iii.~~iv. Exceedances of a WLA occur at a frequency that is less than the frequency specified in the "Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List" (September 2004) as amended or revised.

b. The responsible Co-permittees may implement an approved plan designed to comply with final WQBELS ("WQBEL compliance plan") according to the following requirements:

a. The Co-permittees must submit written notice to the Executive Officer of their intent to develop a WQBEL compliance plan within 180 days of the effective date of this Order or two (2) years prior to the final compliance date, whichever is shorter.

1. For WQBELs where the related TMDL ~~has an implementation plan that includes a~~ require~~s~~ ~~ment that~~ the ~~Co-permittees~~ develop~~ment of~~ a compliance plan, the ~~draft~~ WQBEL compliance plan must be submitted consistent with the schedule specified in the ~~implementation plan~~Basin Plan Amendment. ~~Otherwise, the draft WQBEL plan must be submitted within six (6) months of submission of the written notice of intent to develop the plan.~~

2. For WQBELs where a compliance plan is not a required element of the related TMDL, the compliance plan must

[23] See footnote 18.

be submitted within 18 months of the written notice of intent to the EO,

2.3. For WQBELs where a compliance plan has already been developed for the related TMDL and is currently being implemented, the responsible Co-permittees may request in their written notification that the Executive Officer approve the plan as satisfying the requirements of Subsection XVIII.C.

b. A WQBEL compliance plan may be developed separately by a Permittee or by a group of Permittees

b.c. A WQBEL compliance plan may be developed separately for a specific WQBEL or a group of WQBELs may be combined and addressed in one plan, subject to the discretion of the Regional Board.

c.d. At a minimum, the draft WQBEL compliance plan must contain the following:

i. A characterization of the water quality in the receiving waters, as it pertains to the applicable WQBELs;

ii. Quantification of the contributions of MS4 discharges to exceedances in related pollutants from the responsible Co-permittees' MS4 outfalls to the receiving waters;

iii. A description of the BMPs that are currently being employed to control the pollutant(s);

iv. A description of any proposed new BMPs, or modification of currently-employed BMPs, necessary to achieve the WQBEL(s);

v. An analysis that provides reasonable assurance that the proposed actions will achieve the final WQBEL(s). The analysis must be supported, in part, by peer-reviewed models that are in the public domain where such models are available and appropriate. Alternatively, t (The analysis can include trend analyses that demonstrate that no additional actions are necessary to achieve the final WQBEL(s).).

vi. A description of the adaptive management process that will be used to evaluate the effectiveness of the BMPs to achieve the WQBEL(s) and make improvements as necessary; AND

vii. A time schedule for the implementation of the BMPs that includes key milestones.

d.e. Any draft WQBEL compliance plans is subject to the review and approval of the Executive Officer. Responsible Co-permittees must modify the plan within 60-days of written notification by the Executive Officer. Upon approval

by the Executive Officer, the plan is considered final and the responsible Co-permittees must fully implement the final WQBEL compliance plan. To be considered fully implementing an approved plan, responsible Co-permittee(s) must carry out all actions consistent with the final WQBEL compliance plan and related time schedules contained therein.

e.f. Draft WQBEL compliance plans will be subject to a 30-day public review period. All final WQBEL compliance plans must be made available to the public and posted to the responsible Co-permittee website(s), the Principal Permittee's website, or by another method acceptable to the Executive Officer.

f.g. Except for inconsequential grammatical or technical corrections, changes to final WQBEL compliance plans are subject to the approval of the Executive Officer following 30-days public review as described above.

iv.v. Co-permittee(s) may fully implement a Time Schedule Order ("TSO)" issued by the Regional Board pursuant to California Water Code Section 13300. The TSO must include a WQBEL compliance plan consistent with Section X.VIII.C.i.a.v. The responsible Co-permittees may request a TSO if they believe that additional time to comply with final WQBELs is necessary.

D. Provisions for TMDLs Established by USEPA

1. WQBELs in Appendices G and H are based on TMDLs promulgated by USEPA. These TMDLs do not include an implementation plan adopted pursuant to California Water Code Section 13242. ~~However, USEPA has included recommendations for implementation as part of the TMDLs~~. The responsible Co-permittees, subject to the WQBELs in Appendices G and H must achieve compliance with these WQBELs by one of the following methods:
    a. The responsible Co-permittees may demonstrate compliance with applicable WQBELs using monitoring data as follows:
        i. Demonstrat~~e~~ing that there are no exceedances of receiving water limitations using monitoring data that has been collected and analyzed pursuant to an approved TMDL monitoring plan or the Monitoring and Reporting Program R8-2015-0001; OR
        ii. Demonstrat~~e~~ing that there are no exceedances of WLAs ~~at MS4 outfalls~~ which have been designated pursuant to the requirements of an approved TMDL monitoring plan or the Monitoring and Reporting Program R8-2015-0001; OR
        iii. There is no discharge from the responsible Co-permittees' MS4(s) to the receiving water during the time period subject to the WLA. OR

~~iii.~~iv. Exceedances of a WLA occur at a frequency that is less than the frequency specified in the "Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List" (September 2004) as amended or revised.

b. The responsible Co-permittees may implement an approved plan designed to comply with final WQBELS ("WQBEL compliance plan") according to the following requirements:

i. The Co-permittees must submit written notice to the Executive Officer of their intent to develop a WQBEL compliance plan within 180 days of the effective date of this Order.

ii. For WQBELs where a compliance plan has already been developed for the related TMDL and is currently being implemented, the responsible Co-permittees may request in their written notification that the Executive Officer approve the plan as satisfying the requirements of Subsection XVIII.D.

iii. A WQBEL compliance plan may be developed separately by a Co-permittee or by a group of Co-permittees.

~~iii.~~iv. A WQBEL compliance plan may be developed separately for a specific WQBEL or a group of WQBELs may be combined and addressed in one plan~~, subject to the discretion of the Regional Board~~.

~~iv.~~v. At a minimum, the draft WQBEL compliance plan must contain the following:

A. A characterization of the water quality in the receiving waters, as it pertains to the applicable WQBELs;

B. Quantification of the MS4 discharges to exceedances in ~~contributions of related pollutants from the responsible Co-permittees' MS4 outfalls to~~ the receiving waters;

C. A description of the BMPs that are currently being employed to control the pollutant(s);

D. A description of any proposed new BMPs, or modification of currently-employed BMPs, necessary to achieve the WQBEL(s);

E. An analysis that provides reasonable assurance that the proposed actions will achieve the final WQBEL(s). The analysis must be supported, in part, by peer-reviewed models that are in the public domain where such models are available and appropriate. Alternatively, ~~(T~~the analysis can include trend analyses that demonstrate that no additional actions are necessary to achieve the final WQBEL(s).~~)~~

F. A description of the adaptive management process that will be used to evaluate the effectiveness of the BMPs to achieve the WQBEL(s) and make improvements as necessary; AND

G. A time schedule for the implementation of the BMPs that includes specific milestones.

~~v.~~vi. Any draft WQBEL compliance plans is subject to the review and approval of the Executive Officer. Responsible Co-permittees must modify the plan within 60-days of written notification by the Executive Officer. Upon approval by the Executive Officer, the plan is considered final and the responsible Co-permittees must fully implement the final WQBEL compliance plan. To be considered fully implementing an approved plan, responsible Co-permittee(s) must carry out all actions consistent with the final WQBEL compliance plan and related time schedules contained therein.

~~vi.~~vii. Draft WQBEL compliance plans will be subject to a 30-day public review period. All final WQBEL compliance plans must be made available to the public and posted to the responsible Co-permittee website(s), the Principal Permittee's website, or by another method acceptable to the Executive Officer.

~~vii.~~viii. Except for inconsequential grammatical or technical corrections, changes to final WQBEL compliance plans are subject to the approval of the Executive Officer following 30-days public review as described above.

XIX. PROGRAM EFFECTIVENESS ASSESSMENTS

A. Each Co-permittee must have a program in place to ~~objectively~~ assess the effectiveness of prioritized best management practices or groups of prioritized best management practices ~~employed in each of the elements of~~for their storm water program. The effectiveness assessment approach may be modeled on the most recent guidance from the California Stormwater Quality Association (CASQA)[24] or equivalent. The program must be documented in writing.

B. The Principal Permittee must develop a model program effectiveness assessment. The model assessment must address storm water program elements that are common to all or a majority of the Co-permittees and that are necessary to compile information on the overall performance of the Co-Permittees' collective efforts.

C. Each Co-permittees' programs must be comprised of the following elements:

~~1. Conceptual generalized model(s) of how each pollutant, or functionally similar group of pollutants, are released to the environment and transported to the receiving water(s) (pollution process).~~

~~2. A description of each of the best management practices (interventions) in the pollution process and where in the process they are intended to be applied.~~

~~3.~~1. A system to ~~objectively~~ measure the performance of prioritized BMPs or groups of prioritized BMPs~~each intervention or group of~~

[24] California Stormwater Quality Association (CASQA) document *Municipal Stormwater Program Effectiveness Assessment Guidance Document*, May 2007. https://www.casqa.org/resources/guidance-documents This document is currently being updated and should be released in 2015.

~~interventions~~. The system must include ~~valid~~ performance metrics (or measures), the method(s) to measure and analyze the metrics, and a method to track and document outcomes.

~~4.~~2. Annual evaluation of the ~~validity of the~~ stormwater program; how effective the ~~interventions~~ prioritized BMPs are in achieving the desired outcomes; if the performance metrics and the method(s) for measuring outcomes are ~~valid~~applicable; and any changes found necessary to improve the effectiveness of the ~~interventions or the overall process~~program.

D. Each Co-permittee must perform assessments of their ~~best management practices~~stormwater program annually. The results must be included in the Annual Progress Report (see Monitoring and Reporting Program No. R8-2015-0001). Reported outcomes must be ~~expressly~~ compared to the ~~objective~~ requirements of this Order (prescribed performance standards) where they are provided. The Principal Permittee is responsible for compiling and analyzing information where necessary to demonstrate compliance with the requirements of this Order.

E. Each Co-permittee must have an effective mechanism that solicits input from stakeholders in the development and implementation of the program effectiveness assessments.

XX. FISCAL ANALYSIS

A. The Co-permittees must prepare and submit a unified fiscal analysis to the Executive Officer of the Regional Board. The analysis must conform to fiscal reporting guidance issued by USEPA when available. The analysis must be submitted with the Annual Progress Report (see Monitoring and Reporting Program No. R8-2015-0001) and, at a minimum, include:

1. An accounting of each Co-permittee's expenditures for the previous fiscal year;
2. An accounting of each Co-permittee's budget for the current fiscal year;
3. A description of the source of funds; AND
4. Each Co-permittee's estimated budget for the next fiscal year.

XXI. PROVISIONS

A. All reports that are submitted by the Co-permittees according to the requirements of this Order and which are subject to the approval of the Executive Officer will be publicly-noticed and made available at the Regional Board's web site or through other means. Noticed reports will be subject to public review and comment. The Executive Officer will consider all comments received prior to approval of the reports. Any unresolved, significant issues will be scheduled for

a public hearing at a Regional Board meeting prior to approval by the Executive Officer.

B. The Co-permittees must comply with the requirements of Monitoring and Reporting Program No. R8-2015-0001 ("MRP"), as amended or revised during the term of this Order. The MRP is hereby made a part of this Order. The requirements of the MRP are subject to revision under the direction of the Executive Officer.
    1. Any proposed revisions to the MRP must be submitted in writing to the Executive Officer for approval.
    2. The Principal Permittee must provide public notice of any proposed revisions. The public notice must include direct notice given to potential and known interested stakeholders.
    3. The Executive Officer will provide a minimum of 30-days to interested parties to comment before approving any revisions.
    2. The Co-permittees must make available to the public the results of field and laboratory analyses performed on all samples collected pursuant to the MRP.
C. The NPDES program requirements contained in 40CFR§122.21(a), (b), (d)(2), (f), (p), (h), (i), (j), (k), and (l); and 40CFR§122.42(c) are incorporated into this order by reference.
D. The Co-permittees must report to the Executive Officer of the Regional Board any known discharges of storm water or non-storm water which may have an impact on human health or the environment.
E. The Co-permittees must report to the Executive Officer any suspected or known activities on federal, state, or other entity's land or facilities where the Co-Permittees do not have jurisdiction, where the activities may be contributing pollutants to waters of the U.S.

XXII. PERMIT MODIFICATION

A. In accordance with 40CFR§122.41(f), this Order may be modified, revoked or reissued prior to its expiration date for the following reasons:
    1. To address significant changes in conditions identified in the technical reports required by the Regional Board which were unknown at the time of the issuance of this Order;
    2. To incorporate applicable requirements of state-wide water quality control plans adopted by the State Water Resources Control Board or any amendments to the Basin Plan approved by the Regional Board, the State Board, and, if necessary, by the Office of Administrative Law;
    3. To incorporate changes needed for consistency with standard provisions and precedential Orders adopted by the State Water Resources Control

Board.

4. To comply with any applicable requirements, guidelines, or regulations issued or approved under the Clean Water Act, if the requirements, guidelines, or regulations contain different conditions or additional requirements than those included in this Order; OR
5. To incorporate any requirements imposed upon the Co-permittees through the TMDL process.

B. The filing of a request by the Co-permittees for modification, revocation, and reissuance or termination or a notification of planned changes or anticipated noncompliance does not stay any conditions of this Order.

XXIII. PERMIT EXPIRATION AND RENEWAL

A. This Order will expire on MONTH DAY, 2019. The Co-permittees must file a report of waste discharge (permit application) no later than 180 days in advance of the expiration of this Order after which this Order may be administratively extended (40 CFR §122.6). The submittal of a report of waste discharge will constitute an application for issuance of new waste discharge requirements (40 CFR § 122.41(b)).
B. All permit applications (reports of waste discharge), Annual Progress Reports, and other information submitted under this Order must be signed by either a principal executive officer or a ranking elected official (40 CFR § 122.22(a)(3)) or a duly-authorized representative as per 40 CFR § 122.22(b).
C. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) Permit pursuant to Section 402(p) of the Clean Water Act, or amendments thereto. This Order shall become effective fifty (50) days after the date of its adoption, provided that the Regional Administrator of the USEPA has no objections. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.
D. Except for enforcement purposes, Order No. R8-2009-0030 is hereby withdrawn upon the effective date of this Order.

XXIV. STANDARD PROVISIONS

A. Duty to Comply
   1. The Co-permittee(s) must comply with all of the conditions and provisions of this Order. Any noncompliance with the requirements of this Order constitutes a violation of the CWA and the CWC. Noncompliance is grounds for enforcement action and/or removal from Permit coverage.
   2. Any failure to take appropriate corrective action(s) as specified in this Order or as directed by the Executive Officer is also a violation of this

Order.

3. The Co-permittee(s) must comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants. Compliance must be achieved within the time provided in the regulations that establish these standards or prohibitions, even if this Permit has not yet been modified to incorporate the requirement.

B. General Permit Actions

If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant which is present in the discharge and that standards or prohibition is more stringent than any limitation on the pollutant in this Permit, this Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the Co-permittees so notified.

C. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Co-permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

D. Duty to Mitigate

The Co-permittee(s) must take all responsible steps to minimize or prevent any discharge which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The Co-permittees must at all times properly operate and maintain any facilities and systems of treatment and control (and related equipment and apparatuses) which are installed or used by the Co-permittee to achieve compliance with the conditions of this Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of back-up or auxiliary facilities or similar systems installed by a Co-permittee when necessary to achieve compliance with the conditions of this Permit.

F. Property Rights

This Permit does not convey any property rights or any sort of exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor does it authorize any infringement of Federal, State, or local laws or regulations.

G. Duty to Provide Information

The Co-permittees must provide to the Regional Board, State Board, or USEPA, within a reasonable time, any requested information to determine compliance with this Permit. The Co-permittees must also furnish, upon

request, copies of records that are required to be kept by this Permit.

H. Inspection and Entry
   1. The Co-permittees must allow Regional Board staff, State Board staff USEPA staff, or an authorized representative of the municipal operator of the MS4 receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:
      a. Enter upon the Co-permittees premises at reasonable times where a regulated activity is being conducted or where records must be kept under the conditions of this Permit;
      b. Access and copy at reasonable times any records that must be kept under the conditions of this Permit.
      c. Inspect at reasonable times the facility; AND
      d. Take pictures, collect samples, collect evidence, or monitor at reasonable times for the purpose of ensuring Permit compliance.

I. Monitoring and Records
   1. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.
   2. Records of monitoring must include:
      a. The date, exact place, and time of sampling or measurements;
      b. The date(s) analyses were performed;
      c. The individual(s) who performed the analyses;
      d. The analytical techniques or methods used; AND
      e. The results of such analysis.
   3. The Co-permittees must maintain a paper or electronic copy of all storm water monitoring information, copies of all reports (including the Annual Progress Reports), SWPPPS, and all other required records, including a copy of this Permit, for a period of at least five (5) years from the date generated or date submitted, whichever is later.

J. Electronic Signature and Certification Requirements

   All Annual Progress Reports or other information required by this Permit or requested by the Regional Board, State Board, USEPA, or local storm water management agency must be certified and submitted by the Legally Responsible Person ("LRP") or the Duly Authorized Representative ("DAR").

K. Certification

   Any person signing documents under Section XXIV.J. above, must make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for

information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Anticipated Noncompliance

The Co-permittee(s) must give notice to the Regional Board and local storm water management agency of any planned changes in any municipal activity which may result in noncompliance with this Permit's requirements.

M. Penalties for Falsification of Reports

Section 309(4) of the CWA provides that any person who knowingly makes a false material statement, representation, or certification in any record or other document submitted or required to be maintained under this Permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than two years, or by both.

N. Oil and Hazardous Substance Liability

Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Co-permittee(s) from any responsibilities, liabilities, or penalties to which the Co-permittee(s) is or may be subject to under Section 311 of the CWA.

O. Severability

The provisions of this Permit are severable; and, if any provision of this Permit or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

P. Penalties for Violations of Permit Conditions

Section 309 of the CWA provided significant penalties for any person who violated a permit condition the implements Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any such section in a permit issued under section 401. Any person who violated any permit condition of this Permit is subject to civil penalty not to exceed $37,500 per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties, which in some cases are greater than those under the CWA

Q. Transfers (not applicable)

R. Continuation of Expired Permit

1. This Permit continues in full force and effect until a new Permit is issued or the Regional Board rescinds this Permit.
2. Only those Co-permittees authorized to discharge under the expiring Permit are covered by the continued Permit.

S. Other Federal Requirements

All other requirements of 40 CFR § 122.41 and 40 CFR § 122.42 are incorporated into this Permit by reference.

ACRONYMS

ASBS Areas of Special Biological Significance

BMPs Best Management Practices

CCC Criterion Continuous Concentration

CCR California Code of Regulations (State Water Board regulations are in Title 23)

CEQA California Environmental Quality Act

CFR Code of Federal Regulations

CMC Criterion Maximum Concentration

CTR California Toxics Rule

CWA Clean Water Act

CWC California Water Code

DAMP Drainage Area Management Plan

DAR Duly Authorized Representative

DDT Dichlorodiphenyltrichloroethane

HCA Health Care Agency

LA Load Allocation

LID Low Impact Development

LIP Local Implementation Plan

LRP Legally Responsible Person

MOU Memorandum of Understanding

MPN Most Probable Number

MRP Monitoring and Reporting Program, R8-2015-0001

MS4 Municipal Separate Storm Sewer System

NPDES National Pollutant Discharge Elimination System

PCB Polychlorinated Biphenyl

PEA Program Effectiveness Assessment

POTW Publicly-Owned Treatment Works

QAPP Quality Assurance Project Plan

SARA Superfund Amendments and Reauthorization Act of 1986

SIC Standard Industrial Classification

SIP State Implementation Plan or, more formally, Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California

SSO Sanitary Sewer Overflow

SWAMP Surface Water Ambient Monitoring Program

SWRCB State Water Resources Control Board

TDS Total Dissolved Solids

TMDL Total Maximum Daily Load

USEPA United States Environmental Protection Agency

WEF Water Environment Federation

WDID Waste Discharger Identification

WDR Waste Discharge Requirements

WLA Waste Load Allocation

WQBEL water quality-based effluent limit

WQMP Water Quality Management Plan

GLOSSARY

This Glossary has been prepared for the convenience of the reader. This Glossary is not an exhaustive catalog of terminology used in this Order. Additional terminology is defined in the Clean Water Act, USEPA regulations, and the California Water Code; all such terms not appearing below are incorporated into this Permit by reference.

Authorized non-Storm Water Discharges – Non-storm water discharges authorized pursuant to an NPDES permit. Authorized non-storm water includes: uncontaminated condensate from air conditioners, coolers, and compressors and from the outside storage of refrigerated gases or liquids; flows from riparian habitats and wetlands; passive footing and foundation drains or crawlspace pumps; non-commercial vehicle washing; de-chlorinated water from swimming pools; diverted stream flows; uncontaminated groundwater or spring water; landscape watering, provided that all pesticides, herbicides, and fertilizers have been applied according to the approved labeling; discharges from emergency fire-fighting activities; irrigation water/drainage; and waters otherwise not containing waste.

Basin Plan – The Water Quality Control Plan for the Santa Ana River Basin (1995) and subsequent amendments.

Beneficial Uses – The uses of water necessary for the survival or well-being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals. "Beneficial Uses" that may be protected against include, but are not limited to: domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or groundwater on or after November 28, 1975; and potential beneficial uses are uses that would probably develop in future years through the implementation of various control measures. "Beneficial Uses" are equivalent to "Designated Uses" under federal law (California Water Code Section 13050(f). Beneficial Uses for the Receiving Waters are identified in the Basin Plan.

Best Management Practices ("BMPs") ~~– Also known as storm water control measures.~~ Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating

procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage (40 CFR § 122.2).

Bioaccumulate – The progressive accumulation of contaminants in the tissues of organisms to a higher concentration than in the surrounding environment. Bioaccumulation may occur through any route, including respiration, ingestion, or direct contact with contaminated water, sediment, pore water, or dredged material. Bioaccumulation occurs with exposure and is independent of the trophic level of the organism.

Bioassessment – The use of biological community information to evaluate the biological integrity of a water body and its watershed. With respect to aquatic ecosystems, bio-assessment is the collection and analysis of samples of the benthic macro invertebrate community together with physical/habitat quality measurements associated with the sampling site and the watershed to evaluate the biological condition (i.e. biological integrity) of a water body.

Biological Integrity – Defined in Karr J.R. and D.R. Dudley. 1981. Ecological perspective on water quality goals. Environmental Management 5:55-68 as: "A balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitat of the region." Also referred to as 'ecosystem health'.

Biotreatment Control BMP – A sub-category of structural treatment control BMPs that employ biological uptake, transformation, or degradation of pollutants as their principal mechanism(s) of pollutant removal. Although a portion of the design capture volume or flow may incidentally infiltrate, evaporate, or evapotranspirate, the principal of operation involves the discharge of the treated storm water after detention in a densely-vegetated basin and/or passing through porous, biologically-active medium, dense vegetation or both.

California Toxics Rule – Numeric water quality criteria for certain Priority Toxic Pollutants and other water quality standards provisions promulgated by the USEPA for waters in the state of California. The California Toxics Rule is found in 40 CFR § 131.

Clean Water Act Section 402(p) – The federal statute, codified at 33 USC 1342(p), requiring municipal and industrial Co-permittees to obtain NPDES permits for their discharges of storm water.

Clean Water Act Section 303(d)-Listed Water Body – An impaired water body; a water body in which water quality does not meet applicable water quality standards and/or is

not expected to meet water quality standards, even after the application of technology-based pollution controls required by the CWA.

Construction Site – Any project, including projects requiring coverage under the General Construction Permit, that involves soil disturbing activities including, but not limited to, clearing, grading, disturbances to ground such as stockpiling, and excavation.

Contamination – An impairment of the quality of waters of the State by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. "Contamination" includes any equivalent effect resulting from the disposal of waste whether or not waters of the State (inclusive of waters of the U.S.) are affected. (California Water Code Section 13050(k))

Co-permittee(s) – Entities regulated under Order No. R8-2015-0001, inclusive of the Principle Co-permittee.

Criteria – The numeric values and the narrative standards that represent contaminant concentrations that are not to be exceeded in the receiving environmental media (surface water, groundwater, sediment) to protect beneficial uses.

Debris – Debris is defined as the remains of anything destroyed or broken, or accumulated loose fragments of rock.

Design Capture Flow – The calculated flow rate of storm water runoff, typically expressed as cubic feet per second ("cfs"), that must be treated in one or more structural treatment control BMPs according to the requirements of this Order.

Design Capture Volume – The calculated volume of storm water runoff, typically expressed in gallons or cubic feet, that must be treated in one or more structural treatment control BMPs according to the requirements of this Order.

Development Project/Redevelopment Project – For the purposes of this order projects that include the addition or replacement of impervious surfaces and could reasonably cause water quality or hydrologic impacts. Site improvements or maintenance activities that do not include the addition or replacement of impervious surfaces are exempt from the requirements of Section XII of this Order. Examples of exempted site activities include interior building improvements, roof or siding replacements, sign installations, retaining wall installation, irrigation system installations, routine maintenance activities, and other activities.

Dry Weather – Weather in which there is no precipitation.

Duly Authorized Representative – All reports required by this permit, and other requested information shall be signed by the LRP or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- The authorization is made electronically submitted by the LRP;
- The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated activity such as a position of plant manager, superintendent, position of equal responsibility, or an individual or position having overall responsibility for environmental matters for the municipality.

Effluent – Any discharge of water either to the receiving water or beyond the property boundary controlled by the discharger.

Effluent Limit/Limitation – Means any restriction on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into Waters of the United States, waters of the "contiguous zone," or the ocean. (40 CFR §122.2)

Emergency – A sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services (Public Resources Code Section 21060.3).

Environmentally Sensitive Area ("ESA") – An area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human activities and developments (Public Resources Code Section 30107.5). These areas include, but are not limited to: water bodies designated with the RARE beneficial use in the Basin Plan (Water Quality Control Plan for the Santa Ana River Basin [1995] and amendments); an area designated in the Ocean Plan as an Area of Special Biological Significance; a water body listed as being impaired pursuant to CWA Section 303(d); areas designated as preserves or their equivalent under the Natural Communities Conservation Program (Multiple Species Habitat Conservation Plan, "MSHCP") within the Cities and Counties of Orange, Riverside and San Bernardino; or any area designated as such by a public agency with designation powers.

Erosion – The process whereby material (such as sediment) is detached and entrained in water or air and can be transported to a different location. Chemical erosion involves materials that are dissolved and removed and transported.

Executive Officer – The Executive Officer of the Santa Ana Regional Water Quality Control Board or delegated staff.

Grading – The cutting and/or filling of the land surface to a desired slope or elevation.

Harvest and Use Low-Impact Development Best Management Practice ("Harvest and Use LID BMP") – A sub-category of retention LID BMPs that uses harvest and use of the design capture volume or quantified portion thereof. The captured volume is typically used for non-potable uses such as toilet-flushing, industrial process supply, and landscape irrigation.

Hazardous Substance – Any substance that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity; any substance designated under 40 CFR §116 pursuant to Section 311(b)(2) of the Clean Water Act (40 CFR § 122.2).

Hydrologic Condition of Concern ("HCOC") – A condition of a stream or channel, or some reach thereof; or a condition of some other water body (e.g. a vernal pool), where its hydrology is, or is proposed to be, altered by past or future development such that there has been, or could be, cumulatively significant adverse impacts to the physical or biological integrity of the water body. A condition where a proposed development site discharges directly or indirectly to a water body where such conditions are known or suspected to exist based on Substantial Evidence.

Illicit Discharge – Any discharge to a municipal separate storm sewer that is not composed entirely of storm water. This does not include discharges that occur pursuant to an NPDES permit, other than the MS4 Permit, and discharges resulting from fire-fighting activities (40 CFR § 122.26(b)(2)).

Impaired Water Body – Section 303(b) of the CWA requires each of California's Regional Water Quality Control Boards to routinely monitor and assess the quality of waters of their respective regions. If this assessment indicates that Beneficial Uses are not met, then that water body must be listed under Section 303(d) of the CWA as an Impaired Water Body.

Impervious Surface – That part of a developed parcel that has been modified to reduce the land's natural ability to absorb and hold rainfall. It includes hard surfaces which cause water to run off the surface in greater quantities or at an increased rate of flow from the flow that existed under natural conditions prior to development. For example, common impervious surfaces include, but are not limited to, rooftops, walkways, patios, courtyards, driveways, parking lots, storage areas, concrete or asphalt paving, gravel roads, or any cleared, graded, graveled, paved, or compacted surfaces, or other surfaces which similarly impede the natural infiltration of surface water into the soil.

Infiltration – The flow of water into the soil by crossing the soil surface.

Infiltration Low-Impact Development Best Management Practice ("Infiltration LID

BMP") – A type of retention LID BMP that employs infiltration at the principal mechanism for the loss of the design capture volume or quantified portion thereof.

Isopluvia – A line on a map drawn through geographical points having the same pluvial (rain, precipitation) index.

Land Disturbance – The clearing, grading, excavation, stockpiling, or other construction activity that results in the possible mobilization of soils or other pollutants into the MS4. This specifically does not include routine maintenance activity to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. This also does not include emergency construction activities required to protect public health and safety.

Legally Responsible Person – The legally responsible person who is responsible for signing, certifying, and electronically submitting Permit Registration Documents, Notices of Termination, and any other documents, reports, or information required by a Permit, the State or Regional Water Board, or U.S. EPA. The LRP must be one of the following:

- For a municipality, State, Federal, or other public agency: a principal executive officer, ranking elected official, city manager, council president, or other public employee with managerial responsibility over the municipality (including, but not limited to, project manager, project superintendent, or resident engineer).

Load Allocations ("LA") – Distribution or assignment of TMDL pollutant loads to entities or sources for existing and future nonpoint sources, including background loads.

Low-Impact Development ("LID") – A storm water management and land development strategy that combines a hydrologically functional site design with pollution prevention measures to compensate for land development impacts on hydrology and water quality. LID techniques mimic the site's predevelopment hydrology by using site design techniques that store, infiltrate, evapotranspirate, bio-filter or detain runoff close to its source.

Maximum Extent Practicable ("MEP") - refers to a standard for implementation of storm water management programs. Section 402(p)(3)(B)(iii) of the Clean Water Act requires that municipal storm water permits "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques, and system design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants."

In practice, compliance with the MEP standard is evaluated by how well the Co-

Permittees implement the "minimum measures" identified by EPA, including: (1) Public education and outreach on storm water impacts; (2) Public involvement/participation; (3) Illicit discharge detection and elimination; (4) Construction site storm water runoff control; (5) Post-construction storm water management in new development and redevelopment; and (6) Pollution prevention/good housekeeping for municipal operations. Collectively, these minimum measures are often referred to as "Best Management Practices" or BMPs. The MEP standard does not require Co-permittees to reduce pollutant concentrations below natural background levels, nor does it require further reductions where pollutant concentrations in the receiving water already meet water quality objectives.

MEP is a technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) that operators of MS4s must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of source control and treatment control BMPs. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT.

A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their urban runoff management programs. Their total collective and individual activities conducted pursuant to the urban runoff management programs becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for MS4 maintenance). In the absence of a proposal acceptable to the Regional Board, the Regional Board defines MEP.

In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel, SWRCB addressed the achievement of the MEP standard as follows:

> "To achieve the MEP standard, municipalities must employ whatever Best management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPS only where other effective BMPS will serve the same purpose or the BMPS would not be technically feasible, or the cost would be prohibitive. In selecting BMPS to achieve the MEP standard, the following factors may be useful to consider:
>
> a. Effectiveness: Will the BMPS address a pollutant (or pollutant source) of concern?
> b. Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?

c. Public Acceptance: Does the BMP have public support?
d. Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?
e. Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc?

The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPs and chooses to select only a few of the least expensive, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPs that should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPs that would address a pollutant source, or to pick a BMP based solely on cost, which would be clearly less effective. In selecting BMPs the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPs, it is the responsibility of the discharger to ensure that all BMPs are implemented."

Monitoring and Reporting Period – For purposes of this Order, the monitoring and reporting period is July 1 to June 30 with a reporting deadline of the following November 15th of each year for Annual Progress Reports.

Municipal Storm Water Conveyance System – (See Municipal Separate Storm Sewer System or MS4).

Municipal Separate Storm Sewer System ("MS4") – A conveyance or system of conveyances designed to collect and/or transport urban runoff (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains): (i) Owned or operated by a State, city town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes; (ii) Designated or used for collecting of conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW)

as defined at 40 CFR § 122.2 (40 CFR § 126.26(b)(8)).

Most Probable Number ("MPN") – The most probable number (MPN) of coliform or fecal coliform bacteria per unit volume of a sample. It is expressed as the number of organisms which are most likely to have produced the laboratory results noted in a particular test.

National Pollutant Discharge Elimination System ("NPDES") Permit – A national program under section 402 of the Clean Water Act for regulation of discharges of pollutants from point sources to waters of the United States. Discharges of pollutants are prohibited unless specifically exempted or authorized by an NPDES permit.

Non-Priority Project Plan / Non Priority Project Water Quality Plan – for the purposes of this Order the two terms are interchangeable and specified in Provision XII.

Non-Storm Water – Non-storm water consists of all discharges to and from a storm water conveyance system that do not originate from precipitation events (i.e., all discharges from a conveyance system other than storm water). Non-storm water includes illicit discharges, prohibited discharges, and NPDES permitted discharges.

Nuisance – anything which meets all of the following requirements: 1) Is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. 2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. 3) Occurs during, or as a result of, the treatment or disposal of wastes (CWC Section 13050(m)).

Outfall - A *point source*, as defined by 40 CFR 122.2, at the point where an MS4 discharges to waters of the United States. An outfall does not include open conveyances connecting two municipal separate storm sewers. An outfall does not include pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. (40 CFR 122.26(b)(9)).

Party – Defined as an individual, association, partnership, corporation, municipality, state or federal agency, or an agent or employee thereof (40 CFR § 122.2).

Permit Area – Areas that are under the jurisdiction of the Santa Ana Regional Water Quality Control Board. These include north and northwestern portions of Orange County, north and western portions of Riverside County and western portions of San Bernardino County. See the Basin Plan for a detailed description of the Regional Board boundaries.

Permit Registration Documents ("PRDs") – Include the Notice of Intent, Storm Water Pollution Prevention Plan, Site Map and the appropriate filing fee necessary to authorize a discharge under general waste discharge requirements.

Person – A person is defined as an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof (40 CFR § 122.2).

pH - An indicator of the acidity or alkalinity of water.

Point Source – Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, runoff from concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Pollutant – Any agent that may cause or contribute to the degradation of water quality such that a condition of pollution or contamination is created or aggravated. It includes any type of industrial, municipal, and agricultural waste discharged into water. The term "pollutant" is defined in section 502(6) of the Clean Water Act as follows: "The term 'pollutant' means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." It has also been interpreted to include water characteristics such as toxicity or acidity.

Pollution – The alteration of the quality of the Waters of the U.S. by waste, to a degree that unreasonably affects either of the following: 1) The waters for beneficial uses; or 2) Facilities that serve these beneficial uses. Pollution may include contamination (CWC Section 13050(l)).

Pollution Prevention – Practices and processes that reduce or eliminate the generation of pollutants, in contrast to source control, treatment, or disposal.

Principal Permittee – The County of Orange

Priority Toxic Pollutant – A pollutant identified in the California Toxics Rule.

Receiving Waters – Waters of the United States within the Permit area.

Receiving Water Limitations – Waste discharge requirements issued by the Regional Board typically include both: (1) "Effluent Limitations" (or "Discharge Limitations") that specify the technology-based or water-quality-based effluent limitations; and (2) "Receiving Water Limitations" that specify the water quality

objectives in the Basin Plan as well as any other limitations necessary to attain those objectives. In summary, the "Receiving Water Limitations" provision is the provision used to implement the requirement of CWA SECTION 301(b)(1)(C) that NPDES permits must include any more stringent limitations necessary to meet water quality standards.

Retention Low-Impact Development Best Management Practice ("Retention LID BMP") – A sub-category of structural treatment control BMPs that employ retention of the design capture volume or a quantified portion thereof. The retained volume is infiltrated, evaporated, evapotranspirated, or used (typically for non-potable uses).

Sediment – Soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human-induced land disturbance activities) is considered a pollutant. This Order regulates only the discharges of sediment from anthropogenic sources and does not regulate naturally-occurring sources of sediment. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

Source Control and Site Design BMPs – In general, activities or programs to educate the public or provide low-cost non-physical solutions, as well as facility design or practices aimed to limit the contact between pollutant sources and storm water or authorized non-storm water. Examples include: activity schedules, prohibitions of practices, industrial area sweeping, facility maintenance, detection and elimination of illegal and unauthorized discharges, and other non-structural measures. Facility design (structural) examples include providing attached lids to trash containers, canopies for fueling islands, secondary containment, or roof or awning over material and trash storage areas to prevent direct contact between storm water and pollutants

Standard Industrial Classification ("SIC") Code – Four digit industry code, as defined by the US Department of Labor, Occupational Safety and Health Administration. The SIC Code is used to identify if a facility requires coverage under the Industrial Activities Storm Water Permits.

State Implementation Plan ("SIP") – Formally known as the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. The SIP implements the California Toxics Rule.

State Board – California State Water Resources Control Board

Storm Water – Storm water runoff, snowmelt runoff and surface runoff and drainage (40 CFR § 122.26(b)(13)).

Storm Water General Permits – General Permit-Industrial (State Board Order No. 97-03 DWQ, NPDES No. CAS000001), and General Permit-Construction (State Board Order No. 2009-0009-DWQ, NPDES No. CAS000002).

Structural treatment control BMPs – Any system designed and constructed according to published and generally-accepted engineering criteria to remove pollutants from urban runoff. Pollutants are removed by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process. In this Order, structural treatment control BMPs are classified as LID BMPs and non-LID BMPs. LID BMPs are further sub-classified into Retention LID BMPs and Biotreatment Control BMPs. All of these classes of structural treatment control BMPs are subject to general and specific requirements in this Order.

Substantial Evidence – Facts, reasonable assumptions predicated on facts, or expert opinion supported by facts. Substantial Evidence does not include argument, speculation, unsubstantiated opinion or narrative, or evidence which is clearly erroneous or inaccurate (Public Resources Code Section 21080(e)).

Storm Water Pollution Prevention Plan ("SWPPP") – A plan developed to minimize and control the discharge of pollutants from the industrial site to storm water conveyance systems. The plan shall identify pollutant sources, control measures for each pollutant source, good housekeeping practices and employee training programs.

Total Dissolved Solids ("TDS") – A measure of the total dissolved minerals in the water; the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR § 136 (40 CFR § 122.2)

Total Maximum Daily Load ("TMDL") – The maximum amount of a pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain water quality standards. Under Clean Water Act § 303(d), TMDLs must be developed for all water bodies that do not meet water quality standards after application of technology-based controls.

TMDL Implementation Plan – Component of a TMDL that describes actions, including monitoring, needed to reduce pollutant loadings and a timeline for implementation. TMDL implementation plans can include a monitoring or modeling plan and milestones for measuring progress, plans for revising the TMDL if progress toward cleaning up the waters is not made, and the date by which water quality standards will be met (USEPA

Final TMDL Rule: Fulfilling the Goals of the CWA, EPA 841-F-00-008, July 2000).

Toxicity – Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies.

Turbidity – The cloudiness of water quantified by the degree to which light traveling through a water column is scattered by the suspended organic and inorganic particles it contains. The turbidity test is reported in Nephelometric Turbidity Units (NTU) or Jackson Turbidity Units (JTU)

Uncontaminated Groundwater – Groundwater that is not impaired by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease

Urban Runoff – Urban runoff is defined as all flows in a storm water conveyance system from urban areas which include residential, commercial, industrial, and construction areas. Urban runoff consists of the following components: (1) storm water runoff and (2) authorized non-storm water discharges (See Section III of this Order). Urban runoff does not include runoff from undeveloped open space, feedlots, dairies, farms, and agricultural fields.

Waste – Waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal (CWC Section 13050(d)). Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste classification system which applies to solid and semi-solid waste which cannot be discharged directly or indirectly to water of the state and which therefore must be discharged to land for treatment, storage, or disposal in accordance with Chapter 15. There are four classifications of waste (listed in order of highest to lowest threat to water quality): hazardous waste, designated waste, nonhazardous solid waste, and inert waste.

Waste Discharge Requirements ("WDR") – As defined in section 13374 of the California Water Code, the term "Waste Discharge Requirements" is the equivalent of the term "permits" as used in the Federal Water Pollution Control Act, as amended. The Regional Board usually uses the terms "permit" and "Order" to refer to Waste Discharge Requirements for discharges to Waters of the U.S.

Waste Load Allocations ("WLA") – WLA is the distribution or assignment of pollutant

loads to entities or sources for existing and future point sources according to a TMDL; the maximum quantity of pollutants a discharger is allowed to release into a particular waterway, as set by a regulatory authority. Discharge limits usually are required for each specific water quality criterion being, or expected to be, violated.

Water Quality Assessment – An assessment conducted to evaluate the condition of water bodies which receive process wastewater, storm water and non-storm water discharges.

Water Quality Based Effluent Limit - Any restriction imposed on discharges or concentrations of pollutants, which are discharged from point sources to waters of the U.S. necessary to achieve a water quality standard. The federal regulations (40 CFR 122.44(d)(1)(vii)(B)) require that, when NPDES permits incorporate water quality based effluent limitations ("WQBELs") developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, the WQBELs must be consistent with the assumptions and requirements of the WLA for the discharge. WQBELs may be numeric or BMP-based.

Water Quality Objective – The limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area [California Water Code Section 13050(h)).

Water Quality Standards – Consist of beneficial uses, water quality objectives to protect those uses, an anti-degradation policy, and policies for implementation. Water quality standards are found in Regional Water Quality Control Plans and statewide water quality control plans. The USEPA has also adopted water quality criteria (the same as objectives) for California in the National Toxics Rule and California Toxics Rule.

Waters of the State – Any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code Section 13050(e)). Waters of the State includes waters of the United States.

Waters of the United States – Waters of the United States can be broadly defined as navigable surface waters and tributaries thereto. Groundwater is not considered to be Waters of the United States. As defined in 40 CFR § 122.2, the Waters of the U.S. are defined as: (a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, "wetlands," sloughs, prairie potholes, wet

meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition: (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial seas; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.

Watershed – That geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers; a drainage area, catchment, or river basin.

Wet Season – The period of October 1st through May 31st of each year, except where specifically defined otherwise in an approved TMDL Implementation Plan.

Appendix B

Total Maximum Daily Load for Nutrients in San Diego Creek and Newport Bay
(Resolution No. 98-9, as amended by Resolution No. 98-100)
~~Water Quality-Based Effluent Limits for Nutrients in Newport Bay~~

Appendix B incorporates the waste load allocations ("WLAs") [expressed as Water Quality Based Effluent Limits ("WQBELs")] assigned to urban runoff as identified in the Total Maximum Daily Load for Nutrients in San Diego Creek and Newport Bay (Nutrient TMDL). The WQBELs are consistent with the assumptions and requirements of TMDL implementation requirements and WLAs assigned to discharges from the Co-permittees' MS4s. Responsible Co-Permittees are identified in Appendix A.~~The following water quality-based effluent limits ("WQBELs") apply to discharges of urban runoff from MS4s owned or controlled by those Co-permitees discharging into Newport Bay. The WQBELs in this Appendix are based on the waste load allocations ("WLAs") in the Nutrient TMDL.~~ Compliance with the WQBELs in this Appendix will be determined according to methods described in Section XVIII of Order No. R8-2015-0001.

The Nutrient TMDL was ~~has been~~ approved by the Santa Ana Regional Water Quality Control Board, the State Water Resources Control Board, the Office of Administrative Law ("OAL") and USEPA as follows:

- Regional Board Adoption: April 17, 1998; amendment adopted October 9, 1998
- State Board Approval: May 13, 1998 [Regional Board to confirm]
- OAL Approval: February 10, 1999 [Regional Board to confirm]
- USEPA Approval: April 16, 1999 [Regional Board to confirm]

~~The Nutrient TMDL was adopted by the Santa Ana Regional Water Quality Control Board in Resolution No. 98-9 (amended by Resolution No. 98-100). The TMDL was approved by the Office of Administrative Law on February 10, 1999 and April 16, 1999.~~ The compliance deadlines that were adopted as part of this TMDL have passed and the following WQBELs are effective on the effective date of this Order.

I. Final WQBELs

The responsible Co-permittees must comply with the methods described in Section XVIII of Order No. R8-2015-0001 to demonstrate compliance with the following final WQBELs:

A. Reach 1, San Diego Creek

Table B-1: Final Nutrient WQBELs for Reach 1 of San Diego Creek

Nutrient TMDL	2007 Summer Allocation (Apr-Sept)	2012 Winter Allocation (Oct-Mar)[2],[3]	2007 Annual Allocation
Urban Runoff WLA Lbs/season TN[1]	16,628	55,442	Not Applicable
Urban Runoff WLA Lbs/year TP	Not Applicable	Not Applicable	2,960

[1] TIN = (NO3 + NH3); TN = (TIN + organic N)

[2] Total Nitrogen winter loading limit applies between October 1 and March 31 when the mean daily flow rate in San Diego Creek at Campus Drive is less than 50 cubic feet per second (cfs), and when the mean daily flow rate in San Diego Creek at Campus drive is more than 50 cubic feet per second (cfs), but not as the result of precipitation.

[3] Assumes 67 non-storm days

~~Total Nitrogen[1] – Summer[2] (pounds/season)~~	~~Total Nitrogen[1] – Winter[3, 4, 5] (pounds/season)~~	~~Total Phosphorous – Annual (pounds/year)~~
~~16,628~~	~~55,442~~	~~2,960~~

~~Table B-1 Notes:~~

~~1. Total Nitrogen = NO_3 + NH_3 + organic N~~
~~2. Summer season: April through September~~
~~3. Winter season: October through March~~
~~4. The WQBEL for winter Total Nitrogen applies between October 1 and March 31 when the mean daily flow rate in San Diego Creek at Campus Drive is less than 50 cubic feet per second ("cfs") and when the mean daily flow rate in San Diego Creek at Campus Drive is above 50 cfs but not as the result of precipitation.~~
~~5.~~1. ~~Assumes 67 non-storm days.~~

B. Reach 2, San Diego Creek~~: 5.5 pounds per day Total Nitrogen~~

Table B-2: Nutrient WQBELs for Reach 2 of San Diego Creek

Nutrient TMDL	**2012 Allocation[1]**
Urban Runoff WLA	5.5 lbs/day TN

[1] Total nitrogen loading limit applies when the mean daily flow rate at San Diego Creek at Culver Drive is below 25 cfs, and when the mean daily flow rate in San Diego Creek at Culver Drive is above 25 cfs, but not as the result of precipitation.

~~1. This WQBEL for Total Nitrogen applies when the mean daily flow rate in San Diego Creek at Culver Drive is below 25 cfs and when~~

~~the mean daily flow rate in San Diego Creek at Culver Drive is above 25-cfs but not as the result of precipitation.~~

II. Monitoring and Reporting Requirements

a. Monitoring

Responsible Permittees shall conduct monitoring consistent with the requirements of the TMDL. Such monitoring can be integrated into the overall monitoring requirements specified in Attachment A, Monitoring and Reporting Program.

b. Reporting

Responsible Permittees shall submit reports consistent with the requirements of the TMDL and include recommendations for revisions to the TMDL, if appropriate.

Appendix C

Total Maximum Daily Loads for Fecal Coliform in Newport Bay
(Resolution No. 99-10)
~~Water Quality-Based Effluent Limits for Fecal Coliform in Newport Bay~~

Appendix C incorporates the waste load allocations ("WLAs") [expressed as Water Quality Based Effluent Limits ("WQBELs")] assigned to urban runoff as identified in the Total Maximum Daily Load for Fecal Coliform in Newport Bay (Fecal Coliform TMDL). The WQBELs are consistent with the assumptions and requirements of TMDL implementation requirements and WLAs assigned to discharges from the Co-permittees' MS4s. Responsible Co-Permittees are identified in Appendix A. ~~The following water quality-based effluent limits ("WQBELs") apply to discharges of urban runoff from MS4s owned or controlled by those Co-permitees discharging into Newport Bay. The WQBELs in this Appendix are based on the waste load allocations in the Fecal Coliform TMDL.~~ Compliance with the WQBELs in this Appendix will be determined according to methods described in Section XVIII of Order No. R8-2015-0001.

The Fecal Coliform TMDL was ~~has been~~ approved by the Santa Ana Regional Water Quality Control Board, the State Water Resources Control Board, the Office of Administrative Law ("OAL") and USEPA as follows:

- Regional Board Adoption: April 9, 1999
- State Board Adoption: TBD [Regional Board to confirm]
- OAL Approval: December 24, 1999 [Regional Board to confirm]
- USEPA Approval: February 28, 2000 [Regional Board to confirm]

~~The Fecal Coliform TMDL was adopted by the Santa Ana Regional Water Quality Control Board in Resolution No. 99-10. The TMDL was approved by OAL on December 24, 1999 and February 28, 2000.~~ Unless indicated otherwise below, the compliance deadlines that were adopted as part of this TMDL have passed and the following WQBELs are effective on the effective date of this Order.

I. Final WQBELs

A. The responsible Co-permittees must comply with the methods described in Section XVIII of Order No. R8-2015-0001 to demonstrate compliance with the following final WQBEL to protect the water-contact recreation (REC-1) beneficial use:

Table C-1: Final WQBEL to protect REC-1

Fecal Coliform TMDL	**As soon as possible, but no later than December 30, 2014**

Urban Runoff ~~Waste Load Allocation for Fecal Coliform~~ (REC-1)	5-Sample/30-day Geometric Mean less than 200 organisms/100mL, and not more than 10% of the samples exceed 400 organisms/100mL for any 30-day period[1].

1 – The geometric mean shall be calculated based on a minimum of 5 representative samples taken over a 30-day period.

~~WQBEL to protect REC-1~~	~~Compliance Date~~
~~5-sample/30-days geometric mean less than 200 organisms/100mL and not more than 10% of the samples excee 400 organisms/100mL for any 30-day period[1].~~	~~As soon as possible but no later than December 31, 2014.~~

~~Table C-1 Notes:~~

~~1. The geometric mean shall be calculated based on a minimum of 5 representative samples of urban runoff taken over a 30-day period.~~

B. The responsible Co-permittees must comply with the methods described in Section XVIII of Order No. R8-2015-0001 to demonstrate compliance with the following final WQBEL to protect the shell fish harvesting (SHEL) beneficial use:

Table C-2: Final WQBEL to protect SHEL

Fecal Coliform TMDL	**As soon as possible, but no later than December 30, 2019**
Urban Runoff (SHEL)~~Waste Load Allocation for Fecal Coliform~~	Monthly Median less than 14 MPN/ 100mL, and not more than 10% of the samples exceed 43 MPN/ 100mL.

~~WQBEL to protect REC-1~~	~~Compliance Date~~
~~Monthly median less than 14 MPN/100mL and not more than 10% of the samples exceed 43 MPN/100mL~~	~~As soon as possible but no later than December 31, 2019.~~

II. Monitoring and Reporting Requirements

a. Monitoring

Responsible Permittees shall conduct monitoring consistent with the requirements of the TMDL. Such monitoring can be integrated into the overall monitoring requirements specified in Attachment A, Monitoring and Reporting Program.

b. Reporting

Responsible Permittees shall submit reports consistent with the requirements of the TMDL and include recommendations for revisions to the TMDL, if appropriate

~~C. The responsible Co-permittees must provide an updated TMDL report for both the final WQBELs to protect REC-1 and SHEL no later than 60-days from the effective date of this Order. The TMDL report must:~~

~~1. Integrate and evaluate the results of the studies performed as part of Tasks 1 through 7 of the Fecal Coliform TMDL implementation plan (Table 5-9g of the Basin Plan);~~

~~2. Include recommendations for revisions to the TMDL if appropriate; and~~

~~3. Include recommendations for interim WQBELs and related compliance schedules.~~

Appendix D

Water Quality-Based Effluent Limits for Sediment in Upper Newport Bay

The following water quality-based effluent limits ("WQBELs") apply to discharges of urban runoff from MS4s owned or controlled by those Co-permitees discharging into Upper Newport Bay. The WQBELs in this Appendix are based on the requirements in the Sediment TMDL, exclusive of the load allocations. Compliance with the WQBELs in this Appendix will be determined according to methods described in Section XVIII of Order No. R8-2015-0001.

The Sediment TMDL has been approved by Santa Ana Regional Water Quality Control Board, the State Water Resources Control Board, the Office of Administrative Law ("OAL") and USEPA. The Sediment TMDL was adopted by the Santa Ana Regional Water Quality Control Board in Resolution No. 98-101. The TMDL was approved by OAL on February 2, 1999 and April 16, 1999. The compliance deadlines that were adopted as part of this TMDL have passed and the following WQBELs are effective on the effective date of this Order.

I. Final WQBELs

The responsible Co-permittees must comply with the methods described in Section XVIII of Order No. R8-2015-0001 to demonstrate compliance with the following final WQBELs:

A. Discharges of urban runoff must not transport more than 2,500 tons of sediment per year, calculated as a 10-year running average, into Newport Bay from urban areas.

B. Discharges of urban runoff must not transport more than 2,500 tons of sediment per year, calculated as a 10-year running average, into San Diego Creek and its tributaries.

C. Sediment in discharges of urban runoff must not alter the distribution of habitat types in the 700-acre Upper Newport Bay Ecological Reserve, in Table D-1 below or as revised by the Department of Fish and Wildlife, by more than 1%.

Table D-1: Baseline Distribution of Habitat Types in the Upper Newport Bay Ecological Reserve

Habitat Type	Acres	Permissible Change (acres)
Marine aquatic	210	2.1

~~Mudflat~~	~~214~~	~~2.1~~
~~Salt marsh~~	~~277~~	~~2.8~~
~~Riparian~~	~~31~~	~~3.1~~

~~D. The depths of the Unit 1 and 2 Sediment Basins (a.k.a. Unit I/III and Unit II) must be maintained at a minimum of 7-feet below mean sea level.~~

~~E. Bathymetric and vegetation surveys must be performed no less than once every three years, or as agreed to by the Executive Officer, in a manner to determine compliance with the above requirements for sediment.~~

~~1. Bathymetric and vegetation surveys must be performed within one year following any monitoring period in which monitoring at San Diego Creek at Jamboree Boulevard and Campus Drive (Site ID: SDMF05) shows that more than 250,000 tons of sediment were discharged into Newport Bay.~~

~~2. Bathymetric and vegetation surveys must be conducted by July 1st of each year that they are performed, and must be submitted by December 31 of the same year.~~

~~F. All in-channel and foothill sediment-control basins tributary to Newport Bay must have an available sediment capacity that is 50% or more of each facilities' design capacity prior to November 15th of each year.~~

Appendix E

Total Maximum Daily Loads for Organochlorine Compounds in the San Diego Creek and Newport Bay Watersheds
(Resolution No. R8-2011-0037)
~~Water Quality-Based Effluent Limits for Organochlorine Compounds in Newport Bay and San Diego Creek~~

Appendix E incorporates the waste load allocations ("WLAs") [expressed as Water Quality Based Effluent Limits ("WQBELs")] assigned to urban runoff as identified in the Total Maximum Daily Loads for Organochlorine Compounds in the San Diego Creek and Newport Bay Watersheds (OC Compounds TMDL). The WQBELs are consistent with the assumptions and requirements of TMDL implementation requirements and WLAs assigned to discharges from the Co-permittees' MS4s. Responsible Co-Permittees are identified in Appendix A.
~~The following water quality-based effluent limits ("WQBELs") apply to discharges of urban runoff from MS4s owned or controlled by those Co-permitees discharging into Newport Bay and San Diego Creek as indicated. The WQBELs in this Appendix are based on the waste load allocations ("WLAs") in the Organochlorine Compound TMDL.~~
Compliance with the WQBELs in this Appendix will be determined according to methods described in Section XVIII of Order No. R8-2015-0001. ~~The compliance deadlines for these WQBELs have not yet passed.~~

The ~~Organochlorine~~ OC Compounds TMDL ~~that the following WQBELs are based on has been~~was approved by the Santa Ana Regional Water Quality Control Board, the State Water Resources Control Board, the Office of Administrative Law ("OAL") and USEPA as follows:

- Regional Board Adoption July 15, 2011
- State Board Adoption: October 16, 2012
- OAL Approval: July 26, 2013
- USEPA Approval: November 12, 2013

~~The Organochlorine Compound TMDL was adopted by the Santa Ana Regional Water Quality Control Board in Resolution No. R8-2011-0037 (modifying Resolution No. R8-2007-0024). The TMDL was approved by OAL on July 26, 2013 and by USEPA on November 12, 2013.~~ Chlordane, dieldrin, DDT and PCBs are part of the earlier USEPA-promulgated TMDL whose WLAs were superseded by the Regional Board's TMDL. As a result, the pollutant-water body WLAs established by USEPA's TMDL do not appear below.

I. WQBELs

~~1.~~ A. The responsible Co-permittees must comply with the methods described in Section XVIII of Order No. R8-2015-0001 to demonstrate

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compliance with the final WQBELs in Table E-1. These WQBELs must be met as soon as possible but not later than December 31, 2020:

Table E-1: WQBELs by Receiving Water for Organochlorine Compounds

	~~Waste Load Allocation~~WQBEL (g/year)			
Receiving Water	Total DDT	Chlordane	Total PCB	Toxaphene
San Diego Creek	128.3	--	--	1.9
Upper Newport Bay	51.8	30.1	29.8	~~n/a~~ --
Lower Newport Bay	19.1	11.0	78.1	--

II. Monitoring and Reporting Requirements

a. Monitoring

Responsible Permittees shall conduct monitoring consistent with the requirements of the TMDL. Such monitoring can be integrated into the overall monitoring requirements specified in Attachment A, Monitoring and Reporting Program.

b. Reporting

Responsible Permittees shall submit reports consistent with the requirements of the TMDL and include recommendations for revisions to the TMDL, if appropriate.

Appendix F

Total Maximum Daily Loads for Diazinon and Chlorpyrifos in the San Diego Creek and Newport Bay Watersheds
(Resolution No. R8-2003-0039)
~~Water Quality-Based Effluent Limits for the Diazinon & Chlorpyrifos TMDL for Upper Newport Bay and San Diego Creek~~

Appendix F incorporates the waste load allocations ("WLAs") [expressed as Water Quality Based Effluent Limits ("WQBELs")] assigned to urban runoff as identified in the Total Maximum Daily Load for Diazinon and Chlorpyrifos in the San Diego Creek and Newport Bay Watersheds (Diazinon and Chlorpyrifos TMDL). The WQBELs are consistent with the assumptions and requirements of TMDL implementation requirements and WLAs assigned to discharges from the Co-permittees' MS4s Responsible Co-Permittees are identified in Appendix A.
~~The following water quality-based effluent limits ("WQBELs") apply to discharges of urban runoff from MS4s owned or controlled by those Co-permitees discharging into Upper Newport Bay or San Diego Creek as indicated. The WQBELs in this Appendix are based on the waste load allocations in the Diazinon & Chlorpyrifos TMDL.~~
Compliance with the WQBELs in this Appendix will be determined according to methods described in Section XVIII or Order No. R8-2015-0001.

The Diazinon and~~&~~ Chlorpyrifos TMDL ~~has been~~was approved by Santa Ana Regional Water Quality Control Board, the State Water Resources Control Board, the Office of Administrative Law ("OAL") and USEPA as follows:

- Regional Board Adoption: April 4, 2003
- State Board Adoption: [Regional Board to confirm]
- OAL Approval: January 5, 2004
- USEPA Approval: [Regional Board to confirm]

~~The Diazinon & Chlorpyrifos TMDL was adopted by the Santa Ana Regional Water Quality Control Board in Resolution No. R8-2003-0039. The TMDL was approved by OAL on January 5, 2004 and February 13, 2004.~~ The compliance deadline that was adopted as part of this TMDL has passed and the following WQBELs are effective on the effective date of this Order.

I. Final WQBELs

The responsible Co-permittees must comply with the methods described in Section XVIII of Order No. R8-2015-0001 to demonstrate compliance with the final WQBELs in Table F-1:

Table F-1: WQBELs for Chlorpyrifos and Diazinon in Upper Newport Bay and San Diego Creek

	Chlorpyrifos (ng/L)		Diazinon (ng/L)	
Receiving Water	Acute Concentration (24-hour average)	Chronic Concentration (4-consequtive day average)	Acute Concentration (24-hour average)	Chronic Concentration (4-consequtive day average)
Upper Newport Bay	18	8.1	--	--
San Diego Creek	18	12.6	72	45

II. Monitoring and Reporting Requirements

a. Monitoring

Responsible Permittees shall conduct monitoring consistent with the requirements of the TMDL. Such monitoring can be integrated into the overall monitoring requirements specified in Attachment A, Monitoring and Reporting Program.

b. Reporting

Responsible Permittees shall submit reports consistent with the requirements of the TMDL and include recommendations for revisions to the TMDL, if appropriate.

Appendix G

Total Maximum Daily Load for Toxics in San Diego Creek and Newport Bay Watersheds
(Resolution No. XX)
~~Water Quality-Based Effluent Limits for Toxic Pollutants (Metals and Selenium) into San Diego Creek and Newport Bay~~

Appendix G incorporates the waste load allocations ("WLAs") [expressed as Water Quality Based Effluent Limits ("WQBELs")] assigned to urban runoff as identified in the Total Maximum Daily Loads for Toxics in the San Diego Creek and Newport Bay Watershed (Toxics TMDL). The WQBELs are consistent with the assumptions and requirements of TMDL implementation requirements and WLAs assigned to discharges from the Co-permittees' MS4s Responsible Co-Permittees are identified in Appendix A. ~~The following water quality-based effluent limits ("WQBELs") apply to discharges of urban runoff from MS4s owned or controlled by those Co-permitees discharging into San Diego Creek and Newport Bay as indicated.~~

The WQBELs in this Appendix are based on the waste load allocations in the Toxics ~~Pollutants (Metals and Selenium)~~ TMDL. The TMDL was promulgated by USEPA on June 1~~4~~7, 2002. Several pollutant-waterbody combinations in the Toxics TMDL have been subsequently superceded by Basin Plan Amendments adopted by the Regional Board (diazinon and chlorpyrifos; organchlorinated compounds). Therefore, the WLAs for the Toxics TMDL are limited to the pollutants identified in this Appendix G. Other Basin Plan Amendments, such as selenium, are currently under development and are anticipated to be adopted during the term of this Order. Once any additional Basin Plan Amendments that supersede WLAs contained in the Toxics TMDL are effective, this Order will be re-opened and modified accordingly.

Compliance with the WQBELs in this Appendix will be determined according to methods described in Section XVIII of Order No. R8-2015-0001.
~~Compliance with the WQBELs in this Appendix will be determined according to methods developed pursuant to Subsection II.B. of Monitoring and Reporting Program R8-2015-0001.~~ Compliance deadlines for the WBELs in this Appendix were not established; these WQBELs are effective on the effective date of this Order.

I. Final WQBELs

The responsible Co-permittees must comply with the methods described in Section XVIII of Order No. R8-2015-0001 to demonstrate compliance with the final WQBELs in the following Tables G-1, G-2, G-3, and G-4.~~:~~

Table G-1: ~~Concentration-based~~ WQBELs for Metals in San Diego Creek at Campus Drive[1]

	Base Flow (flow < 20~~-~~cfs; hardness = 400 mg/L)		Small Flows (21 ~~≤ flow ≤~~ 181~~-~~cfs; hardness = 322 mg/L)		Medium Flows (182 ~~≤ flow ≤~~ 815~~-~~ cfs; hardness = 236 mg/L)		Large Flows (~~flow~~ >815~~–~~cfs; hardness = 197 mg/L)
	Acute (µg/L)	Chronic (µg/L)	Acute (µg/L)	Chronic (µg/L)	Acute (µg/L)	Chronic (mg/L)	Acute (µg/L)
Cadmium, dissolved	19.1	6.2	~~5.3~~15.1	~~15.1~~5.3	~~4.2~~10.8	~~10.8~~4.2	8.9
Copper, dissolved	50	29.3	40	24.3	30.2	18.7	25.5
Lead, dissolved	281	10.9	224	8.8	162	6.3	134
Zinc, dissolved	379	382	316	318	243	224	208

1. Actual ambient hardness must be determined for each monitoring sample regardless of which flow condition exists.

Table G-2: WQBELs for ~~Discharges of~~ Metals in~~to~~ Newport Bay

	Acute Concentrations (24-hour average) (µg/L)	Chronic Concentrations (4 consecutive day/96-hour average) (µg/L)	Mass-based Loads (pounds/year)
Cadmium, dissolved[1]	42	9.3	9,589
Copper, dissolved	4.8	3.1	3,043
Lead, dissolved	210	8.1	17,638
Zinc, dissolved	90	81	174,057

1. Values for dissolved cadmium apply only to discharges to Upper Newport Bay

Table G-3: WQBELs for ~~Discharges into the~~ Rhine Channel

Mercury (kg/year)	Chromium (kg/year)
0.0171	5.66

Table G-4: WQBELs for Discharges of Selenium in San Diego Creek at Campus Drive

	Base Flows Flow < 20 cfs	Small Flows (21 ≤ flow ≤ 181 cfs)	Medium Flows 182 ≤ flow ≤ 814 cfs)	Large Flows (flow > 814 cfs)	Annual Total[1]
Maximum Permissible Annual Load (pounds/year)	0.4	1.0	1.0	5.3	7.6

1. 1. Sum of loading capacity for San Diego Creek only (based on 5 µg/L applied to all flow tiers)
2. Selenium TMDLs are currently under development for the Newport Bay watershed. Once adopted and effective the permit will be reopened to incorporate the revised WQBELs.

II. Monitoring and Reporting Requirements

a. Monitoring

Responsible Permittees shall conduct monitoring consistent with the requirements of the TMDL. Such monitoring can be integrated into the overall monitoring requirements specified in Attachment A, Monitoring and Reporting Program.

b. Reporting

Responsible Permittees shall submit reports consistent with the requirements of the TMDL and include recommendations for revisions to the TMDL, if appropriate.

Appendix H

Total Maximum Daily Loads for Metals in San Gabriel River Watershed
(Resolution No. XX)
~~Water Quality-Based Effluent Limits for Coyote Creek~~

Appendix H incorporates the waste load allocations ("WLAs") [expressed as Water Quality Based Effluent Limits ("WQBELs")] assigned to urban runoff as identified in the Total Maximum Daily Loads for Metals in the San Gabriel River Watershed (San Gabriel River TMDLs). The WLAs apply to Coyote Creek, which discharges to the San Gabriel River. The WQBELs are consistent with the assumptions and requirements of TMDL implementation requirements and WLAs assigned to discharges from the Co-permittees' MS4s Responsible Co-Permittees are identified in Appendix A.
~~The following water quality-based effluent limitations ("WQBELs") apply to discharges of urban runoff from MS4's owned or controlled by those Co-permitees discharging into Coyote Creek.~~

~~These WQBELs are based on the waste load allocations and requirements in the~~The San Gabriel River Metals TMDL was promulgated by the USEPA on March 26, 2007. The Los Angeles Regional Water Quality Control Board adopted a Basin Plan Amendment to incorporate an implementation plan and compliance schedule for this TMDL.

Compliance with the WQBELs in this Appendix will be determined according to methods described in Section XVIII of Order No. R8-2015-0001. The Responsible Permittees shall comply with final WLAs by September 30, 2026.

~~Compliance with the WQBELs in this Appendix will be determined according to methods developed pursuant to Subsection II.B. of Monitoring and Reporting Program R8-2015-0001. Compliance deadlines for the WBELs in this Appendix were not established; unless noted otherwise, these WQBELs are effective on the effective date of this Order.~~

I. WQBELs

The responsible Co-permittees must comply with the methods described in Section XVIII of Order No. R8-2015-0001 to demonstrate compliance with the final WQBELs in the following Tables:

Table H-1: WQBELS for Discharges in Coyote Creek

	Daily Maximum (kg/day)		
	Copper, total recoverable (kg/day)	Lead, total recoverable (kg/day)	Zinc, total recoverable (kg/day)

Dry Weather[1]	0.941	--	--
Wet Weather[2]	24.71 µg/L x daily storm volume (L)~~in liters~~	96.99 µg/L x daily storm volume (L)~~in liters~~	144.57 µg/L x daily storm volume (L) ~~in liters~~

1. Calculated based upon the median flow at LACDPW gauge station F354-R of 19 cfs multiplied by the numeric target of 20 µg/L minus direct air deposition of 0.002 kg/day.
2. In Coyote Creek, wet weather TMDLs apply when the maximum daily flow in the creek is equal to or greater than 156 cfs measured at LACDPW gauge station F354-R, located at the bottom of the creek, just above the Long Beach WRP.

~~Noted for Table H-1:~~
~~1. These WLA are calculated based on the median flow at the U.S. Army Corps of Engineers' stream gauge station F-354-R of 19-cfs multiplied by the target concentration of 20 µg/L, minus direct air deposition of 0.002 kg/day.~~
~~2. Wet weather WQBELs apply when the maximum daily flow in the creek is equal or greater than 156 cfs, as measured F-354-R below Spring Street in the City of Long Beach.~~

II. Monitoring and Reporting Requirements

a. Monitoring

Responsible Permittees shall conduct monitoring consistent with the requirements of the TMDL. Such monitoring can be integrated into the overall monitoring requirements specified in Attachment A, Monitoring and Reporting Program.

b. Reporting

Responsible Permittees shall submit reports consistent with the requirements of the TMDL and include recommendations for revisions to the TMDL, if appropriate.

~~I. Specific Monitoring Requirements~~
~~A. Runoff samples and flow volumes must be taken at the Los Angeles County Department of Public Work's storm water mass emission station at Coyote Creek (Monitoring Station S13)[1].~~
~~B. The daily storm volume to be sampled must be generated by a rain event that produces a peak flow that is equal to or greater than 156 cfs.~~
~~C. Responsible Co-permittees will develop a plan for sampling, analysis, and reporting whether or not discharges are exceeding the Waste Load Allocations in this Appendix according to Subsection II.B.2. of Monitoring and Reporting Program R8-2015-0001.~~

~~[1] Coyote Creek Monitoring Station S13 is located at the U.S. Army Corps of Engineers stream gauge station F-354-R below Spring Street in Long Beach.~~

Attachment A

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

3737 Main Street, Suite 500, Riverside, CA 92501-3348
(951) 782-4130 ● Fax (951) 781-6288
http://www.waterboards.ca.gov/santaana

MONITORING AND REPORTING PROGRAM NO. R8-2015-0001

for

Order No. R8-2015-0001
NPDES Permit No. CAS618030

Orange County Flood Control District, the County of Orange
And
The Incorporated Cities therein within the Santa Ana Region

Area-wide Urban Storm Water Runoff

January XX, 2015

Revision No.	Date Requested	Approval Date

Table of Contents

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I. General

A. The requirements of this Monitoring and Reporting Program ("MRP"), as presented or later amended, may be met through the Co-permittees' participation in state-wide, national, regional or local monitoring programs, subject to the discretion of the Executive Officer.
B. The Executive Officer is authorized to review and approve proposed changes to this MRP. The Executive Officer will provide a minimum of 30-days for public review prior to approving any proposed changes.
C. To avoid duplication of effort, monitoring work performed by parties other than the Co-permittees may be substituted for work described in the MRP provided that the work meets the requirements of the MRP and Order No. R8-2015-0001.
D. The Co-permittees may supplement monitoring data that is required to be collected by this MRP and subsequent amendments with other valid data sources for the purpose of improving any related analysis.
E. Except for Priority Toxic Pollutants identified in the California Toxics Rule, all sample collection, handling, storage, and analysis must be completed in conformance with 40 CFR Part 136; with adopted guidance developed by the State Water Resources Control Board pursuant to California Water Code Section 13383.5; or with other methods satisfactory to the Executive Officer.
F. Unless otherwise specified differently, the Minimum Levels ("MLs") published in Appendix 4 of the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries if California (State Implementation Plan or "SIP") must be used for the analyses of all samples.
G. The term "acute", as used in Order No R8-2015-0001 and the MRP, shall have the same meaning as "criterion maximum concentration" or "CMC" (24-hour average concentration) unless specified otherwise.
H. The term "chronic", as used in Order No R8-2015-0001 and the MRP, shall have the same meaning as "criterion continuous concentration" or "CCC" (4-day or 96-hour average concentration) unless specified otherwise.
I. Each Co-permittee is responsible for the accuracy and completeness of the monitoring program(s) and related products for the watershed(s) to which the Co-permittee discharges. However, the Principal Permittee may develop and implement those programs and submit related work products on behalf of the Co-permittees.
J. All reports submitted to the Regional Board pursuant to the requirements of Order No. R8-2015-0001 must include a statement identifying the provision(s) for which the report is intended to comply with.
K. Unless paper copies are expressly requested by Regional Board staff, all reports and submittals must be provided in an electronic format consistent with written guidance provided by the Executive Officer.

II. Water Quality Monitoring

A. Goals

The Co-permittees must develop and implement an effective water quality monitoring program to achieve the following goals:

1. To develop useful information in support an effective program to control the discharge of pollutants in urban runoff.
2. To characterize the condition of water quality in receiving waters with respect to water quality standards; identify trends; and identify pollutants found in urban runoff that may adversely affect the beneficial uses of the receiving waters.
3. To characterize pollutant loads or concentrations in discharges from the MS4s relative to applicable ~~waste load allocations~~water quality based effluent limits and identify and quantify significant water quality problems related to urban runoff.
4. To identify and quantify other sources of pollutants to the maximum extent possible (e.g. atmospheric deposition, legacy pollutants, etc.) that may adversely affect the beneficial uses of the receiving waters.
5. To identify the sources of, and to prohibit illicit discharges.
6. To identify those waters, which without additional action to control pollution from urban runoff, cannot reasonably be expected to attain or maintain applicable water quality standards necessary to sustain the beneficial uses designated in the Basin Plan.
7. To objectively evaluate the effectiveness of BMPs implemented according to the Co-permittees' related programs, including, to the extent possible, quantifying the reasonably achievable reductions of pollutants in discharges or the receiving waters that are attributable to the BMP(s).
8. To evaluate and describe the costs and benefits of BMPs, implemented according to the Co-permittees' related programs, to the public and stakeholders.

B. Water Quality Monitoring Plan Development

1. The Co-permittees must prepare a draft Water Quality Monitoring Plan ("Plan") according to the goals, requirements, and specifications described in this Section (Section II.), State Board Resolution No. 2012-0012, and Order No. R8-2015-0001. To the extent practical, the Plan should be comprised of a single document, however, it may be composed of different components subject to the Co-permittees' discretion.
    a. The initial draft Plan must be submitted for approval to the Executive Officer within 6 months of the adoption of Order No. R8-2015-0001.
    b. The Executive Officer will provide a minimum public review period of 30-days prior to approving the Plan.

2. The Water Quality Monitoring Plan must be designed to objectively evaluate the effectiveness of the best management practices being implemented in the watersheds to meet the respective water quality standards ~~or waste load allocations~~.
3. The Water Quality Monitoring Plan must describe processes and a schedule for determining and reporting compliance with each of the Water Quality-Based Effluent Limits ("WQBELs") and requirements in Appendices B through H of Order No. R8-2015-0001 and for identifying and reporting exceedances of applicable water quality standards. The Plan must include cycles of monitoring, analysis, and reporting for all of the WQBELs~~WLAs~~ and ~~that addresses~~ applicable water quality standards.
    a. A complete cycle must be as short as practicable, comply with applicable TMDL deadlines and assessment periods found in Chapter 5 of the Basin Plan, ~~or otherwise must~~and should not exceed once every 5 years.
    b. A complete cycle ~~The schedule for determining compliance~~ should consider the availability of data and a reasonable period after which BMPs may affect water quality.
    c. Any required data collection and analyses must comply with those specified in the relevant TMDL, including averaging and assessment periods, found in Chapter 5 of the Basin Plan
4. The Water Quality Monitoring Plan must also include, at a minimum, descriptions of the locations of ID/IC, receiving, and outfall monitoring locations; an explanation for the locations' selection; the sampling frequencies; parameters to be sampled; descriptions of sampling methods; and the data analysis and reporting schedule (see Subsection K below).
5. The Water Quality Monitoring Plan must be written in an instructive manner for the benefit of persons responsible for its implementation.
6. The Water Quality Monitoring Plan must include a quality assurance program plan ("QAPP") ~~for data which is collected to determine compliance with water quality standards or waste load allocations~~.
    a. The QAPP must be prepared by qualified persons in conformance with the State's SWAMP Quality Assurance Program Plan[1], as amended or revised, and with USEPA's *Guidance for Quality Assurance Project Plans*[2] and *Requirements for Quality Assurance Project Plans*[3] as appropriate.
    b. Data collected according to the QAPP, including laboratory and quality control results, must be delivered using California Environmental Data Exchange Network ("CEDEN") data templates[4].

[1] Available at: http://www.waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa
[2] USEPA, *Guidance for Quality Assurance Project Plans*, EPA QA/G-5, December 2002.
[3] USEPA, *Requirements for Quality Assurance Project Plans*, EPA QA/R-5, March 2001.
[4] CEDEN data templates and documentation are available at : http://ceden.org

c. The QAPP must include quality control and sample handling guidelines against which collected data must be verified; where the guidelines are not met, the affected data must be identified as such using appropriate verification codes.

7. Until the ~~initial~~ draft Water Quality Monitoring Plan is approved, the Co-permittees must continue monitoring as described in the 2013-2014 Annual Progress Report. Changes to the monitoring are prohibited except with the approval of the Executive Officer.
8. On an annual basis, t~~T~~he Co-permittees must evaluate the Water Quality Monitoring Plan and propose ~~subsequent~~ changes as needed ~~at least annually~~. Proposed changes must be submitted by August 1 of each year following the approval of the ~~initial~~ Water Quality Monitoring Plan. The ~~Co-permittees must submit subsequent~~ proposed changes to the Plan must be~~for~~ approved~~al~~ by the Executive Officer[5]. ~~If no changes are proposed, the Executive Officer must be notified so in writing.~~
9. Except for inconsequential grammatical or technical corrections, the Water Quality Monitoring Plan may be amended by the Co-permittees only with the approval of the Executive Officer.
10. The Co-permittees must fully implement the Water Quality Monitoring Plan and any subsequent changes as approved by the Executive Officer.
11. The Executive Officer will allow a minimum of 30-days for public review and comment before approving a Water Quality Monitoring Plan or any proposed changes.
12. The approved Water Quality Monitoring Plan, as amended, must be posted for public access at ocwatersheds.com or using other media acceptable to the Executive Officer. The posted Plan must be full, true, and accurate.

C. General Water Quality Monitoring Requirements

1. The sampling method and practice must minimize bias.
2. Water quality parameters that are tested using valid field instruments are not required to be analyzed by a laboratory.
3. The Co-permittees must employ sample collection methods that support regional comparisons of data, unless site conditions make alternate methods necessary.
4. For each monitoring location and event, the Co-permittees must record observed conditions or circumstances that may influence monitoring results or affect conclusions made from the monitoring data.
5. Wet-weather sampling events ~~may not be consecutive and~~ must be separated by a minimum of two (2) days of dry weather (no precipitation).
6. Locations and frequencies of monitoring performed to meet the objectives of ~~to determine compliance with the waste load allocations in~~ Appendices

[5] The Co-permittees are not prohibited from proposing changes earlier or more frequently than required particularly where approval is needed to coincide with upcoming monitoring efforts.

B through H of Order No. R8-2015-0001 must be consistent with ~~those~~ the requirements specified in the relevant TMDL.

D. Outfall Monitoring Requirements

The water quality monitoring program must include representative monitoring of urban runoff from MS4 outfalls under storm and dry-weather conditions.

1. The Co-permittees must identify representative outfall monitoring locations in the permit area.
2. Each outfall monitoring location must be sampled every two years on an alternating basis; some sites may be sampled every odd year while the remainder will be sampled every even year. The nature, number and distribution of samples are described below in this Section.
3. Stream gauges, or equally-effective methods, must be deployed during sampling events for the purpose of estimating mass loading of pollutants at each of the monitoring locations and for calculating flow-weighted event mean concentrations.
4. The Co-permittees must sample urban runoff produced by three separate storm events ("wet-weather sample") per season at each outfall monitoring location. The Executive Officer may allow exceptions to sampling three storm events when climatic conditions create good cause.
    a. The Co-permittees must make a reasonable effort so that one of the three sampled storm events is of the first storm water runoff of each season from each outfall monitoring location designated to be sampled during the applicable even or odd monitoring year.
        i. A sample for this event must be collected ~~from each outfall monitoring location during the applicable even or odd monitoring year. Each sample must~~ that represents the "first flush" of the storm and consist of a composite of discrete samples collected in the first hour of the storm.
        ii. A ~~second~~ subsequent composite storm water sample for this event must be collected after the storm's first hour, starting two hours after completion of the first flush sampling~~;~~. ~~t~~This sample must consist of a composite of discrete storm water samples collected every two (2) hours during a 96-hour period, or until storm flow is insufficient to allow continued storm water sampling.
        iii. ~~Except for the "first flush" samples, discrete samples must be composited into a single sample.~~
        After the first flush composite sampling is completed, the Permittees may adjust the compositing schedule based on storm conditions observed.
    b. For storm events occurring after the first storm event of the season, ~~a minimum of three (3)~~ composite samples must be collected at each outfall monitoring location during the applicable even or odd monitoring year as follows.

i. A first flush sample is collected during the first hour of the storm consisting of a composite of discrete samples.

~~i.~~ A second~~Each~~ sample must consist of a composite of discrete samples collected every two hours during a 24-hour period or until flow is insufficient to allow sampling.

ii. The 24-hour period must begin two hours after "first flush" sampling period is ~~initiated~~completed.

~~ii.~~iii. Depending on observed storm flow duration, additional composite storm water samples may be collected following the first flush and second composite samples.

c. The Co-permittees must ~~provide~~ document the date and duration of the storm event(s) sampled, rainfall estimates of the storm event which generated the sampled discharge, and the duration between the storm event sampled and the end of the previous measurable storm event.

5. The Co-permittees must sample outfalls ~~biannually (2 times per year) during sampling years~~ under dry-weather conditions ("dry-weather sample") at each outfall monitoring location during the applicable even or odd monitoring year as follows. ~~Each sample must consist of a composite of discrete samples collected hourly during a 24-hour period.~~

a. Twice each year (2 times per year) on samples taken from monitoring locations during the applicable even- or odd-year in Carbon Creek, Coyote Creek, East Garden Grove-Wintersburg Channel, Bolsa Chica Channel, Fullerton Creek, Central Irvine Channel, and Costa Mesa Channel.

~~a.~~b. Four times per year, on a quarterly basis during the even or odd monitoring year, on samples taken from monitoring locations in Peters Canyon Wash, San Diego Creek at Campus Drive and Harvard Avenue, and Santa Ana Delhi Channel.

~~5.~~6. All wet-weather and dry-weather samples must be tested for the parameters indicated in Table 1 below. Each sample must consist of a composite of discrete samples collected hourly during a 24-hour period.

~~6.~~7. In addition to the parameters indicated in Table 1, samples must be tested in the manner as follows:

a. Diazinon, chlorpyrifos, malathion, and dimethoate must be tested for in dry-weather samples that must be taken monthly from outfall monitoring locations discharging into Newport Bay in accordance with applicable TMDL requirements.

b. A Priority Pollutant scan must be completed on wet-weather samples taken of runoff from the first storm of the season each year.

c. Glyphosate must be tested for in dry-weather samples taken from monitoring sites that are outfalls dominated by urban runoff, as opposed to rising groundwater.

d. Additional parameters that are known or suspected to contribute to the impairment of the beneficial uses of the receiving waters must also be tested for at the direction of the Executive Officer.
e. The list of parameters in Table 1 are subject to change, subject to the approval of the Exective Officer and a demonstration of good cause by the Co-permitees. Modifications to the list of parameters in Table 1 may occur for individual monitoring sites or from storm event sampling or dry weather sampling or both based on the supporting technical justification.

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Table 1: Initial Outfall Monitoring Parameters

Parameter		Wet-weather samples	Dry-weather samples	Sediment samples
Nutrients	Nitrate plus nitrite	X	X	
	Total ammonia	X	X	
	Total Kjeldahl nitrogen	X	X	
	Total phosphate	X	X	
	Orthophosphate	X	X	
Dissolved organic carbon		X		
Total organic carbon		X	X	X
Total suspended solids		X	X	
Volatile suspended solids		X	X	
Chloride		X	X	~~X~~
Sulfate		X	X	~~X~~
Turbidity		X	X	
pH		X	X	X
Oil and grease			X	
Temperature		X	X	
Dissolved oxygen		X	X	
Electrical conductivity		X	X	
Hardness		X	X	
Particle size distribution				X
~~Neonicotinoids~~		~~X~~	~~X~~	~~X~~
Total and dissolved heavy metals	Cadmium	X	X	X
	Chromium	X	X	X
	Copper	X	X	X
	Lead	X	X	X
	Mercury	X	X	X
	Nickel	X	X	X
	Selenium	X	X	X
	Silver	X	X	X
	Zinc	X	X	X
Organo-phosphate pesticides	Chlorpyrifos	X		
	Diazinon	X		

	Dimethoate	X		
	Malathion	X		
Bacterial indicators	Total coliform	X	X	
	Fecal coliform	X	X	
	Enterococcus	X	X	

E. Receiving Waters Monitoring Requirements

The Water Quality Monitoring Program must include monitoring in the receiving waters to which the outfalls, that are monitored according to Section II.C. (above), discharge.

1. Each receiving water monitoring location must be sampled every two years on an alternating basis; some sites may be sampled every odd year while the remainder will be sampled every even year. The nature, number and distribution of samples are described below ~~in this Section~~.
    a. Twice each year on samples taken from monitoring locations during the applicable even- or odd-year in Huntington Harbour, East Garden Grove-Wintersburg Tide Gate, Bolsa Chica and Talbert Marsh stations.
    b. Four times per year, on a quarterly basis during the applicable even- or odd-year, on samples taken from monitoring locations in Upper and Lower Newport Bay.

~~1.~~

2. The Co-permittees must sample sediment under dry-weather conditions ("sediment sample") ~~quarterly (4 times per year)~~ at the same frequencies included in Provision II.E.1 above during sampling years at receiving water monitoring locations to be specified in the Water Quality Monitoring Plan.
3. All sediment samples must be tested for the parameters indicated in Table 2 ~~above~~.
4. In addition to the parameters indicated in Table 2, samples must be tested in the manner as follows:
    a. Sediment samples taken from Newport Bay must be tested for Total DDT, Dieldrin, Chlordane, PCBs, and Toxaphene.
    b. Additional parameters that are known or suspected to contribute to the impairment of the beneficial uses of the receiving waters must also be tested for at the direction of the Executive Officer.
5. Samples taken for receiving water monitoring must be tested for the parameters shown in Table 2 ~~below~~ and in the following manner:
    a. Measurements of specific conductance, pH, temperature, and dissolved oxygen must be taken of the water column's profile at one-meter increments, from the water surface to the bottom of each monitoring location.

b. Water samples that are tested for nutrients must be collected near the surface of the water at the monitoring location.
c. Water samples that are tested for metals, pesticides, total and dissolved organic carbon, and toxicity must consist of a composite of samples collected at the monitoring location in a manner that represents the average concentrations in the water column.
d. The list of parameters in Table 2 are subject to change, subject to the approval of the Executive Officer and a demonstration of good cause by the Co-permitees. Modifications to the list of parameters in Table 1 may occur for individual monitoring sites or from storm even sampling or dry weather sampling or both based on the supporting technical justification.

6. Wet-weather, dry-weather, and sediment samples taken from Upper Newport Bay must also be tested for selenium.
7. Sediment samples taken from representative receiving water monitoring locations must also be tested once each year for benthic infauna using methods in the Region 8 Storm Water Ambient Monitoring Program ("SWAMP") Field Operations Manual.
8. Sediment samples taken from monitoring locations in Upper Newport Bay must also be tested for organochlorine pesticides and PCBs.
9. Additional parameters that are known to contribute to the impairment of the beneficial uses of the receiving waters must also be tested for at the direction of the Executive Officer.

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Table 2: Initial Parameters for receiving water monitoring

Parameter		Wet-weather samples	Dry-weather samples	Sediment samples
Nutrients	Nitrate plus nitrite	X	X	
	Total ammonia	X	X	
	Total Kjeldahl nitrogen	X	X	
	Total phosphate	X	X	
	Orthophosphate	X	X	
Dissolved organic carbon			X	
Total organic carbon		X	X	X
Total suspended solids		X	X	
Volatile suspended solids		X	X	
Turbidity		X	X	
pH		X	X	X
Oil and grease			X	
Temperature		X	X	
Dissolved oxygen		X	X	
Electrical conductivity		X	X	
Hardness		X	X	
Particle size distribution				X
Total and dissolved heavy metals	Cadmium	X	X	X
	Chromium	X	X	X
	Copper	X	X	X
	Lead	X	X	X
	Mercury	X	X	X
	Nickel	X	X	X
	Silver	X	X	X
	Zinc	X	X	X
Organo-phosphate pesticides	Chlorpyrifos		X	~~X~~
	Diazinon		X	~~X~~
Bacterial indicators	Total *coliform*	X	X	
	Fecal *coliform*	X	X	
	Enterococcus	X	X	
Glyphosate		X	X	

F. Toxicity Testing

The water quality monitoring program must include toxicity testing~~, analyzed using USEPA's Test of Significant Toxicity approach[6].~~.

1. Toxicity testing must be performed twice per season on *wet-weather samples* taken from representative outfall monitoring locations during the applicable even or odd monitoring year, using *Ceriodaphnia*, sea urchin fertilization, and mysid survival and growth as follows:
    a. Toxicity testing must be performed on *wet-weather samples* representing the "first-flush" of the first storm of the season (See Provision II.D.4.a.i. above).
    b. Toxicity testing must also be performed on *wet-weather samples* taken from the second and third sampling events that represent the 24-hour period following the "first-flush" (See Provision II.D.4.b. above).
2. Toxicity testing must be performed twice per season on *wet-weather samples* taken from receiving water monitoring locations during the applicable even or odd monitoring year, using sea urchin fertilization and mysid survival and growth.
3. Toxicity testing must be performed on *dry-weather samples* using *Ceriodaphnia*, *Selanastrum*, and *Hyalella azteca* as follows:
    a. Twice each year on samples taken from monitoring locations during the applicable even or odd monitoring year in Carbon Creek, Coyote Creek, East Garden Grove-Wintersburg Channel, Bolsa Chica Channel, and Fullerton Creek.
    b. Four times per year, on a quarterly basis during the even or odd monitoring year, on samples taken from monitoring locations in Peters Canyon Wash, San Diego Creek at Campus Drive and Harvard Avenue, and Santa Ana Delhi Channel.
4. Toxicity testing must be performed on representative *dry-weather* samples ~~quarterly (four times per year)~~ at the applicable even- and odd-year receiving water monitoring stations ~~during the even or odd monitoring year on representative *dry-weather* samples in Newport Bay~~ using sea urchin fertilization and/or mysid survival and growth. The sampling frequency will be consistent with Provision II.E.1 above.
5. Toxicity tests must be performed once annually on *sediment samples* collected from the applicable even- and odd-year receiving water monitoring sites. The Toxicity tests must be performed using a 10-day amphipod (*Eohaustorius estuaries*) survival test in solid-phase sediment and a 48-hour bivalve (*Mytilus galloprovincialis*) embryo development test at the sediment-water interface.
6. If Toxicity tests of *sediment samples* collected in two consecutive monitoring years (even or odd years) indicate zero percent survival of the

~~[6] USEPA. 2010. *National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document*. EPA 833-R-10-003. US Environmental Protection Agency, Office of Wastewater Management, Washington D.C.~~

test organisms within the first hour, Toxicity Identification Evaluations must be performed on samples taken from those same locations during the third consecutive monitoring year of sampling.

a. Toxicity Identification Evaluations must be performed in substantial conformance with published and generally-accepted methods[7].

G. Benthic Invertebrate Taxonomy

1. The water quality monitoring program for harbors and estuaries must include annual (one time per year) identification of the taxonomy of benthic invertebrate communities. Taxonomy must be identified in those sediment samples taken from monitoring locations in waters of the U.S. during their scheduled even or odd sample years consistent with the receiving water monitoring requirements.

H. Illicit Discharges and Illicit Connections

The Water Quality Monitoring Plan must include monitoring to detect illicit discharges and illicit connections.

1. The Co-permittees must monitor a minimum of 30 monitoring stations annually during the dry season (May 1 through September 30).
2. Monitoring to detect illicit discharges and illicit connections must occur at the locations and frequencies specified in the Water Quality Monitoring Plan. Monitoring locations and frequencies are subject to change according to Provision II.B.6. above.
3. For each monitoring station, the Co-permittees must characterize the base line hydrology of the dry-weather discharges and the water quality parameters of the discharge. Based on this information, the Co-permittees must employ statistical process control methods to establish flow and water quality parameter thresholds that indicate when an illicit discharge may have occurred or when an illicit connection may exist. The Co-permittees must also use odor, color, clarity, unusual wildlife morbidity or mortality, sheen, staining, corrosion, unnatural deposits, and other subjective indicators to identify suspected illicit discharges or illicit connections
4. The Co-permittee that is the local jurisdiction must initiate (or cause to be initiated) an investigation to identify the known or most likely source(s) of the suspected illicit discharge or illicit connection (source investigation) where indicators developed pursuant to Provision II.H.3. above are found.
5. When dry-weather discharges are found at the monitoring locations, the discharge must be tested for the parameters specified in Table 3 below using the test method type(s) indicated.

[7] E.g. U.S. EPA. 2007. Sediment Toxicity Identification Evaluation (TIE) Phases I, II, and III Guidance Document EPA/600/R-07/080, Office of Research and Development. Washington, DC. Available at: http://www.epa.gov/nheerl/publications/files/Sediment TIE Guidance Document.pdf

6. A source investigation must occur in substantial conformance with a common set of written techniques and procedures developed by the Co-permittees as part of the written program describe in Provision VII.D. of Order No. R8-2015-0001.
    a. Except as provided for in Section XVII, indications of a potential illicit discharge or connection must be investigated within three (3) business days of the Co-permittee (including the Principal Permittee) becoming aware of it.
    b. A source investigation may only be regarded as concluded after the cause(s) of the illicit discharge has been identified or additional monitoring fails to detect a subsequent exceedance of the same parameter(s) after 180 days. In the interim, the Co-permittee that is the local jurisdiction must put forth a good faith effort to identify the source(s) of a suspected illicit discharge or illicit connection.

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Table 3: Parameters for Illicit Discharge and Illicit Connection Discharge Monitoring

Parameter			Test Method Type	
			Field	Laboratory
Ammonia			X	
Nitrate			X	
Soluble phosphorus			X	
Total organic carbon ("TOC")				X
pH			X	
Oil and grease (if oil sheen is present) or Total petroleum hydrocarbons				X
Temperature			X	
Dissolved oxygen			X	
Electrical conductivity			X	
Hardness			X	
Dissolved Heavy Metals	Arsenic			X
	Cadmium			X
	Hexavalent chromium		X	
	Total chromium			X
	Copper		X	X
	Lead			X
	Mercury			X
	Nickel			X
	Selenium			X
	Silver			X
	Zinc			X
Organophosphate Pesticides		Diazinon		~~X~~
		Chlorpyrifos		~~X~~
		Malathion		~~X~~
		Dimethoate		~~X~~
Bacterial Indicators		Total coliform		X
		Fecal coliform		X
		Enterococcus		X
MBAS			X	

I. Bacterial Indicators

The Water Quality Monitoring Plan must include an effective monitoring program for bacterial indicators.

1. The Co-permittees must sample discharges from the outfalls/tributaries and ocean water in the surf zone 25-yards up-coast and 25-yards down-coast from those discharges on a weekly basis.
    a. Samples must be measured for total coliform, fecal coliform, and *Enterococcus*.
    b. At the time of sample collection, the Co-permittees must estimate the flow rate of the discharge from the respective outfall/tributary and measure and record the temperature of the discharge and of the surf zone down-coast from the outfall/tributary.
    c. If no hydrologic connection exists between the outfall and the surf zone, only a down-coast sample is needed.
2. The Co-permittees must sample dry-weather discharges at representative monitoring locations.
    a. Samples must be measured for total coliform, fecal coliform, and *Enterococcus*.
    b. Sample events must be coordinated with the Orange County Health Care Agency and the Orange County Sanitation District or their successors in order to augment their monitoring program and improve the collective data's ability to resolve trends, comparisons, and correlations within and between the sites.

J. Bioassessment Monitoring

1. The Co-permittees must conduct bioassessment monitoring in conformance with the Surface Water Ambient Monitoring Program ("SWAMP").
2. Bioassessment monitoring must be completed at the monitoring locations specified by the most recent Stormwater Monitoring Coalition ("SMC") monitoring plan. The monitoring locations and parameters may be adjusted during the monitoring year according to recommendations from the SMC so that they are consistent with the SMC monitoring plan.
~~3. Co-permittees must perform a minimum of one Causal Assessment during the term of Order No. R8-2015-0001 to identify the likely causes of the biological condition at the monitoring locations.~~
~~4. Causal Assessments must be conducted according to the USEPA Stressor Identification Guidance Document (2000) or an equivalent guidance acceptable to the Executive Officer.~~

~~5.~~3. The bioassessments must include monitoring of urban runoff for the parameters shown in Table 4 below.

~~6. Toxicity tests which produce a zero percent survival of the test organisms within the first hour must be evaluated using Toxicity Identification Evaluations.~~

Table 4: Bioassessment water quality test parameters

Nutrients	Nitrate plus nitrite	Hardness	
	Total ammonia	Total and dissolved heavy metals	Arsenic
	Total Kjeldahl nitrogen		Cadmium
	Total phosphorus		Chromium
	Orthophosphate		Copper
Total organic carbon			Lead
Total suspended solids			Mercury
Chloride			Nickel
Sulfate			Selenium
Turbidity			Silver
pH			Zinc
Oil and grease (if sheen is present)		Organophosphate pesticides	Diazinon
Temperature			Chlorpyrifos
Dissolved oxygen			Malathion
Electrical conductivity			Dimethoate

K. Data Analyses

1. The Water Quality Monitoring Plan must include a schedule of statistically-valid analyses that will be performed on collected data.
2. The schedule of analyses must include a description of the statistical analyses that will be performed, the purpose of each analysis, the data sets and sub-sets that will be analyzed, and the time periods or thresholds at which each analysis will be performed.
3. The schedule of analyses must satisfy schedules specified in this MRP, established in relevant adopted TMDLs, and this Order.
4. The Water Quality Monitoring Plan must include the supporting rationale for the schedule of analyses.
5. The applicable schedule of analyses and the results of the performed analyses must be reported in the Annual Progress Report.

L. Special Studies

1. The water quality monitoring program must include the performance of special studies. The special studies must be carried out for those purposes in Section II.A. above, where other elements of the monitoring program are insufficient.
2. The Co-permittees must provide documentation of any special studies to be performed in support of their storm water program. The documentation must be provided annually via a reporting mechanism acceptable to the Executive Officer (e.g. as a stand-alone report, or as part of the Annual Progress Report or other annually-required report). The documentation must include a schedule of proposed actions, a description work products to be completed, and the achievement of milestones along with any changes or updates for any special studies big carried out. This information must be included in the Annual Progress Report each year.

III. Program Effectiveness Assessments and Reporting

A. All reports and plans required by this Order must be signed by a duly authorized representative for the Principal Permittee and submitted to the Executive Officer of the Regional Board under penalty of perjury.
B. The Co-permittees must submit all information and materials necessary to comply with, or demonstrate compliance with, the requirements of this Order to the Principal Permittee in a timely manner. All submittals by the Co-permittees must be signed by a duly authorized representative for the respective Co-permittee under penalty of perjury.
C. Data transmittals to the Regional Board must be in the form developed by the Stormwater Monitoring Coalition ("SMC") and approved by the State Water Resources Control Board in the document entitled "Standardized Data Exchange Formats" for the purpose of providing a standard format for all data transfers and allow data to be universally shared and evaluated as part of various programs.
D. The Co-permittees must submit an Annual Progress Report to the Executive Officer of the Regional Board and to the Regional Administrator of the USEPA – Region 9 no later than November 15th of each year. The Executive Officer may grant an extension of up to 90-days with cause upon the receipt of a written request from the Principal Permittee. The reporting period must address actions taken to comply with the requirements of Order No. R8-2015-0001 and this MRP through June 1 of the reporting year. The Annual Progress Report must include the following:
    1. A schedule of all actions required by Order No. R8-2015-0001 during the reporting period, ~~any outstanding actions required by Order No. R8-2015-0001 and Order No. R8-2009-0030~~, and the status of efforts to carry out the scheduled actions~~ and satisfy the related requirements~~.
    2. The results of each Co-permittees' program effectiveness assessment and the results of the Principal Permittee's overall evaluation of those results.

a. The results of water quality monitoring; the results of scheduled analyses of the water quality monitoring data; and any related conclusions reached by the Co-permittees.
b. The status of special studies carried out according to the previous reporting period's work plan and the work plan for the upcoming reporting period (See Section II.K. above)
c. The status of efforts to reduce and/or eliminate the discharge of trash and debris (See Subsection VII.D. of Order No. R8-2015-0001).
d. The status of efforts to detect and mitigate SSOs (See Subsection VII.E. of Order No. R8-2015-0001).
e. The unified fiscal analysis (See Section XX of Order No. R8-2015-0001).

IV. Reporting Schedule Summary

Table 5, below, summarizes information that must be reported to the Executive Officer and the items' deadlines. Deliverables are in the order in which they appear in Order No. R8-2015-0001. The table is provided for the convenience of the reader and should not be used as a substitute for reviewing the contents of Order No. R8-2015-0001, this MRP, or the Technical Report.

A. With the exception of deliverables with capitalized titles, Order No. R8-2015-0001, this MRP, and this summary do not establish formal nomenclature. Deliverables with no formal nomenclature may be identified in a manner suitable to the Co-permittees, but they must be identified by a written statement of purpose, declaring which Provision(s) they are intended to comply with.

B. Deliverables that are submitted with the Annual Progress Report do not need to consist of separate documents; they may be incorporated into the Annual Progress Report. But they must be readily-identifiable, denoted elements (e.g. separate chapters) and include a statement of purpose as described above.

C. The Co-permittees must submit deliverables in an electronic format. To preserve their authenticity, all deliverables submitted in an electronic format must not be readily-alterable. All deliverables must be in a format that is viewable using widely-available software.

Table 5: Reporting Schedule Summary

Deliverable	Source Provision(s)	Deadline
Draft plan	IV.C.1.	Varies, but generally triggered by water quality monitoring results and analyses. Due within 6 months of the Co-permittees becoming aware of an exceedance of water quality standards. If requested in writing by the Executive Officer, due as specified in the written request.
Legal authority assessment report	VI.B.	Reported as needed as part of Annual Progress Report.
Trash and debris BMP report	VII.E.1.	Reported as part of Annual Progress Report.
Trash and debris technology evaluation report	VII.E.2.	Reported as part of Annual Progress Report.
BMP retrofit study updates	XII.A.8.	12 months from date of adoption.
Structural treatment control BMP waiver notice	XII.L.	30-days prior to Co-permittee's issuance of the waiver.
Draft watershed maps	XII.N.3.	6 months from date of adoption.
General audience survey	XIII.E.1.b.	60 months from the date of adoption.
Initial imminent threat notice	XVII.A.1.	24 hours of Co-permittees becoming aware.
Imminent threat report	XVII.A.2.	5 business days after initial imminent threat notice.
Known/suspected WDR violations report	XVII.C.	30-days following the end of each calendar quarter: January 30th, April 30th, July 30th, and October 30th of each year.
Program Effectiveness Assessment	XIX.D.	Reported as part of the Annual Progress Report
Unified fiscal analysis	XX.A.	Reported as part of the Annual Progress Report
Report of Waste Discharge	XXIII.A.	180-days before expiration of this Order.
Water Quality Monitoring Plan	XXIV.I.,MRP II.B.1. and MRP II.B.6.	6 months from date of adoption; proposed revisions due August 1, each year
Annual Progress Report	XXIV.I. and MRP III.D.	Annually by November 15th of each year commencing 2016.

Ordered by:

Kurt V. Berchtold
Executive Officer

Date

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February 13, 2015

Sent via email: santaana@waterboards.ca.gov

Regional Water Quality Control Board – Santa Ana Region
Attn: Adam Fischer
3737 Main Street, Suite 500
Riverside, CA 92501

RE: Comments on Second Draft Orange County Municipal Separate Storm Sewer System ("MS4") Permit, NPDES Permit No. CAS61080

Dear Mr. Fischer,

Orange County Coastkeeper ("Coastkeeper") respectfully submits the following comments on the second draft Orange County Municipal Separate Storm Sewer System ("MS4") permit, Tentative Order No. R8-2015-0001 ("Draft Permit'). This comment letter builds on the comments from our previous letter, dated June 20, 2014. We incorporate that letter by reference, as well as the letter submitted by the Natural Resources Defense Council ("NRDC") on June 20, 2014. Coastkeeper and NRDC have worked collaboratively on MS4 comments to the Regional Board in the past and will continue to collaborate where possible.

7.1 Coastkeeper's continued involvement in MS4 permits renewals regularly confirm our frustration with the slow pace of water quality improvements as a result of these complex regulatory mechanisms. Existing MS4 permits have not reduced urban runoff impacts to water quality to the extent that the public deserves and the law requires under existing MS4 Permits. Orange County swimmers, surfers, kayakers and the like continue to suffer from waterways that are too often closed or posted for pollution. We acknowledge the money spent and time dedicated to the issues, but the iterative process has been underutilized and ineffective to date in bringing MS4 discharges into compliance with water quality standards. However, the program's failure is the direct result of widespread non-compliance by permittees and non-enforcement by Regional Boards. Discussion of improvements to the iterative process must be undertaken with a focus on Regional Board implementation and discharger compliance.

I. The Regional Board is Prematurely Wading into the Controversy Surrounding Receiving Waters Limitation Language

7.2 Receiving Water Limitation ("RWL") language has been a primary focus of MS4 permit co-permittees statewide with claims of near unlimited liability preventing co-permittees from experimenting with non-traditional BMPs to improve water quality. The threat to counties and municipalities, so the argument goes, will unreasonably limit the potential of local government to conduct the water quality improvement they are so desperately seeking to implement. These same arguments were made by the counties of Riverside, Orange and San Diego and rejected by the San Diego Regional Water Quality Control Board (SDRWQCB) during the adoption of R9-2013-0001, as amended by R9-2015-0001. When pressed by environmental groups, including Coastkeeper, co-permittees could not identify expenditures related to third party initiated MS4 litigation. Consequently, the SDRWQCB chose to retain their existing RWL language along with a re-opener to allow for changes when the SWRCB issues guidance. Claims of near unlimited liability, while not illusory, have not materialized in the sixteen years since Order 99-05 or in the years since the adoption of R9-2013-0001.

Currently, the SWRCB is considering a petition challenging the 2012 Los Angeles MS4 permit (Order No. R4-2012-0175) in order to primarily address the adequacy of that permit's RWL. This MS4 permit has been subject to considerable scrutiny and remains a contentious Order statewide. SWRCB has issued a draft Order with a comment deadline of January 21, 2015. Coastkeeper joined with other environmental groups in commenting on the impact of this draft and incorporate our comments by reference. Coastkeeper anticipates a final Order issued by the SWRCB that has the potential to resolve RWL language statewide within a period of months.

The existing RWL language found in Order No. R8-2009-0030, as amended by Order No. R8-2010-0062, contains clear, appropriate, and enforceable language that complies with the Clean Water Act and has stood the test of administrative, judicial, and enforcement challenges.[1] Municipal dischargers, however, repeatedly raise concerns about the alleged uncertainty of compliance with water quality-based RWLs in NPDES permits and have argued for unenforceably vague permit limits and/or "safe harbors." Such a "safe harbor" can be read in Section IV of R8-2015-0001, wherein a co-permittee is required to submit a plan after their own determination, or that of the Executive Officer, that a discharge is causing or contributing to an exceedance of a water quality standard and the submission of the plan, rather that the approval of the plan by the Executive Officer, places the co-permittee in compliance. Coastkeeper's experience with the County of Orange's WQMP submission, wherein the comments from Regional Board staff were counted by the hundreds are viewed by Coastkeeper as a warning as to what could be expected if the mere submission of plans, rather than the adoption of comprehensive and iterative plans, was the trigger for compliance with this permit. As written, "safe harbors" incentive co-permittees to submit poor plans in order to obtain compliance, rather than actual plans that solve water quality problems. Proposals to incorporate "safe harbor" provisions or otherwise weaken the RWL language would fail to meet minimum federal requirements, and would constitute a violation of the Clean Water Act's anti-backsliding provisions for any permit previously incorporating the required language of Order 99-05.[2] Any attempt to shield permittees from enforceable requirements meant to ensure water quality standard compliance would move the region backwards in terms of water quality and discharger accountability and thus represents poor public policy.

7.2

However, **we offer potential alternative compliance determination mechanisms with respect to receiving water limitations that would both comply with the Act and provide more engineering certainty for municipal dischargers**. A workable and *legal* RWL would consist of pollution control programs (or enhanced watershed management plans) designed to achieve compliance with all applicable water quality-based requirements within the 5 year life of the Permit, and would be assessed using pre-approved, peer reviewed computer modeling. Instead of providing the illegal "safe harbors" currently incorporated in the Permit, Time Schedule Orders (TSO) would provide time for implementation of the programs, and compliance with the TSOs would be determined based on compliance with the engineering standards in the program, and on meeting the interim and final deadlines for implementation. Ultimate compliance with WQBELs and RWLs would be determined via water quality monitoring pursuant to deadlines within the TSOs. Dischargers would thereby gain certainty during the life of the Permit, pollutant loads would be significantly reduced, and the core requirement of the Act—that ultimate compliance be determined *in the water*—would be met.

A. **Proposed Alternative Compliance Determination**

A program that would facilitate engineered solutions while complying with State and Federal law would consist of the following elements:

1) Where TMDLs Have Been Adopted

[1] "[T]he plain meaning of these provisions is clear: they prohibit discharges that cause or contribute to a 'violation of Water Quality Standards' [or water quality objectives]." Brief of Amicus Curiae California Regional Water Quality Control Board, Los Angeles Region, in *Santa Monica Baykeeper v. City of Malibu* No. CV 08-1465-AHM (PLAx) (C.D. Cal.) (filed Feb. 5, 2010), at 4. See also, *In re L.A. County Mun. Storm Water Permit Litigation*, No. BS 080548 at 4-7 (L.A. Super. Ct. Mar. 24, 2005).

[2] 40 C.F.R. 122.44(l)(1) provides that except for a narrow set of enumerated circumstances, "when a permit is renewed or reissued, interim effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit."

a) A demonstration that the proposed engineered Pollution Control Program (infiltration, treatment, diversion, LID, and combinations thereof) will achieve compliance with applicable Waste Load Allocations ("WLA") where TMDLs have been adopted, including any interim limits, during the five year life of the Permit. For example, a Program implementing capture and/or infiltration of all stormwater in a sub-watershed up to the 85th percentile rain event would be in compliance with Permit requirements where calibrated modeling demonstrates that this level of capture and infiltration will achieve compliance for each and every applicable WLA.

i. The demonstration that the program will achieve compliance with the WLAs would be made using a Board approved, peer reviewed model, applied on a sub-watershed basis.
ii. The proposed programs would be subject to public review and comment, and if requested public hearing before the Regional Board.
iii. The program will include an enforceable schedule for implementation, including interim deadlines and interim load reductions.
iv. The Permit would *not* deem dischargers to be in compliance during the Program development process, or the design and construction phase. Dischargers would only be deemed in compliance with the Pollution Control Program upon full deployment of the pollution control measures contained therein.

b) Where dischargers are not currently in compliance with existing WLA, interim WLAs, or WLAs with passed compliance deadlines, time for implementation of the Pollution Control Program sufficient to achieve compliance, not to exceed the five year life of the permit, could be provided via Time Schedule Orders, Cease and Desist Orders, and/or Clean Up and Abatement Orders.

7.2

c) Compliance with the TSO, CDO or CAO would be based on implementation of the Program, including meeting interim deadlines and interim load allocations, rather than receiving water sampling.

d) End of pipe and receiving water monitoring would continue for the life of the permit, and used continue to calibrate modeling, and to modify/adjust program elements where anticipated performance is not achieved.

e) Ultimate compliance would be determined through end of pipe and receiving water monitoring.

2) 303(d) listed Receiving Water parameters, without TMDLs

1) A demonstration that the proposed engineered Pollution Control Program (infiltration, treatment, diversion, LID, and combinations thereof) will achieve compliance with applicable Water Quality Standard. For example, a Program implementing capture and infiltration of all stormwater in a sub-watershed up to the 85th percentile rain event would be in compliance with Permit requirements where calibrated modeling demonstrates that this level of capture and infiltration will achieve compliance for each and every applicable WQS.

a) The demonstration that the program will achieve compliance with the WQSs would be made using a Board approved, peer reviewed model, applied on a sub-watershed basis.
b) The proposed programs would be subject to public review and comment, and if requested public hearing before the Regional Board.
c) The program will include an enforceable schedule for implementation, including interim deadlines and interim standards.
d) The Permit would *not* deem dischargers to be in compliance during the Program development process, or the design and construction phase. Dischargers would only be deemed in compliance with the Pollution Control Program upon full deployment of the pollution control measures contained therein.

2) Where dischargers are not currently in compliance with existing WQS, time for implementation of the Pollution Control Program sufficient to achieve compliance, not to exceed the five year life of the permit, would be provided via Time Schedule Orders, Cease and Desist Orders, and/or Clean Up and Abatement Orders.

3) End of pipe and receiving water monitoring for the life of the permit, used to establish compliance (discharge from MS4 Not Causing or Contributing to WQS Violations, including concentration based WQS) to calibrate modeling, and to modify/adjust program elements where anticipated performance is not achieved.

4) Ultimate compliance would be determined through end of pipe and receiving water monitoring.

3) For Parameters Not 303(d) listed (Anti-Degradation)

1) A demonstration that the proposed engineered Pollution Control Program (infiltration, treatment, diversion, LID, and combinations thereof) will for "high quality" waters protect water quality better than that minimum necessary for "fishable/swimmable" uses. For example, a Program implementing capture and infiltration of all stormwater in a sub-watershed up to the 85th percentile rain event (such as the LA County MS4 Permit) would be in compliance with Permit requirements where calibrated modeling demonstrates that this level of capture and infiltration will achieve compliance with WQS, and will maintain existing water quality for higher quality waters.

7.2

e) The demonstration that the program will achieve compliance with anti-degradation requirements would be made using a Board approved, peer reviewed model, applied on a sub-watershed basis.

f) The proposed programs would be subject to public review and comment, and if requested public hearing before the Regional Board.

g) The program will include an enforceable schedule for implementation, including interim deadlines and interim standards.

h) The Permit would *not* deem dischargers to be in compliance during the Program development process, or the design and construction phase. Dischargers would only be deemed in compliance with the Pollution Control Program upon full deployment of the pollution control measures contained therein.

i) Ultimate compliance would be determined through end of pipe and receiving water monitoring.

The arguments made concerning the content of the RWL provisions of MS4 permits have been considered by Regional Boards statewide and are currently being heard by the SWRCB. Most recently, the SDRWQCB affirmed their decision to retain the RWL provision of R9-2013-0001 earlier this week when enrolling Orange County under the permit. In so doing, the SDRWQCB allowed for a review of the RWL provision after the SWRCB issues a final Order sometime later this year.

Furthermore, Coastkeeper points to a comment letter to the SWRCB dated January 20, 2015, wherein the USEPA recognized MS4 permittees outside of the jurisdiction of the Los Angeles Regional Water Quality Control Board were arguing to the SWRCB for the application of the LA MS4 permit's WMP/EWMP approach (read: RWL language) to other Regional Boards[3]. In response, the USEPA concluded that until the WQ Order addressed core issues, it would be "premature and inappropriate to require the LA MS4 permit approach throughout the State." Coastkeeper anticipates the County of Orange to argue for the incorporation of the RWL language found in the LA MS4 permit and/or the draft WQ Order into R8-2015-0001. Coastkeeper agrees with the reasoning of USEPA that until such time as the WQ Order is final, such language should not be relied on by other Regional Boards.

[3] Ltr. from David Smith, Manager, NPDES Permits Sec. (WTR-2-3), to Ms. Jeanine Townsend, Clerk to the Bd, State Water Res. Control Bd., Comments to A-2236(a)-(kk) 2-3 (Jan. 20, 2015).

In conclusion, Coastkeeper strongly encourages the Regional Board to retain the language of the existing RWL provision until such time as the SWRCB issues a final Order resolving this critically important issue. Adopting R8-2015-0001 with RWL language that has not been subject to administrative, judicial or enforcement challenge, and to some degree will be modified after the SWRCB issues their final Order, is imprudent and unjustified. Adopting R8-2015-0001 with the RWL language in currently in effect along with a reopener allowing for the revision of the language to reflect the SWRCB Order is consistent with the SDRWQCB and affirms the position the County of Orange already finds itself in south Orange County. In the event the Regional Board does not agree with the aforementioned conclusion, Coastkeeper supports the adoption of the proposed alternative compliance determination.

7.2

II. The Draft Order's Proper Inclusion of Retrofitting of Existing Development in Section XII Ignores Orange County's Existing Obligations Under R9-2015-0001

Coastkeeper supports the Regional Board's addition of the Fourth Priority Consideration of Offsets through Retrofit of Existing Development, Section XII.I. However, the Regional Board's addition of this section ignores the work the SDRWQCB in drafting and adopting Order No. R9-2013-0001, as amended by Order No. R9-2015-0001. Section II.E.5.e.(1) of said permit requires Orange County to utilize their existing development inventory and tracking system, as described in Section II.E.5.a, to "identify sources of pollutants and/or stressors that contribute to the highest priority water quality conditions in the Watershed Management Area." This allows the co-permittee to identify areas of existing development as candidates for retrofitting, focusing on those areas with significant water quality problems, including hydromodification, and the potential sources of those impairments. The focus is on the source of issues, and not limited to publicly owned sources. After identifying the source, the co-permittee must develop a strategy for the implementation of retrofitting projects. In the event the retrofitting is infeasible, the SDRWQCB allows for co-permittees to collaborate on regional retrofitting projects.

7.4

As written, R8-2015-0001 allows for the retrofitting of existing development, however, it fails to provide a project proponent with the direction necessary to target candidate sites for retrofitting. The burden is shifted to a project proponent to identify a candidate site without the assistance of the co-permittee's inventory system or the benefit of prioritization. In effect, project proponents could be assisting in the retrofitting of site to address pollutants of little in the watershed. This is an inefficient use of available resources by project proponents when an alternative exists. Claiming that the draft permit doesn't prohibit the County's expansion of the system from south Orange County into north Orange County ignores the principles of permit construction. In south Orange County, the principal permittee is already required to identify candidate sites, develop a strategy to facilitate and implement retrofitting projects in areas of existing development identified as candidates, and under certain conditions, collaborate with other co-permittees on regional retrofitting projects. This integrated approach exists in Orange County, Coastkeeper and the SDRWQCB anticipate this to be a useful tool for the co-permittees and project proponents that should be incorporated countywide. This integrated approach will be unlikely to expand unless it is a requirement of the permit. As such, Coastkeeper supports the Regional Board in expanding the existing program's scope beyond south Orange County by making this inventory a requirement.

III. The Draft Order Must Be Updated to Reference the Existence of Orange County's Marine Protected Areas

7.5

Coastkeeper recommends the incorporation of a reference to Marine Protected Areas ("MPAs") under Findings Section D ("Considerations Under Federal and State Law") of R8-2015-0001. The Marine Life Protection Act was passed in 1999 and is part of the California Fish and Game Code.[4] MPAs are named, discrete geographic marine or estuarine areas seaward of the high tide line or the mouth of a coastal river, including any area of intertidal or subtidal terrain, together with its overlying water and associated flora and fauna that has been designated by law, administrative action, or voter initiative to protect or conserve marine life and habitat. MPA classifications include marine life reserves (the equivalent of the state marine reserve classification) (SMR), state marine parks (SMP), which allow recreational fishing and prohibit commercial extraction, and state marine conservation areas (SMCA), which

[4] Cal. Fish & Game Code §§2850-2863

allow for specified commercial and recreational activities, including fishing for certain species but not others, fishing with certain practices but not others, and kelp harvesting. Marine Protected Areas along the southern California Coastline (Point Conception to the Mexican border) have been in effect since January 1, 2012. These include four MPAs in the area covered by the Regional Board; Bolsa Bay SMCA, Bolsa Basin SMCA, Upper Newport Bay SMCA and the Crystal Cove SMCA.

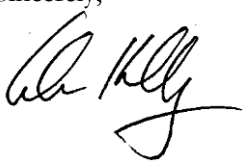
7.5

MPAs are primarily intended to protect or conserve marine life and habitat, and are therefore a subset of marine managed areas (MMAs), which are broader groups of named, discrete geographic areas along the coast that protect, conserve, or otherwise manage a variety of resources and uses, including living marine resources, cultural and historical resources, and recreational opportunities. Marine managed area classifications include state water quality protection area, state marine cultural preservation area, and state marine recreational management area.

Including MPA language, as a recognition of their existence and helps to secure their consideration by co-permittees and regulators, and is consistent with the SDRWQCB Order No. R9-2013-0001, as amended by R9-2015-0001, and the recent Regional Board renewal of the AES NPDES permit. Water quality is a critical component of all marine habitats will be a key component in the success or failure of the MPAs in Orange County. The inclusion of a reference to MPAs in the MS4 permit recognizes the importance of these underwater parks and their integration into the regulatory system.

In conclusion, Coastkeeper appreciates the opportunity to submit these comments to the Regional Board. Please feel free to contact me directly at 714-850-1965 ext. 307 or at colin@coastkeeper.org with any questions or concerns you may have.

Sincerely,



Colin Kelly
Staff Attorney
Orange County Coastkeeper

January 21, 2015

Chair Felicia Marcus and Board Members
c/o Ms. Janine Townsend, Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
PO Box 100
Sacramento, CA 95812-0100
commentletters@waterboards.ca.gov

Sent via email

Re: Comments to A-2236(a)-(kk)

Dear Chair Marcus and Board Members:

Thank you for the opportunity to comment on the Los Angeles MS4 Draft Order ("Order"). San Diego Coastkeeper is a non-profit organization working to protect and restore the San Diego region's bays, beaches, watersheds, and ocean. Orange County Coastkeeper is a non-profit organization dedicated to promoting and restoring water resources that are drinkable, fishable, swimmable, and sustainable. Inland Empire Waterkeeper's (hereinafter collectively referred to as "Coastkeeper") mission is to protect and enhance the water quality of the Upper Santa Ana River Watershed through programs of advocacy, education, research, restoration and enforcement.

Coastkeeper wishes to express our full support of the comments being submitted by Los Angeles Waterkeeper, Natural Resource Defense Counsel, and Heal the Bay on the Draft Order, and incorporates those comments herein by reference. Because the Draft Order includes some language that would have repercussions and consequences outside of the Los Angeles ("LA") region, Coastkeeper believes it is important for these comments to represent those members and interests of ours outside of Los Angeles County on which this Draft Order would have an impact.

While the Conclusion of the Order (p. 48-49) states that it directs all regional boards to "consider" the WMP/EWMP approach, it reads very much like a directive for each Regional Board to implement the approach in a locally-appropriate way. As our organizations and others in the San Diego Regional Board's jurisdiction have already had a healthy broad stakeholder discussion on the safe harbor issue during the adoption of the 2013 San Diego Regional permit ("2013 permit"), the issues now before the State Board are familiar to us. Discussions are ongoing in the Santa Ana region, which is considering the adoption of the 2015 Orange County MS4 permit, with an anticipated joint San Bernardino County and Riverside County permit to be released later this year.

Coastkeeper would like to respectfully caution the State Board on using information and processes gained from permit development (however long overdue) in one region and extrapolating that reasoning and interpretation to other regions, as this Draft Order does. Below

we briefly explore the justifications put forth by the Board in the hopes to express why they do not apply outside of the LA region.

Anti-Backsliding:

Application of a safe harbor that weakens the applicability of Receiving Water Limitation ("RWL") language to the San Diego region would fail to meet minimum federal requirements and would constitute a violation of the Clean Water Act's anti-backsliding provisions. The Clean Water Act and associated Federal Regulations, specifically, 40 CFR 122.44(l)(1), provide that except in a narrow set of enumerated circumstances, "when a permit is renewed or reissued, interim effluent limitations, standards, or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit."

The draft order's comments make slight mention of why the LA permit *may* not violate anti-backsliding, but then without discussing the justification in detail the Draft Order simply states that justification isn't necessary because an exception allowing for backsliding exists in this case. The Draft Order itself appears to base the bulk of its acceptance that the safe harbor does not constitute backsliding on the LA Regional Board's Response to Comments document, wherein an argument was made that an exception to backsliding exists. The Draft Order includes little analysis as to whether anti-backsliding actually applies (and importantly, the Draft Order does not find that anti-backsliding provisions *do not* apply here), and instead focuses its attention on finding that an exception to backsliding exists in the case of this permit.

Supporting Water Board Rationales: Paradigm Shift, Prioritization, and Lessons Learned

The LA Regional Board's Response to Comments upon which the State Board's justification hinges, in turn, states that an exception exists, "if the circumstances on which the previous permit was based have materially and substantially changed since the time the previous permit was issued and would constitute cause for permit modification or revocation or reissuance under 40 CFR section 122.2. Like section 122.41(l), section 122.62 includes new information not available at the time the previous permit was issued as a cause for modification" (p. 51 of Response). The Response then goes on to justify an exception based largely upon the differences between the 2001 and 2012 permits, a paradigm shift towards treated stormwater as an asset, and information gained during that substantial 10-plus year time frame.

In stark contrast, no such large time gap between permits and no such large-scaled paradigm shifts or information downloads have occurred between any two MS4 permits in southern California's other regions. Our regions have continually evolved their MS4 permits using lessons learned, and what resulted have been a series of permits aimed at integrated water management approaches and watershed-wide planning. So while we disagree with the Draft Order and the LA Regional Board that an exception to anti-backsliding exists in LA based on those lessons learned and shifts in thinking, it is even more plain to us that the justification for any such exception does not apply to regions outside of LA.

To illustrate, the San Diego MS4 permits have since 2001 incorporated the RWL language of Order 99-05. In fact, the San Diego region has adopted several iterations of MS4 permits since 2001, including one in 2007 and another in 2013. The Santa Ana region has adopted at least

six MS4 permits since 2001, a full two cycles for each county with a third cycle nearing adoption for Orange County. Each of these has gradually evolved to include the paradigm shift included in Los Angeles' permit, as well as the lessons learned via the iterative process and its monitoring and assessment. Low impact development provisions have been included since 2007 in the San Diego permit and 2009 in the Orange County permit, and on-site capture, as well as incentives and direction towards capture and use, exist. Further, San Diego's newest permit includes provisions for on-site capture and infiltration for development projects over a certain threshold and it stresses integrated water management approaches that address water quality and supply for our borderline arid region. In addition to the capture and use provisions of those permits, watershed-wide planning efforts aimed at prioritization of waterbodies or pollutants also already exists in our permits. Thus, both the San Diego and Santa Ana regions have already adopted permits that include a paradigm shift towards treating stormwater as an asset rather than a liability.

The most recent San Diego 2013 MS4 permit also incorporates a framework, utilizing Water Quality Improvement Plans (WQIPs) and an adaptive management process, to achieve RWLs in our region. WQIPs include prioritization of watershed conditions and pollutants, and contain numeric interim and final goals aimed at achieving RWLs. Unlike the LA permit, however, our permit does not include safe harbor allowing compliance with the process of WQIP development and implementation to excuse a permittee from compliance with RWLs.

Importantly, the RWL provisions have remained in place throughout these processes and permitting schemes that included the paradigm shifts, watershed planning, and prioritization plans. Certainly the reasoning behind the LA exception, if applicable at all, is not applicable to regions outside of LA, and any directive to include a safe harbor in robust permits that include watershed-based planning and integrated water management would run afoul of the anti-backsliding provisions of the Clean Water Act. Quite simply, since the San Diego permit has already been updated to include the paradigm shift, already contains prioritization and plans for meeting RWL requirements, and has chosen *NOT* to have a safe harbor, any relaxing of the conditions of the permit would not be as stringent as our existing permit, and thus would constitute backsliding under the Clean Water Act.

It is equally important to note that after receiving comments on all sides of the issue during permit adoption the Region 9 Water Board chose not to include a proposed safe harbor provision in the 2013 permit.

From a practical perspective relative to the direction of water supply in stormwater management, the San Diego region, which includes coastal south Orange County, differs in some important and substantial ways from its neighbor up north. First, while Los Angeles has the ability to utilize groundwater basins for infiltration and groundwater aquifer recharge for local water supply production, the San Diego region does not have available to it the larger underground basins for such storage. So, while our region's permit incentivizes and strives for more water supply from stormwater runoff, it may very well be that solutions to our continuing and serious water quality issues come in the form of more traditional source and treatment control technologies (such as on-site capture, infiltration, and retention) that have been part of the repertoire of stormwater management for some time.

Supporting Water Board Rational: TMDL Incorporation into MS4 Permits

To an equally large degree the justification for allowing a safe harbor is based on the development, monitoring, and analysis of 33 TMDLs in Los Angeles, coupled with paradigm shift. In fact, in justifying the exception the LA Regional Board mentions the importance of its TMDLs toward the achievement of fishable, swimmable, drinkable waters in LA when it says, "the majority of pollutants of concern from the Los Angeles County MS4 are addressed by the 33 TMDLs that are included in the Permit," (p. 37, Response to Comments), and it recognizes the prioritization of TMDLs as highest priority issues (p. 40, Response to Comments). The San Diego region, in contrast, has only a handful of TMDLs. The San Diego region remains much more reluctant to develop new TMDLs and instead will often look towards alternatives to TMDLs. Two instances where TMDL alternatives have been developed in just the last few years are in Oceanside's Loma Alta Slough (for nitrate impairment), and the Tijuana River Valley (for impairments of sedimentation and trash. In these instances, our Regional Board has elected for processes or procedures that do not have the stricter interim and final milestones and deadlines for achieving receiving water limitations and objectives that are found in TMDLs. And, our own regional permit includes Water Quality Improvement Plans that aim to prioritize and address pollutants within the Region and those WQIPs contain interim and final measurable benchmarks to show progress of meeting the goals of achieving RWLs. Without the RWLs kept in place, however, no enforcement mechanisms would exist for the Regional Board or citizens of our region if the WQIPs fail to meet the goals of the Clean Water Act. This regional variation makes it all the more imperative that the RWLs be kept and no safe harbor provided.

Additionally, the Santa Ana region possess at least 133 pollutants on 51 303d listed water quality limited segments in its jurisdiction with only 18 TMDLs in the implementation phase. The reluctance of the Regional Board to move timely with the development and implementation of TMDLs have allowed water bodies to languish in their impairment. Some of these TMDLs are technical TMDLs established by USEPA nearly 15 years ago still without an implementation plan. USEPA promulgated the Selenium TMDL for San Diego Creek, Lower Newport Bay, and Upper Newport Bay in 2002. The Regional Board issued a short-term groundwater discharge permit to dischargers in 2004 with Selenium effluent limitations based on CTR criteria and a deadline. Currently, dischargers are on their second Time Schedule Order with an anticipated compliance deadline tentatively planned for the 2030's. The environmental organizations working with dischargers and the Regional Board on addressing Selenium through a working group withdrew in protest over the perpetually delayed compliance deadlines. Arguments that, as the State Board states, "TMDL requirements and receiving water limitations, which may be implemented through the WMP/EWMP provisions, will be the means for achieving water quality standards for the majority of degraded water bodies in the region," ring hollow when regions outside of the LA region have so few TMDLs and the implementation of TMDLs can be measured in decades.

Finally with respect to time allowances, the appropriate way for our regions (that don't have the suite of TMDLs present in LA) to address those issues is through the MS4 permit and Time Schedule or other Orders that include interim and final milestones for compliance rather than an excuse from RWLs.

Without the definitive requirements of TMDLs, Coastkeeper and its members are left with just one way to measure whether our MS4s are meeting, or will meet, the requirements of the CWA.

That measure is the Clean Water Act itself, and the receiving water limitations provisions of the permits under the Act.

To date, zero third party lawsuits have been filed in San Diego for MS4 noncompliance. And yet while the new permits for LA and for San Diego region contain "carrots" to incentivize certain plans and programs aimed at meeting RWLs and water quality standards, the San Diego permit has maintained the "stick" of enforcement actions when and where necessary to ensure RWLs will be achieved. Without TMDLs or other time-certain measures, it is vital to our success that third-party enforcement actions regarding RWLs not be read out of existence. So much good has come from citizen involvement in the improvement of our waters, Coastkeeper thinks that foreclosing the possibility of citizen suits is inappropriate and unwelcome. Our efforts towards the development and implementation of our existing permit that aims to jointly address source control and water supply production are longstanding and remain ongoing. The San Diego region, stakeholders, and Regional Board have worked tirelessly to develop a permit that is robust, thoughtful, and forward looking, and one that incorporates both the carrot and the stick to incentivize moving forward in an earnest and meaningful way.

Prioritization and Unintended Consequences:

Like the LA permit, the Region 9 permit calls for prioritization of waterbodies and pollutants through its WQIPs. It is recognized that throughout the implementation of these prioritization plans, permittees will focus resources towards those water bodies or constituent pollutants designated as highest priorities. In doing so, it is also possible, if not expected, that dedicating enough resources towards particular focus areas to make a real difference in achievement of RWLs and TMDLs will result in the reallocation of resources away from lower priority watersheds or pollutants. In such instances, "orphaned" watersheds are likely to result. While the safe harbor is professed to allow an excuse from RWLs so long as permittees are focusing and working hard on priority issues, an unintended consequence of it would be to allow permittees to escape enforcement actions related to waterbodies it has shifted resources away from and lower priorities. The result would be degradation of a lower prioritized water body. Only by maintaining the strict RWL standards without a safe harbor can we be sure lower priority water bodies are adequately protected under the Clean Water Act. As the permit calls for prioritization of watershed issues, the compliance with a *process*, rather than a *standard*, could very well lead to degradation of water quality in a lower-priority or "orphaned" watershed or sub-watershed. Without receiving water limitations as the clear standard, Coastkeeper and our many members are left with no clear way to ensure degradation of waterbodies that are not prioritized does not occur.

Transparency:

The Draft Order maintains that the full transparency of the WMP/EWMP process is sufficient to allow proper oversight and public input into watershed planning to the extent that a safe harbor is not detrimental. Based on the experience of Coastkeeper in our regions, we believe the Order overestimates the resources and abilities of environmental and watershed organizations statewide to monitor the development and adequacy of the plans.

The San Diego permittees are currently developing their watershed-wide cross-jurisdictional plans (WQIPs) required under the Region 9 permit, which in many ways are analogous to the WMP/EWMPs of the LA permit. Our region contains 11 watersheds, including one that crosses

an international border and several of which cross military lands under federal jurisdiction. Each of these 11 draft watershed plans is lengthy, highly technical in many ways, detailed, and will only gain in length as the plans and deliverables are due to the Regional Board. Besides the limited staff at Coastkeeper that has done so it is very unlikely that any member of the public has attempted to review in detail each of the 11 watershed draft plans to date.

The lesson, we believe, is that while the Draft Order stresses that the development of alternatives to RWLs is a transparent process with opportunity for public input and oversight, the Order overestimates the resources of environmental and watershed organizations to monitor the development of these plans.

Quite simply put, the most transparent and legally-supported measuring stick for compliance is compliance with RWLs themselves, both in the Region 9 permit and all permits throughout California.

Thank you for the opportunity to comment on the Los Angeles Draft MS4 Order. Please feel free to contact us with any questions or for additional feedback. We look forward to working with you toward development of a meaningful and effective approach to stormwater management in our region.

Sincerely,

Matt O'Malley
Waterkeeper, Legal & Policy Director
San Diego Coastkeeper

Colin Kelly
Staff Attorney
Orange County Coastkeeper
Inland Empire Waterkeeper

January 21, 2015

Ms. Jeanine Townsend, Clerk to the Board
State Water Resources Control Board
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P.O. Box 100
Sacramento, CA 95812-0100
Submitted via email: commentletters@waterboards.ca.gov

Re: Comments on Proposed Draft Order SWRCB/OCC Files to A-2236(a)-(kk): In Re Petitions Challenging 2012 Los Angeles Municipal Separate Storm Sewer System Permit (Order No. R4-2012-0175)

Dear Members of the Board:

On behalf of the Natural Resources Defense Council, Los Angeles Waterkeeper, and Heal the Bay (collectively, "Environmental Groups"), petitioners to the Los Angeles County Municipal Separate Storm Sewer System (MS4) Permit (Order No. R4-2012-0175) ("2012 MS4 Permit"), we submit the following comments on the November 21, 2014 State Water Resources Control Board ("State Board") proposed draft order SWRCB/OCC Files A-2236(a) through (kk): In Re Petitions Challenging 2012 Los Angeles Municipal Separate Storm Sewer System Permit (Order No. R4-2012-0175) ("Draft Order"). We appreciate this opportunity to comment on the Draft Order.

I. Summary

The 2012 MS4 Permit presents a critical opportunity to meaningfully address the number one source of water pollution in the Los Angeles Region – urban runoff. Despite more than two decades of stormwater regulation, urban runoff continues to chronically impact human health and impair water quality at our beaches and in our rivers. It is time for this problem to be addressed in a way that will both reduce pollutant loading and guarantee attainment of water quality standards ("WQSs").

We support the State Board and Los Angeles Regional Water Quality Control Board's ("Regional Board") desire to promote stormwater capture to help augment local water supplies while addressing water quality concerns. Such an approach is critically important in helping California cope with current and future drought as well as the increasing challenges of climate change. This approach also has the potential to achieve healthy waterways and compliance with WQSs, as the law requires. Unfortunately, the 2012 MS4 Permit and the Draft Order fail to adequately promote this objective and instead provide safe harbors for Permittees that neither embrace a watershed approach nor commit to capture meaningful amounts of stormwater runoff – let alone guarantee compliance with WQSs.

As is detailed more fully in these comments, we oppose the 2012 MS4 Permit and the Draft Order because as currently written they represent bad public policy and are illegal.

First, the 2012 MS4 Permit contains safe harbors that retreat from more than a decade of precedence by the State and Regional Board requiring compliance in fact with WQSs in all instances. These safe harbors also treat dry weather and wet weather runoff the same, when under the law they are not. And the safe harbors treat watershed management programs ("WMPs") and enhanced watershed management programs ("EWMPs") the same, when by the defining terms of the permit they are not.

Moreover, the underlying justifications for the WMP/EWMP approach in the 2012 MS4 Permit are inadequate, and the Draft Order does not resolve the problems observed with the failed iterative process from the prior 2001 Permit.[1] With history as our guide, this ongoing, protracted approach will only lead to additional delay in achieving water quality objectives and protecting public health. Even assuming the WMP/EWMP process is sufficient to meet RWLs (which it is not, for the reasons described below), Permittees' compliance with the WMP/EWMP process cannot be assured. This means that dischargers could still be in violation of WQSs many years down the road. While we recognize that the draft order reads the permit to require that all WMPs and EWMPs include an express deadline for ultimate compliance in fact with RWLs, they must only be achieved at some undetermined "final date."[2] Even assuming the permit is interpreted or revised accordingly, a lengthy delay in achieving receiving water limitations still renders the 2012 Permit illegal.

The 2012 MS4 Permit and Draft Order also present the potential for serious unintended consequences. For example, in recent court filings, the County of Los Angeles has taken the extreme view that the 2012 MS4 Permit excuses all of the County's violations of the receiving water limitations ("RWLs") in the 2001 Permit – violations proven after six years of litigation in federal court. While we disagree with the County's claim, the County's position highlights the potential arguments the 2012 MS4 Permit may invite from Permittees seeking to evade responsibility for their contribution to water quality impairment.

Finally, in addition to the above major shortcomings, the 2012 MS4 Permit and Draft Order are also illegal[3] for the following reasons:

- They fail to ensure compliance with WQSs and total maximum daily load ("TMDL") provisions;
- The safe harbors violate anti-backsliding provisions;
- The safe harbors violate antidegradation provisions; and
- The findings proposed by the Draft Order are not supported by the 2012 MS4 Permit, the Draft Order itself, or by the evidence in the record.

There is a better way forward. We believe the State Board can achieve the mutual goals of water quality protection and stormwater capture by embracing compliance with WQSs while retaining critical enforcement discretion. Enforcement is a proven tool to drive success and can be used to motivate

[1] Los Angeles Regional Water Quality Control Board, Waste Discharge Requirements for Municipal Separate Storm Sewer and Urban Runoff Discharges Within the County of Los Angeles, and the Incorporated Cities Therein, Except the City of Long Beach, Order No. 01-082, NPDES Permit No. CAS004001 (Dec. 13, 2001) ("2001 Permit").
[2] *See e.g.*, Draft Order, at 44-45.
[3] For a full explanation of how the permit violates the law, *see* Memorandum of Points and Authorities in Support of Petition of NRDC, Los Angeles Waterkeeper, Heal the Bay for Review of Action by the California Regional Water Quality Control Board, Los Angeles Region, in Adopting the Los Angeles County Municipal Separate Stormwater National Pollutant Discharge Elimination System (NPDES) Permit; Order No. R4-2012-0175; NPDES Permit No. CAS004001 (Dec. 10, 2012) ("Environmental Groups' Petition"), SWRCB/OCC File No. A-2236(m), incorporated herein.

compliance where other regulatory methods have failed over the past two decades. As is discussed in more detail below, we propose an alternative compliance approach that retains the Boards' enforcement discretion, is consistent with the legal mandates of the Clean Water Act ("CWA") and avoids the numerous potential unintended consequences of the Draft Order.

A strong MS4 permit is critical to the health of Los Angeles waterways and the millions of people who depend on them. Moreover, because any final Order has the potential to create water quality policy statewide, a strong Order from the State Board is critical to water quality all across California.

We appreciate the State Board's consideration of these comments, and we urge the Board to strengthen water quality protections, the 2012 MS4 Permit and the Draft Order by, at a minimum, removing the 2012 MS4 Permit's safe harbor provisions.

II. Background

a. Stormwater Runoff is the Leading Source of Surface Water Pollution in Southern California

Waters discharged from municipal storm drains carry bacteria, metals, and other pollutants at unsafe levels to rivers, lakes and beaches in Los Angeles County. This pollution causes increased rates of human illness, harm to the environment, and an economic loss of tens to hundreds of millions of dollars every year from public health impacts alone. In fact, stormwater is the leading source of surface water pollution in all of Southern California. Monitoring data from mass mission stations collected between 2003 and 2013 revealed that WQSs were exceeded at least 1,283 times in Ballona Creek, Malibu Creek, Los Angeles River, Santa Clara River, Dominguez Channel, and Coyote Creek alone.[4] In addition, the majority of Los Angeles's waterways are impaired – 33 TMDLs, covering over a dozen major waterbodies, have been integrated into the 2012 MS4 Permit. Unfortunately, monitoring demonstrates that Los Angeles-area MS4s consistently contribute to exceedances of these TMDLs. In light of Los Angeles County's high rate of urbanization and persistent water quality problems in the region, the MS4 Permit demands the most effective management tools. Clear, enforceable provisions requiring strict compliance with WQSs are necessary to prohibit discharges from further impairing regional surface waters and impacting beneficial uses.

b. Stormwater Pollution Threatens Public Health, Impacts California's Economy and Undermines Watershed Restoration Efforts

Polluted urban runoff increases bacteria levels and illness rates among swimmers.[5] Contact with waters contaminated by stormwater runoff can lead to fever, chills, ear infections and discharge, coughing and respiratory ailments, vomiting, diarrhea and other gastrointestinal illness, and skin rashes.[6] Scientists reviewing 22 epidemiological studies found that 19 of them showed that adverse health effects were

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[4] Los Angeles County Department of Public Works, *Stormwater Monitoring Reports*, available at http://dpw.lacounty.gov/wmd/NPDES/report_directory.cfm.

[5] Curriero et al., *The Association Between Extreme Precipitation and Waterborne Disease Outbreaks in the United States, 1949-1994,* American Journal of Public Health, August 2001, 91:8 1194-1199. *See also*, Letter from Dr. Jennifer Jay to Mr. Sam Unger, Executive Officer and Members of the Board, Regional Board re: MS4 Permit for Los Angeles County, July 23, 2012.

[6] *See, e.g.*, Haile, et al., *The Health Effects of Swimming in Ocean Water Contaminated by Storm Drain Runoff*, Epidemiology 10(4): 355-63, 1999, at 356-57; Haile, R. W. et al., *An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay,* Santa Monica Bay Restoration Project, 1996, at 3.

significantly related to fecal indicator bacteria or bacterial pathogens.[7] One local analysis investigated health risks of people exposed to storm drain runoff while swimming in Santa Monica Bay and found that swimmers exposed directly in front of a storm drain experienced increased health risks of approximately 50-100 percent compared with people swimming more than 400 yards away from the drain.[8]

The Regional Board itself has acknowledged that the harm to the public from exceeding bacteria standards "is dramatic both in terms of health impacts to exposed beachgoers, and the economic cost to the region associated with related illnesses."[9] These health impacts come at tremendous cost—one study demonstrated that swimming at polluted beaches in Los Angeles and Orange Counties caused between 627,800 and 1,479,200 excess cases of gastroenteritis per year, resulting in annual health costs of between $21 and $51 million, or $176 and $414 million per year (depending on whether only market costs or both market and non-market costs, such as willingness-to-pay not to get sick, were considered).[10]

In addition, stormwater runoff in Los Angeles County's coastal waters causes or contributes to an enormous number of beach closures or advisories each year.[11] Beach closures and advisories result in direct and indirect negative effects on the coastal economy, such as lost revenue.[12] One study estimated that a hypothetical beach closure of Huntington Beach for one day would result in a loss of 1200 beach visits and associated economic losses of $100,000.[13] Conversely, the National Oceanic and Atmospheric Association found that improving water quality in Long Beach from a C grade to the healthier standards of Huntington City Beach (a B grade) would create $8.8 million in economic benefits over a 10-year period.[14]

Finally, stormwater runoff undermines efforts to restore and revitalize Los Angeles watersheds. For example, the Los Angeles River revitalization, which is currently gaining substantial attention as planning gets underway, will rely heavily upon Los Angeles River water quality to restore this heavily degraded ecological system. Without effective stormwater controls measured by compliance with WQSs, poor water quality originating from the region's MS4s threatens to severely undermine these efforts.

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[7] Pruss, A., *Review of epidemiological studies on health effects from exposure to recreational waters*, International Journal of Epidemiology 27:1-9, 1998, at 3.

[8] Haile, R. W. et al., *An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay,* Santa Monica Bay Restoration Project, 1996, at 54. *See also*, Haile, et al, *The Health Effects of Swimming in Ocean Water Contaminated by Storm Drain Runoff*, Epidemiology 10(4): 355-63, 1999, at 357.

[9] 2001 Permit, at 15-16.

[10] Given, S., et al., *Regional Public Health Cost Estimates of Contaminated Coastal Waters: A Case Study of Gastroenteritis at Southern California Beaches*, Environmental Science & Technology 40(16): 4851-4858, 2006, at 4856.

[11] Los Angeles County reported 2,430 total closing or advisory days in 2011 from all sources. Reported closing or advisory days are for events lasting six consecutive weeks or less. *See* Natural Resources Defense Council, *Testing the Waters: A Guide to Water Quality at Vacation Beaches*, 2012, available at http://www.nrdc.org/water/oceans/ttw/ttw2012.pdf.

[12] See Leeworthy, V.R. and Wiley, P.C., *Southern California Beach Valuation Project: Economic Value and Impact of Water Quality Change for Long Beach in Southern California*, National Oceanic and Atmospheric Administration, 2000, at 4 ("2000 NOAA Report").

[13] Hanemann, M. et al., *Welfare Estimates for Five Scenarios of Water Quality Change in Southern California: A Report from the Southern California Beach Valuation Project*, Marine Ecosystem Services Partnership, November 2005, at 7-8.

[14] 2000 NOAA Report, at 9, 15.

c. Watershed-based and Green Infrastructure Solutions are the Correct Approach to Control Stormwater Pollution

Controlling pollution from MS4 systems has far-reaching economic and social benefits for the State. To further that end, watershed-based best management practices ("BMPs") are a valuable tool for controlling urban runoff and have a long history in Los Angeles. It was the 1996 MS4 Permit that first adopted the watershed approach and required the development and implementation of the Standard Urban Stormwater Mitigation Plan ("SUSMP") to retain, treat and infiltrate stormwater generated by developed areas. (1996 Los Angeles MS4 Permit at 5, 7-8; 2000 Los Angeles County SUSMP, at 10.) Since then, Los Angeles County (in 2009), and several cities - City of Santa Monica (in 2010), City of Long Beach (in 2010), and City of Los Angeles (in 2012) - have adopted additional low-impact development ("LID") ordinances prior to the requirement in the 2012 MS4 Permit.

Environmental Groups have long supported the use of green infrastructure or LID techniques to control urban runoff. Green infrastructure provides multiple benefits to surrounding communities at a higher benefit-cost ratio when compared to grey infrastructure.[15] A 2007 U.S. Environmental Protection Agency (EPA) study found that "in the vast majority of cases . . . implementing well-chosen LID practices saves money for developers, property owners, and communities while protecting and restoring water quality."[16] With only "a few exceptions," the EPA study found that "[t]otal capital cost savings ranged from 15 to 80 percent when LID methods were used" instead of conventional stormwater management techniques.[17] The EPA study is not alone in reaching this conclusion. A report by ECONorthwest concluded that LID methods not only "cost less to install, have lower operations and maintenance (O&M) costs, and provide more cost-effective stormwater management and water-quality than conventional stormwater controls" but they also provide "ecosystem services and associated economic benefits that conventional stormwater controls do not.[18] Moreover, a survey released by the American Society of Landscape Architects in 2011 found that green infrastructure reduced or did not influence project costs 75 percent of the time."[19]

In this time of drought, protecting and augmenting local water supplies is essential for long-term sustainability. A report by the Natural Resources Defense Council found that implementing LID practices at new and redeveloped residential and commercial properties in urbanized areas of Southern California and limited portions of San Francisco Bay has the potential to increase local water supplies by up to 405,000 acre-feet of water per year by 2030.[20] This volume of water accounts for roughly two-thirds of

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[15] U.S. Environmental Protection Agency, *Case Studies Analyzing the Economic Benefits of Low Impact Development and Green Infrastructure Programs* (August 2013), *available at* http://water.epa.gov/polwaste/green/upload/lid-gi-programs_report_8-6-13_combined.pdf.

[16] U.S. Environmental Protection Agency, *Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices,* December 2007, at iii. available at http://water.epa.gov/polwaste/green/upload/2008_01_02_NPS_lid_costs07uments_reducingstormwatercosts-2.pdf.

[17] *Id.* at iv.

[18] ECONorthwest, *The Economics of Low Impact Development: A Literature Review,* November 2007, at 4, available at http://www.econw.com/media/ap_files/ECONorthwest-Economics-of-LID-Literature-Review_2007.pdf,

[19] Stormwater Case Studies, American Society of Landscape Architects, available at http://www.asla.org/stormwatercasestudies.aspx.

[20] Natural Resources Defense Council, *A Clear Blue Future: How Greening California Cities Can Address Water Resources and Climate Challenges in the 21st Century*, August 2009, at 4, available at http://www.nrdc.org/water/lid/files/lid_hi.pdf ("A Clear Blue Future").

all water used by the City of Los Angeles each year.[21] Historically, southern California has imported approximately 50 percent of its water supply from distant, energy-intensive sources such as the Sacramento-San Joaquin Delta and the Colorado River.[22] Green infrastructure thus has the potential to greatly reduce Los Angeles' dependence on imported water.

Environmental Groups embrace stormwater capture and reuse as it provides water quality *as well as* water supply benefits. However, as is discussed more fully in Section VIII below, the 2012 MS4 Permit's emphasis on stormwater capture and reuse without mandating ultimate compliance with WQSs loses sight of CWA requirements. Legal requirements aside, without the "backstop" of water quality standard compliance, the MS4 Permit's effectiveness to protect and restore waters of the United States and their beneficial uses is questionable. Instead of delaying the provisions to strictly comply with WQSs, the 2012 MS4 Permit should rely on proactive enforcement of all its requirements.

III. The 2012 MS4 Permit is a Step Backwards in Stormwater Regulation

The 2012 MS4 Permit's safe harbor provisions defer compliance with the RWLs and TMDL limitations for Permittees that elect to participate in a WMP or an EWMP, and violate multiple provisions of the CWA and other federal and state regulations. This approach represents a significant step backwards in stormwater regulation in California.

a. The 2001 Permit Properly Rejected Safe Harbors to the RWL Provisions

Similar to the 2012 MS4 Permit, the 2001 Permit contained RWL provisions prohibiting "discharges from the MS4 that cause or contribute to the violation of Water Quality Standards or water quality objectives."[23] Permittees were directed to begin remedial measures immediately if discharges violated WQSs.[24] If exceedances of WQSs persisted, notwithstanding control measures, Permittees were required to "assure compliance" through an iterative process by preparing a compliance report that identifies the violations and adopting more stringent pollution control measures to correct them.[25]

As the Draft Order recognizes, the requirement to comply with the 2001 Permit's iterative process was designed to assist Permittees in meeting water quality goals, but did not excuse violations of WQSs based on Permittees' efforts to comply with these standards.[26] One reason for rejecting a safe harbors in the 2001 Permit was EPA's position that such an approach is illegal. In fact, an earlier MS4 permit for Orange County, approved by the State Board, had included language stating "the permittees will not be in violation of [receiving water limitations] so long as they are in compliance with [the iterative process set forth in the permit]."[27] The EPA objected to this approach as a "safe harbor" which illegally deemed the Permittees in compliance with the permit regardless of whether water quality standards were then met.[28] In response, the State Board adopted Order No. 99-05, which directed the Regional Boards to

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[21] *Id.*
[22] *Id.,* at 18-19.
[23] 2001 Permit, at Part 2.1.
[24] *Id.*, at Part 2.3.
[25] *Id.*
[26] Draft Order, at 14.
[27] State Water Resources Control Board, *Own Motion to Review the Petition of Environmental Health Coalition to Review Waste Discharge Requirements Order No. 96-03*, State Board Order No. WQ 98-01, at 6-7.
[28] State Water Resources Control Board, *Own Motion Review of the Petition of Environmental Health Coalition to Review Waste Discharge Requirements Order No. 96-03, NPDES permit No. CAS0108740 for Storm Water and*

include receiving water limitations language devised by EPA, without a safe harbor provision, into all future MS4 permits.[29]

The Regional Board has consistently supported the 2001 Permit approach in both the enforcement context[30] and in defense of the 2001 Permit in Los Angeles County and 43 cities' legal challenge, and rightfully so - this approach is mandated by both the federal CWA and the California Porter-Cologne Act.[31] Specifically, the Regional Board has stated:

> Permittees would like to read a "safe harbor" into the Permit: if a permittee was in compliance with the iterative process specified in Sections 2.3 and 2.4 of the Permit, it would be in compliance with the Permit, regardless of whether water quality standards are met… In other words, if a permittee is *trying* to meet water quality standards, it would be the same as meeting them. The Regional Board did not include a safe harbor in the Permit and, *under California law, could not have done so*.[32]
>
> The Regional Board's position then, as now, is that the Permit cannot be read so as to excuse exceedances of water quality standards. A permittee cannot shield itself from liability for causing exceedances of water quality standards simply by invoking the iterative process.[33]

The Ninth Circuit Court of Appeal confirmed the 2001 Permit's approach, holding that "no such 'safe harbor' is present in this Permit … [there is] no textual support for the proposition that compliance with certain provisions shall forgive non-compliance with the discharge prohibitions."[34]

b. The 2012 MS4 Permit's Safe Harbors Allow and Excuse Exceedances of WQSs in Certain Circumstances

In contrast with the 2001 Permit, the 2012 MS4 Permit unjustifiably and illegally postpones the requirement that MS4 Permittees must strictly comply with WQSs. Rather, Permittees have two different compliance options, known as WMPs and EWMPS, which trigger application of a safe harbor.[35] These programs effectively allow a Permittee to draft their own permit requirements, conditions, and schedules for compliance.

Under a WMP, a Permittee is required to identify water quality priorities, select watershed control measures to be implemented, and establish compliance schedules for addressing water quality

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Urban Runoff from the Orange County Flood Control District and the Incorporated Cities of Orange County Within the San Diego Region, Issued by the California Regional Water Quality Control Board, San Diego Region, State Board Order: WQ 99-05, at 1, available at http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/1999/wq1999_05.pdf ("WQ Order No. 99-05).

[29] *See* WQ Order 99-05.

[30] Brief of Amicus Curiae California Regional Water Quality Control Board, Los Angeles Region, in *Santa Monica Baykeeper v. City of Malibu* No. CV 08-1465-AHM (PLAx) (C.D. Cal.) (filed Feb. 5, 2010), at 8 ("Regional Board Malibu Amicus Brief").

[31] *See, In re L.A. County Mun. Storm Water Permit Litigation*, No. BS 080548, at 4-7 (L.A. Super. Ct. Mar. 24, 2005).

[32] Regional Board Malibu Amicus Brief, at 8 (emphasis added).

[33] *Id.* at 9.

[34] *Natural Resources Defense Council v. County of Los Angeles* (2011) 673 F.3d 880, 897 (reversed and remanded on other grounds). *See also*, *Natural Resources Defense Council v. County of Los Angeles* (Aug. 8, 2013) No. 10-56017, 2013 Westlaw 4017155.

[35] 2012 Permit, at Part VI.C.

priorities.[36] For an EWMP, a Permittee must, in addition to WMP requirements, where feasible within a given watershed, retain all storm water runoff from the 85th percentile, 24-hour storm event for the drainage areas tributary to identified regional projects.[37] Under both options, Permittees must conduct a Reasonable Assurance Analysis ("RAA") to assess whether non-85th percentile retention projects within these programs will result in discharges that achieve WQSs and TMDL limitations or water quality based effluent limitations ("WQBELs") in the 2012 MS4 Permit.[38]

Although it is a stated goal of these programs to ensure that stormwater discharges do not cause or contribute to exceedances of RWLs,[39] and that TMDL waste load allocations ("WLAs") are achieved**, it is not a requirement that the programs achieve these results in fact**. Permittees are instead given a safe harbor from the prohibition on violations of RWLs, or, in some cases of TMDL limits, if they participate in a WMP or an EWMP – regardless of whether RWLs or TMDLs are achieved.[40]

The 2012 MS4 Permit's safe harbors are exceedingly broad and allow exceedances of WQSs and TMDLs at various stages of plan and development. First, during the period of plan development and review,[41] the Permittee is excused for violations of the Permit's RWLs:

> Upon notification of a Permittee's intent to develop a WMP or EWMP and prior to approval of its WMP or EWMP, a Permittee's full compliance with all of the following requirements shall constitute a Permittee's compliance with the receiving water limitations provisions in Part V.A. not otherwise addressed by a TMDL…[42]

Second, after approval of a Permittee's WMP or EWMP by the Regional Board or the Board's Executive Officer, a safe harbor excuses liability for a violation of all RWLs if the WMP or EWMP addresses that water body-pollutant combination, regardless of whether or not compliance with the RWL is actually achieved:

> A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or EWMP shall constitute a Permittee's compliance with the receiving water limitations provisions in Part V.A. of this Order for the specific water body-pollutant combinations addressed by an approved Watershed Management Program or EWMP.[43]

Third, the 2012 MS4 Permit provides a safe harbor from certain TMDL requirements. Specifically, the 2012 MS4 Permit provides a safe harbor for interim TMDL WLAs for Permittees indicating their intent to develop a WMP or an EWMP:

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[36] *Id.* at Part VI.C.5.
[37] *Id.* at VI.C.1.g.
[38] *Id.* at VI.C.1.g; VI.C.5.b.iv(5).
[39] *See, e.g.*, *id.* at VI.C.5.b.ii.
[40] In some circumstances the 2012 Permit provides a safe harbor for compliance with either interim or final TMDL limits, or both.
[41] For a WMP, the period of plan development and review is up to 28 months from the 2012 MS4 Permit's effective date, and for an EWMP, up to 40 months from the 2012 MS4 Permit's effective date before it may be approved. *Id.* at VI.C.4.a.)
[42] *Id.* at Part VI.C.2.d.
[43] *Id.* at VI.C.2.b. (emphasis added).

> Upon notification of a Permittee's intent to develop a WMP or EWMP and prior to approval of its WMP or EWMP, a Permittee's full compliance with all of the following requirements *shall constitute a Permittee's compliance* with provisions pertaining to interim WQBELs with compliance deadlines occurring prior to approval of a WMP or EWMP.[44]

And, for Permittees implementing an EWMP, the 2012 MS4 Permit provides a safe harbor for all interim TMDLs[45]and final limits other than for Trash TMDLs:

> *A Permittee shall be deemed in compliance* with an applicable final water quality-based effluent limitation and final receiving water limitation for the pollutant(s) associated with a specific TMDL if… (4) In drainage areas where Permittees are implementing an EWMP, (i) all non-storm water and (ii) all storm water runoff up to and including the volume equivalent to the 85th percentile, 24-hour event is retained for the drainage area tributary to the applicable receiving water.[46,47]

By allowing these safe harbors, the 2012 MS4 Permit excuses compliance with RWLs and TMDL WLAs despite the State Board's clear goal to achieve WQSs and the 2001 Permit's clear mandate.

IV. The WMP/EWMP Approach Falls Short of the State Board's Stated Goals

The Draft Order emphasizes that "[c]ompliance with water quality standards is and should remain the ultimate goal of any MS4 permit."[48] Despite this clear mandate, the safe harbors discussed above, do not guarantee achievement of water quality standards. Moreover, the 2012 MS4 Permit's misguided adaptive management process and inadequate technical requirements undermine the goals of meeting water quality standards and promoting stormwater capture.

a. The 2012 MS4 Permit's WMP/EWMP Provisions Do Not Ensure the Proper Rigor, Accountability, and Transparency to Lead to the Achievement of WQSs

The Draft Order's endorsement of the WMP/EWMP alternative compliance approach is based on the mistaken belief that the 2012 MS4 Permit's WMP and EWMP provisions ensure the "appropriate rigor, transparency, and accountability" and "are designed to lead to achievement of receiving water limitations."[49] The Draft Order seeks to distinguish the WMP/EWMP approach from the RWL provisions in the 2001 Permit primarily based on the following reasons: (1) unlike the iterative approach, the adaptive management process provides Permittees the opportunity to modify and improve control measures, (2) the 2012 LA MS4 Permit requires Permittees to conduct a RAA for each water body-pollutant combination incorporated into the WMP/EWMP, (3) the new permit requires specific compliance deadlines and interim milestones within the WMP/EWMP for achieving RWLs. Yet, as is explained below, none of these provisions ensures the WMP/EWMP alternative compliance approach will result in achieving RWLs and thus cannot provide justification for the inclusion of safe harbors.

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[44] *Id.* at VI.E.2.d.i(4)(d) (emphasis added).
[45] *Id.* at VI.E.2.d.i(4).
[46] *Id.* at VI.E.2.e.i. (emphasis added).
[47] The Draft Order's attempt to add a backstop to this provision falls short because it merely adds the requirement to engage in the inadequate adaptive management process. *See* Section IV.a.i. below.
[48] Draft Order at 14.
[49] Draft Order, at 32.

i. The Adaptive Management Process Suffers From the Same Shortcomings as the Failed Iterative Approach

We agree with the Regional and State Boards that the iterative process has not been effective at bringing Permittees into compliance with WQSs.[50] The Draft Order's attempt to draw a distinction between the adaptive management process and the failed iterative process, however, are without merit. Upon even cursory examination, the adaptive management process is essentially a "rebranded" iterative process and suffers from its same shortcomings.

For example, the Regional Board claims that the iterative process has not resulted in the water quality outcomes that they had hoped for because it: (1) failed to specify "parameters regarding expectations of timeframes or type(s) of additional monitoring needed"; (2) provided "little guidance on reporting or compliance evaluations"; (3) gave Permittees "wide discretion on the level of detail to include in their plan to address RWLs exceedances"; and (4) is "largely reactive in that permittees are only required to take certain actions to evaluate and modify their BMPs and control measure once there has been an exceedance of a RWL."[51]

Ironically, all of the deficiencies of the iterative process that are identified by the Regional Board also exist under the adaptive management process:

- The adaptive management process provisions in the 2012 MS4 Permit do not provide any guidelines to determine the new expected timeframes for meeting compliance;
- The adaptive management process provisions do not mention whether additional monitoring is required (in contrast, the need for additional monitoring *is* recognized under the iterative process);
- The adaptive management process provisions say nothing about reporting or compliance evaluation requirements, or requirements to develop an implementation schedule (whereas the latter *is required* by the iterative process); thus, the adaptive management process provisions also give Permittees wide latitude regarding the level of details they need to include in their modified WMPs/EWMPs; and
- The adaptive management process is as ineffective in ensuring continual improvement in BMPS as the iterative process. The trigger for modification requests by Permittees under the adaptive management process is "when anticipated outcomes are not achieved."[52] Therefore, Permittees are not required to proactively evaluate the effectiveness of their BMPs but rather can modify their strategies when they realize that their BMPs will not be able to achieve the WQSs by the proposed deadlines. As a result, the adaptive management process is just as reactive as the iterative approach, which is triggered when a MS4 discharge is determined to have caused or contributed to an exceedance of a RWL.[53]

In addition, the Regional Board claims – and the Draft Order agrees – that the adaptive management process provides more transparency than the iterative approach. The adaptive management process

[50] Draft Order, at 14. *See also*, Los Angeles Regional Water Quality Control Board Comments on Receiving Water Limitations Questions, August 15, 2013, at 4 ("Regional Board RWL Comments").
[51] *Id.*
[52] *Id.* at. 6.
[53] 2012 Permit, at Part V.A.3.a.

does provide the opportunity for stakeholder review and input.[54] However, the decision to approve or disapprove program modifications is still at the Regional Board Executive Director's discretion, similar to the iterative approach.[55] Indeed, only where a change is considered a *permit modification* is the public afforded a meaningful opportunity to challenge and/or enforce permit terms.[56]

Finally, the Draft Order's attempt to distinguish the adaptive management process from the iterative process by claiming that the adaptive management approach requires Permittees to conduct "adaptive management on their own initiative without waiting for direction from the regional water board" is misplaced.[57] Under the iterative process, the Permittees *share* responsibility with the Regional Board to identify exceedances of WQSs. As the Regional Board stated, "… Part 2.3a grants the Regional Board the authority to trigger the iterative process, but this does not erode the permittees' responsibilities in the first instance…. the language merely ensures that *in addition* to the City's obligation to identify exceedances and direct the permittees to take future actions, the Regional Board can determine that there are exceedances and direct the permittees to take further actions."[58] In other words, there is no distinction between the adaptive management approach and the iterative process. Under both, Permittees may, on their own initiatives, evaluate their monitoring data and initiate the process to modify and improve their BMPs to ensure compliance with water quality standards.

ii. The RAA Requirements are Inadequate

The 2012 Permit requires WMPs and EWMPs (for non-85th percentile retention projects) to include a Reasonable Assurance Analysis (RAA) "to demonstrate that applicable water quality based effluent limitations and receiving water limitations shall be achieved."[59] However, the RAA provisions fail to ensure compliance with WQSs, and do not resolve problems with the prior iterative approach. For example, the RAA must be "quantitative and performed using a peer-reviewed model in the public domain"[60] and the 2012 MS4 Permit lists at least three approved models for this purpose. Yet at least one of those models – the Watershed Management Modeling System (WMMS) – was not peer-reviewed nor was its effectiveness and rigor validated through the permit adoption proceedings. Furthermore, notwithstanding the RAA requirement, Permittees are allowed to modify any BMP every two years pursuant to the adaptive management process based on monitoring data and new information, and without having to conduct a new RAA.[61]

In an effort to strengthen the RAA requirement, the Draft Order proposes to add language to the 2012 MS4 Permit that would require Permittees to conduct an RAA at least every six years. The State Board claims this will add greater rigor and accountability to the process of achieving WQSs.[62] However, this added requirement to conduct an RAA at least every six years does nothing to solve the overarching problems of the WMP/EWMP approach: Permittees are still allowed to *knowingly (and indefinitely)*

[54] Specifically, anytime a Permittee proposes modifications to deadlines and/or BMPs, the requests are subject to a 30-day comment period. Regional Board RWL Comments, at 4, 7; Draft Order, at 35.
[55] 2012 Permit, at Part VI.C.8.iii.
[56] *See e.g.,* 40 C.F.R. §122.62; 40 C.F.R. Part 124. *See also*, CA Water Code §13320.
[57] Draft Order, at 49.
[58] Regional Board Malibu Amicus Brief, at 11.
[59] 2012 Permit, at Part VI.C.1.g.
[60] 2012 Permit, at Part VI.C.5.v.iv.5.
[61] 2012 Permit, at Part VI.C.8.
[62] Draft order, p. 73

exceed WQSs and they may do so without suffering any penalties pursuant to the adaptive management process.

iii. Requirements to Include Deadlines Are Undermined by Never-ending Opportunities for Extensions

The 2012 MS4 Permit's provisions related to deadlines and compliance milestones under the WMP/EWMP compliance approach lack specificity and rigor. Many deadlines may be extended via the adaptive management process as Permittees are allowed to repeatedly modify deadlines and/or BMPs every 2 years.[63] For example, the 2012 MS4 Permit does not impose a limit on the number of times Permittees may propose modifications under the adaptive management process. The Draft Order claims it "cannot accept a process that leads to a continuous loop of iterative WMP/EWMP implementation without ultimate achievement of receiving water limitations"[64] and yet the adaptive management process allows just that – an endless process of continual WMP/EWMP implementation and time extensions, which essentially removes any rigor, specificity and Permittee accountability.

b. The WMP Approach Does Not Require Stormwater Capture to be Considered or Implemented by the Permittees

The Regional Board and Draft Order repeatedly highlight the 2012 MS4 Permit's incentives for regional, multi-benefit stormwater projects that have the potential to augment local water supply. We whole-heartedly support projects that provide both water quality and water supply benefits. However, the proclaimed incentives do not exist with regard to the WMPs or "non-enhanced" watershed management programs. Permittees that elect to engage in a WMP are not required to consider regional, multi-benefit projects such as stormwater capture, yet they receive the same safe harbor protections as the Permittees who, under the EWMP approach, are required to consider stormwater retention wherever feasible.

The 2012 MS4 Permit requires WMPs to:

- Prioritize water quality issues resulting from storm water and non-stormwater discharges from the MS4 to receiving waters,
- Identify and implement strategies, control measures, and BMPs to achieve the outcomes specified [above],[65]
- Execute an integrated monitoring program to determine progress towards outcomes,
- Modify controls measures and BMPs according to adaptive management process, and
- Provide stakeholder input.[66]

WMP Permittees must also demonstrate compliance with the LID and Green Streets requirements.[67] But nowhere in the 2012 MS4 Permit are WMP Permittees required to implement, or even consider, multi-benefit stormwater projects generally, or capture and reuse projects specifically. Thus, WMPs are not required to provide *any* water supply benefits.

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[63] 2012 Permit, at Part VI.C.8.a.
[64] Draft Order, at 32.
[65] Outcomes specified are RWLs, TMDL requirements, non-stormwater discharge prohibition. 2012 Permit, at Part VI.C.1.d.
[66] *Id*., at Part VI.C.1.
[67] *Id.*, at Part VI.C.4.c.

Moreover, in practice, WMPs submitted to date by Permittees have proven difficult to evaluate[68] because many WMPS lack meaningful specificity regarding the chosen BMPs.[69] For example, although the 2012 MS4 Permit requires that, "[e]ach plan shall include…[f]or each structural control and non-structural best management practice, the number, type, and location(s) and/or frequency of implementation,"[70] several WMPs fail to provide required specificity on the types, sizes, and locations of proposed BMPs.[71] Even without the specificity required, however, it is clear that little emphasis is placed on the use of multi-benefit strategies in the WMPs, on specific additional benefits that could be achieved (e.g., increased water supply), or on partnerships outside of the MS4 community that could be formed to increase utility of land area used for stormwater management.[72] It is therefore nonsensical to give a safe harbor to Permittees that are only required to meet the most minimum of requirements – and can ignore the benefits of stormwater capture.[73]

c. The EWMP Approach Does Not Ensure Ultimate Compliance with WQSs

The 2012 MS4 Permit provides that Permittees will be deemed in compliance with final WQBELs and other TMDL-specific limitations in drainage areas where the Permittees are implementing an EWMP and, where feasible, capturing all stormwater runoff up to an 85th percentile storm.[74] When a Permittee chooses to implement the stormwater retention approach, no RAA is required for projects designed to meet the 85th percentile standard. Yet the 2012 MS4 Permit's Administrative Record fails to demonstrate that retention of the 85th percentile storm event will, in fact, achieve compliance with either WQSs required under the RWLs provisions, or with numerous TMDL WLAs requirements in the 2012 MS4 Permit. The Draft Order, EPA, and Environmental Groups all seem to agree on this point.

At the November 8, 2012 Permit Adoption Hearing, EPA specifically questioned the adequacy of the record on this point:

> [T]he EPA guidance on incorporating TMDLs into … MS4 permits that has been around since 2002 talks about when you come up with a BMP-based approach for incorporating a TMDL into a permit—so basically this is a BMP-based approach. You would be retaining the 85th percentile

[68] Environmental Groups provided comments on many of the Draft WMPs submitted by the Permittees to the Regional Board on August 18, 2014.
[69] *See* Comments on Watershed Management Plans and Monitoring Plans Pursuant to Requirements under the Los Angeles County Municipal Separate Storm Sewer System Permit, NPDES Permit No. CAS004001, Order No. R4-2012-0175 submitted by NRDC, LA Waterkeeper, and Heal the Bay, August 2014, attached to Environmental Groups' accompanying Request for Official Notice as Exhibit K.
[70] 2012 Permit, at Part VI.C.5.b.iv(4).
[71] For example, although the Lower San Gabriel River WMP lists hundreds of *potential* BMP sites for regional or street right-of-way sites, the Permittees do not provide any specifics on BMP type, location, or size – let alone an indication of which ones will be implemented. *See,* Lower San Gabriel WMP, at 3-61 - 3-70, attached to Environmental Groups' accompanying Request for Official Notice as Exhibit E.
[72] *See e.g.,* Lower Los Angeles River Upper Reach 2 WMP, at 65 (prioritizing cost considerations over water supply benefits).
[73] Environmental Groups acknowledge that some WMP Permittees are prioritizing regional and multi-benefit projects voluntarily, but we maintain that consideration of such projects should be a requirement in all watershed management programs.
[74] 2012 Permit, at Part VI.E.2.e.i(4).

> storm—you have to have in the record for the permit the justification for how that gets to those specific wasteload allocations….[75]
>
> We've been very involved with the county's modeling and … we don't have that rigorous analysis that's been—that's required by the EPA guidance for saying and showing that that specific retention is going to achieve the numeric wasteload allocation…. I haven't seen the support in the administrative record, the fact sheet or otherwise.[76]

The Regional Board's attempts to justify the 85th percentile standard fall short. Following EPA's comments at the 2012 Hearing, the Regional Board Chair asked staff directly if the evidence requested by EPA was in the record.[77] The Board's Executive Officer, Mr. Unger replied:

> Yes. Yes. It was discussed when the county first presented at the last hearing, the enhanced management approach, they discussed their – the watershed modeling system that they would be using to demonstrate a reasonable assurance.[78]

However, the record, including watershed modeling discussed by Los Angeles County, does not anywhere demonstrate that retention of the 85th percentile storm will protect WQS or achieve TMDL WLAs as required by the CWA or EPA guidance. Moreover, the County's presentations merely demonstrate that the stormwater retention approach represents a cost-effective or "appropriate design storm [size] for use in BMP planning and design,"[79] not a standard designed to meet WQSs or TMDL limits.

The Draft Order acknowledges this deficiency in noting a "lack of verification in the Los Angeles MS4 Order that final WQBELs and other TMDL-specific limitations or receiving water limitations will in fact be met as a result of implementation of the storm water retention approach."[80] Further, the Draft Order states, "the stormwater retention approach does not provide a level of assurance of success that would lead us to conclude that its implementation, with nothing else, is sufficient to constitute compliance with final WQBELs and other TMDL-specific limitations."[81] Despite the Draft Order's recognition of this significant shortcoming in the EWMP approach, it nevertheless upholds the adaptive management process provisions of the 2012 MS4 Permit, which will only result in a continuous loop of program implementation and monitoring without ensuring ultimate compliance. This approach merely engages Permittees in a never-ending cycle of adaptive management which in practice, as discussed in Section IV.a.i. above, closely resembles the failed iterative approach, and will not achieve water quality goals. It does not resolve the underlying problem with a lack of evidence in the record, nor does it guarantee compliance with water quality standards.

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[75] Mr. John Kemmerer, EPA, November 8 Hearing, at 365:24-25 to 366:1-7.
[76] Mr. John Kemmerer, EPA, November 8 Hearing, at 366:10-18; 367:6-8.
[77] *See* Ms. Maria Mehranian, Regional Board Chair, November 8 Hearing, at 368:13-14 (stating "So—I'm sorry… it is in the record?").
[78] Mr. Sam Unger, at 368:15-19.
[79] Mr. Gary Hildebrand, November 8 Hearing, at 220:18-19. Regional Board staff also indicated their understanding that selection of the 85th percentile storm was a cost consideration, not an independent assessment of the storm size required to be retained to meet applicable TMDL WLAs. *See also*, Mr. Sam Unger, November 8 Hearing, at 360:14-17 ("when you look at that curve, sort of a dollars versus precipitation event occurred, right about that 85th percentile – right at the 85th percentile, the curve trends up very markedly.").
[80] Draft Order, at 40.
[81] *Id*. at 42.

V. The Draft Order's Justifications for Providing Permittees Additional Compliance Time are Misguided

The Regional Board claims – and the Draft Order seems to agree – that since the adoption of the 2001 Permit, there has been a paradigm shift from viewing stormwater as a liability to a regional asset,[82] as well as from taking an individual programmatic approach to water quality improvement to taking a collaborative, watershed-based approach.[83] This "new" information informed the Regional Board that Permittees need additional time to bring themselves into permit compliance and ultimately shaped the WMP/EWMP approach in the 2012 MS4 Permit. As discussed in further detail below, the Regional Board's – and the Draft Order's – justifications are flawed because these approaches are not a novel concept to the either the Regional Board or Permittees.

a. Treating Stormwater as a Regional Asset is Not a New Concept

The concept that stormwater can be captured to provide a beneficial source of groundwater recharge or water supply is not new. For example, a 1994 EPA report in the record notes that "[b]efore urbanization, groundwater was recharged by precipitation infiltrating through pervious surfaces . . . Urbanization, however, reduced the permeable soil surface area through which recharge by infiltration could occur. This resulted in much less groundwater recharge. . . ."[84] The report goes on to state, "with a reasonable degree of site-specific design considerations to compensate for soil characteristics, infiltration may be very effective in controlling both urban runoff quantity and quality problems. This strategy encourages infiltration of urban runoff to replace the natural infiltration capacity lost through urbanization. . . ." In light of this record, the Regional Board cannot claim that use of stormwater capture and infiltration to increase groundwater recharge or create water supplies is categorically new information.

Further, in the years since the 2001 Permit's adoption, use of practices such as LID and green infrastructure have proliferated at both site-specific and regional or watershed scales[85] For example, the City of Los Angeles began implementing stormwater capture projects over a decade ago. The Sun Valley Park Drain and Infiltration System Project was completed in 2006 by the Los Angeles Flood Control District.[86] The Riverdale Avenue Green Street project was completed in early August 2010.[87] Construction for the Garvanza Park Stormwater BMP Project started in November of 2010, and was completed in March of 2012.[88] And, the South L.A. Wetlands Park was completed in February of 2012.[89]

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[82] *Id.* at 20.

[83] Regional Board RWL Comments, at 8.

[84] U.S. Environmental Protection Agency, *Potential Groundwater Contamination from Intentional and Nonintentional Stormwater Infiltration*, EPA/600/SR-94/051, May 1994, at 1, 6 ("EPA Stormwater Infiltration Report").

[85] To this end, we note that the 2001 Permit contained requirements for development to "Maximize the percentage of pervious surfaces to allow percolation of storm water into the ground" and "Minimize the quantity of storm water directed to impervious surfaces and the MS4." 2001 Permit, at Part 4.D.

[86] *Sun Valley Park Drain and Infiltration System*, Department of Public Works, accessed at http://dpw.lacounty.gov/wmd/svw/SVP.aspx.

[87] *The Tale of Two Green Streets,* LA Stormwater, accessed at http://www.lastormwater.org/blog/2010/09/the-tale-of-two-green-streets-2/.

[88] *Garvanza Park Stormwater BMP Project,* North East Trees, accessed at https://northeasttrees.wordpress.com/2011/01/14/garvanza-park-stormwater-bmp-project/. *See also, Los Angeles To Celebrate Grand Re-Opening of Garvanza Park,* LA Stormwater, accessed at http://www.lastormwater.org/blog/2012/03/la-to-celebrate-grand-re-opening-of-garvanza-park/.

In light of these projects, neither Permittees nor the Regional Board can claim that green infrastructure solutions are somehow "new" knowledge or new solutions to an old problem.

Nonetheless, even if we agreed with the Regional Board's position that it has only recently identified new techniques to address stormwater pollution, it still does not logically lead to the conclusion that more time for compliance with RWLs is warranted. If anything, the additional options now available to Permittees should mean they need *less* time to comply with the water quality objectives rather than more, because there are *more* tools at the Permittees' disposal. Overall, the additional time given for compliance is misguided, most significantly, because Permittees have had 13 years to achieve WQSs since the adoption of the 2001 Permit (including through use of regional or watershed-based strategies or use of stormwater capture and groundwater recharge practices available to the Permittees). The State Board should not be sympathetic to Permittees' claims that they cannot comply with WQSs overnight because immediate compliance has been required since 2001, and the Permittees have yet to meet this mandate. Furthermore, the fact that the Regional Board has finally now determined to embrace practices known for over a decade does not justify further delay.

b. A Regional, Watershed-Based Approach to Controlling Urban Runoff is Not a New Concept

Just as implementing green infrastructure techniques is hardly new ground for Permittees, the watershed-based approach to controlling urban runoff is similarly not a new concept. In fact, this approach was well-known by Permittees and the Regional Board at the time of the 2001 Permit adoption. In several instances, the Regional Board and 2001 Permit explicitly called for a watershed-based approach to be adopted.

For example, while the Regional Board claims it has achieved a "new understanding" that BMPs or management strategies may be best implemented on a watershed scale, the 2001 Permit already called for stormwater management to be conducted on a coordinated, watershed basis. The 2001 Permit states:

> The Regional Board supports a Watershed Management Approach to address water quality protection in the region. The objective of the Watershed Management Approach should be to provide a comprehensive and integrated strategy towards water resource protection, enhancement, and restoration while balancing economic and environmental impacts within a hydrologically defined drainage basin or watershed. It emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with available resources.[90]

Moreover, numerous commenters on the 2001 Permit, including Permittees, pointed specifically to the need for approaches in the Permit that embrace watershed-based management or for regional projects and solutions to be implemented:

- Heal the Bay discussed the lack of a proper watershed-based approach in the Draft 2001 Permit, stating "inclusion of watershed-specific requirements for each of the watersheds within the storm water permit is long overdue . . . Watershed specific issues were addressed and studied extensively as part of the 1996 Permit, which required all

[89] *South Los Angeles Wetlands Park,* LA Stormwater, accessed at http://www.lastormwater.org/green-la/proposition-o/south-los-angeles-wetlands-park/.
[90] 2001 Permit, at 11. *See also*, 2001 Permit, at 23.

the watershed groups prepare a watershed management area plan (WMPA). However, the [Regional Board] has failed to require implementation of these plans in order to achieve receiving water quality objectives."[91]

- NRDC discussed need for regional projects and solutions in the Draft 2001 Permit, stating "water quality standards are not being met in this region. This indicates that regional solutions are needed. . . ." NRDC specifically called on the Regional Board to act in this regard: "Regional Board leadership is needed in this area. We are increasingly concerned about the Permittee's commitment (or lack thereof) to developing regional programs and solutions . . . although several permittees often tout them as the most effective solution. Clearly, specific requirements are needed to ensure that regional programs are developed."[92]

- The Mayor of Signal Hill, Larry Forester, noted at the 2001 Permit Adoption Hearing that, "the permit contains a section discussing regional solutions which are widely recognized as the most cost effective means of dealing with storm water cleanup."[93]

Moreover, Regional Board staff also repeatedly referred to the need or opportunity for regional solutions at the 2001 Permit adoption hearing,[94] and even the State Board Office of Chief Counsel, in response to discussion surrounding use of regional solutions in the 2001 Permit, stated:

> A comment asserts that the Regional Board has failed to adequately consider "regional solutions." To the extent the comment maintains that State Board's SUSMP Order encouraged regional solutions, the Regional Board staff concurs. Specifically, the State Board encouraged the permittees to develop such projects. . . . it is the burden of the permittees to develop and present workable, acceptable programs that meet or exceed the requirements of the draft MS4 permit. At this time, the permittees have not submitted any specific proposals for regional solutions or programs. The Regional Board itself maintains broad discretion to consider proposed programs in the future.[95]

The Regional Board was well aware of, and in fact, supportive of, the benefits of watershed-based stormwater management and regional projects and solutions – as a result, the State Board should not endorse the Regional Board's justification for providing the Permittees additional time for compliance.

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[91] Letter from Heal the Bay to Dr. Xavier Swamikannu, Regional Board, re: Comments on the Second Draft of the LARWQCB NPDES No. CAS614001 – Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges Within the County of Los Angeles and the Incorporated Cities, Except for Long Beach and Santa Clarita, August 6, 2001, at 2.

[92] Letter from NRDC to Xavier Swamikannu, Regional Board, re: Comments on the June 29, 2001 Draft of the LARWQCB NPDES Permit No. CAS614001 – Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges Within the County of Los Angeles and the Incorporated Cities Therein, August 6, 2001, at 3-4.

[93] 2001 Permit Adoption Hearing transcript, at 55:25 – 56:2.

[94] *See, e.g.*, November 8 hearing transcript, at 13, 19, 21, 37, and 146.

[95] Legal Memo from Michael Lauffer, Office of Chief Counsel, to Dennis Dickerson LARWQCB, Nov. 9, 2001, at 7, available at http://www.swrcb.ca.gov/losangeles/water_issues/programs/stormwater/municipal/los_angeles_ms4/tentative/121301_legal%20brief%20ms4%2011-9-01.pdf.

VI. The WMP/EWMP Approach is Not Comparable to the Trash TMDL Approach

As is noted above, the WMP/EWMP approach attempts to incentivize a particular technology-based approach (i.e., stormwater capture) to achieve compliance with WQSs. There is nothing inherently wrong with this type of approach, as technology-based requirements can be effective at achieving compliance with WQSs. However, the WMP/EWMP approach lacks the necessary rigor and accountability for success.

An oft-cited example of a successful technology-based approach to water quality compliance in the stormwater context is the Los Angeles River Trash TMDL and some Permittees have tried to argue that the WMP/EWMP approach of the 2012 MS4 Permit is just like the L.A. River Trash TMDL approach. This is simply not true. First and foremost, the Trash TMDL sets a waste load allocation for stormwater at zero. While the Trash TMDL approach provides an alternative compliance path for dischargers that install "full capture systems," in doing so, the provisions provide very clear and definitive compliance language. The TMDL requirements state:

> Compliance with the final waste load allocation may be achieved through a full capture system. A full capture system is any device or series of devices that traps all particles retained by a 5 mm mesh screen and has a design treatment capacity of not less than the peak flow rate (Q) resulting from a one-year, one-hour, storm in the subdrainage area. [96]

Note that under the Trash TMDL approach, a discharger is not deemed in compliance with the final WLAs unless a full capture system that meets the stated requirements is actually installed. Mere evaluation of opportunities to deploy full capture systems or the use of undersized systems does not equal compliance.

Unfortunately, the WMP/EWMP approach is not equivalent to the Trash TMDL approach in its specificity or in its implementation requirements. Notably, the WMP approach fails to identify what technologies or control measures will result in a compliance determination. It does not even mention stormwater capture. It merely creates a *process* for dischargers to develop programs, regardless of what technology they choose to deploy.[97] The EMWP process is slightly better in that it at least attempts to incentivize stormwater capture, but in doing so it falls far short of ensuring that capture will be widespread or meaningful. In particular, the EWMP language states:

> An EWMP is one that comprehensively **evaluates opportunities**, within the participating Permittees' collective jurisdictional area in a Watershed Management Area, for collaboration among Permittees and other partners on multi-benefit regional projects that, **wherever feasible**, retain (i) all non-storm water runoff and (ii) all storm water runoff from the 85th percentile, 24-hour storm event for the drainage areas tributary to the projects, while also achieving other benefits including flood control and water supply, among others.[98]

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[96] *See* Attachment A to Resolution No. 07-012, Amendment to the Water Quality Control Plan – Los Angeles Region to incorporate the TMDL for Trash in the Los Angeles River Watershed (Adopted by the California Regional Water Quality Control Board, Los Angeles Region on August 9, 2007).

[97] 2012 Permit, at Part VI.C.1.

[98] 2012 Permit, at Part VI.C.1.g. (emphasis added).

This approach not only fails to ensure that water quality goals will be met but also fails to ensure stormwater capture will be utilized. A far better approach would be to *require* the use of stormwater capture (rather than merely consider it) if a Permittee is to benefit from any alternative compliance pathway. Such an approach would be far more analogous to the Trash TMDL approach and far more likely to achieve the desired effect.

VII. The Permittees Exaggerate the Costs of Compliance, and Contrary to Permittees' Assertions, There are Available Sources of Funding for Permit Implementation.

At the December 16, 2014 State Board workshop on the Draft Order, many Permittees raised concerns about costs of permit implementation – similar to past claims – specifically relating to the development of WMPs/EWMPs and the implementation of green infrastructure projects, and asserted that there are very few sources of funding available for Permittees to pursue. In addition, the City of Monrovia brought up the recently released U.S. Conference of Mayors report[99] to argue that many communities are facing serious economic challenges with limited resources and financial capabilities as a result of having to comply with CWA objectives.[100] The findings of this report, according to the City of Monrovia, indicate that a tipping point has been reached and help is needed. The City then concluded that the WMP/EWMP discussion speaks directly to these affordability concerns (because if costs were not an issue, then every Permittee can develop its WMP/EWMP and achieve WQSs within the five-year permit cycle), and therefore Permittees need more time to develop and implement their WMPs/EWMPs and to find the funding in order to make permit compliance more affordable for their residents.[101]

Monrovia's reliance on the U.S. Conference of Mayors report is misplaced because the report suffers from several deeply flawed analyses. First and foremost, the report lumps *all types* of water costs together (sewer, water, *and* flood control), thus making it difficult to ascertain just how much of the economic expense borne by communities can be attributed to stormwater management or even the CWA. Second, while the report concludes that lower income households are disproportionately impacted by the economic burdens of public water services, it says nothing about what these households are *actually paying* in their water and sewer bills.

Permittees have a long history of overlooking the benefits of implementing stormwater programs while exaggerating the costs of compliance. In comments submitted on the 2001 Permit, for example, the City of Signal Hill and city members of the "Coalition for Practical Regulation"[102] stated that "the cost of the

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[99] The U.S. Conference of Mayors, *Public Water Cost Per Household: Assessing Financial Impacts of EPA Affordability Criteria in California Cities,* November 2014, available at http://www.usmayors.org/pressreleases/uploads/2014/1202-report-watercostsCA.pdf. Environmental Groups note that this report has not been properly incorporated into the Administrative Record by Permittees.

[100] Some the major findings of the report that were mentioned at the workshop included: 1) More than half of the 30+ cities that were surveyed are spending money for public water services in excess of 2% of their median household income; 2) ten of the cities are spending more than 4.5% of their actual income; and 3) thirty-nine percent of paramount's residents are already spending more than that threshold for their water. Recording of December 16, 2014 Board Workshop, at Part 2, 1:17:22.

[101] *Id.* at 1:18:30.

[102] At the time of this comment, the Coalition for Practical Regulation was made up of at least 35 cities regulated under the Los Angeles County MS4 permit, of which at least 20 were members of the current Los Angeles Permit Group, comprising one-third of that group's membership, as of May 30, 2012. These cities include: Arcadia, Artesia, Bellflower, Burbank, Commerce, Diamond Bar, Industry, Lakewood, Lawndale, Monrovia, Montebello, Paramount, Pico Rivera, Pomona, Rosemead, Santa Fe Springs, San Gabriel, Sierra Madre, South Gate, and Vernon. (See Letter from Larry Forester, Coalition for Practical Regulation, to Mr. Dennis Dickerson, Regional Board, re:

TMDL program for Los Angeles County alone, which is to be implemented in part, through the NPDES permitting process, could result in expenditures to Los Angeles taxpayers in excess of ***$50 billion***."[103] In contrast to this assertion, the Regional Board notes in the 2012 MS4 Permit Fact Sheet[104] that "Based on reported values [by the Permittees], the average annual cost to the Permittees in 2010-11 was $4,090,876 with a median cost of $687,633," for implementation of their entire stormwater programs, including TMDL requirements.[105] In 2010, Los Angeles County asserted, for instance, that compliance with the Trash TMDLs "could cost the municipalities over $1 billion."[106] Yet the staff report for the TMDLs states that the cost of implementing the TMDLs "will depend on the BMPs selected by the Permittees,"[107] and in fact, the County itself points out that compliance could cost less than $1 million.[108] The listed implementation costs for the Los Angeles River Trash TMDL are also spread among 44 Permittees, meaning the costs borne by any one discharger are only a fraction of any total cost estimate.[109]

Further, and directly applicable to the problems of accounting contained in the Conference of Mayors report, as the Regional Board notes, the "reported program costs [by Permittees] are not all solely attributable to compliance with requirements of the LA County MS4 Permit. . . . For example, storm drain maintenance, street sweeping and trash/litter collection costs are not solely or even principally attributable to MS4 permit compliance, since these practices have long been implemented by municipalities," and provide separate and additional municipal benefits beyond stormwater pollution control.[110] As a result, "the true program cost related to complying with MS4 permit requirements is some fraction of the total reported costs. For example, after adjusting the total reported costs by subtracting out the costs for street sweeping and trash collection, the average annual cost to the Permittees was $2,397,315 with a median cost of $290,000."[111] Even multiplied over the course of the many years the 2001 Permit has been in effect, these expenditures (which as stated above, cover the entire program, not just TMDL implementation), are an order of magnitude less than claimed by the commenting cities.

Finally, contrary to Permittees' claims, there are both available and feasible sources of funding for Permittees to seek to help cover their costs of permit compliance. For example, in Los Angeles County,

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Second Draft – Municipal NPDES Permit, August 6, 2001, at 1; Statement by Larry Forester, Coalition for Practical Regulation, December 13, 2001, at 1; City Manager's Office, City of San Gabriel (May 30, 2012) The Council Weekly, "LA Permit Group: Voting Agencies," at 9.)

[103] Letter from Rutan & Tucker, LLP, to Dr. Xavier Swamikannu, Los Angeles Regional Water Quality Control Board, re: Los Angeles Regional Water Quality Control Board, October 11, 2001 Draft NPDES Permit No. CAS004001, November 13, 2001, at 20.

[104] Los Angeles Regional Water Quality Control Board, Fact Sheet for Order R4-2012-0175, NPDES Permit No. CAS004001, November 8, 2012 ("2012 Permit Fact Sheet").

[105] 2012 Permit Fact Sheet, at F-146.

[106] Brief of Amicus Curiae County of Los Angeles and Los Angeles County Flood Control District in Support of Cross-Appeal of Plaintiffs/Cross-Appellants Cities of Arcadia et al., in *City of Arcadia v. State Water Resources Control Bd.* (2010) 191 Cal.App.4th 156, 161, at 16 ("County and LACFCD Amicus Brief").

[107] Regional Board Trash Total Maximum Daily Loads for the Los Angeles River Watershed (Revised Draft July 27, 2007), at 42.

[108] County and LACFCD Amicus Brief, at 16, fn 5.

[109] See, e.g., *City of Arcadia v. U.S. E.P.A.* (N.D. Cal. 2003) 265 F.Supp.2d 1142, 1157 (rejecting an economic challenge to the Trash TMDL in part based on the fact that costs are spread among multiple parties).

[110] 2012 Permit Fact Sheet, at F-146.

[111] *Id.*

public agencies (both federal and state) have provided significant sources of funding through grants, bonds, and fee collections designated for implementation of stormwater management programs in Los Angeles County. From sources such as Prop O, Props, 12, 13, 40, 50, and 84, grants or funds from state agencies such as DWR and the Coastal Conservancy, and Measure V, more than $645 million has been provided for stormwater management in Los Angeles County.[112] Proposition 1, the new California Water Bond, also includes funds for stormwater capture.

VIII. The Draft Order and the 2012 MS4 Permit are Illegal

In multiple aspects, the 2012 MS4 Permit, the Draft Order and their provisions are contrary to both state and federal law, and must be revised in order to pass legal muster.

a. The Draft Order and 2012 MS4 Permit Violate Anti-backsliding Provisions

i. The Statutory Prohibition Against Backsliding Under the CWA is Applicable

The Draft Order asserts that "The Clean Water Act's statutory prohibition against backsliding applies under a narrow set of criteria specified in Clean Water Act section 402(o)," which "prohibits relaxing effluent limitations imposed pursuant to Clean Water Act sections 301(b)(1)(C) or 303(d) or (e)."[113] The Draft Order then cursorily asserts that "The receiving water limitations provisions in the 2001 Los Angeles MS4 Order were not established based on either section 301(b)(1)(C) or section 303(d) or (e), so this prohibition on backsliding is inapplicable."[114] This position directly ignores and contradicts the Regional Board's express statement of the legal basis for the 2001 Permit. As the Fact Sheet for the 2001 Permit states:

> The conditions established by this permit are based on CWA § 402(p)(3)(B) which mandates that a permit for discharges from MS4s must: effectively prohibit the discharges of non-storm water to the MS4; and require controls to reduce pollutants in discharges from MS4 to the maximum extent practicable (MEP) including best management practices, control techniques, and system, design and engineering methods, and such other provisions determined to be appropriate. *MS4s are not exempted from compliance with Water Quality Standards. CWA § 301(b)(1)(C) requires NPDES permits to incorporate effluent limitations, including those necessary to meet water quality standards, applies.* The permit conditions have been developed to meet the statutory mandate of the CWA."[115]

Further, the 2001 Permit defined the Water Quality Objectives and Water Quality Standards at issue in the Draft Order as "water quality criteria contained in the Basin Plan, California Ocean Plan, National Toxics Rule, the California Toxics Rule…"[116] All of these standards are by definition adopted pursuant to Section 301(b)(1)(C). In addition, Part 5 of the 2001 Permit defines "Applicable Standards and Limitations" as "all state, interstate, and federal standards and limitations…*under sections 301*, 302,

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[112] *Id.* at F-150.
[113] Draft Order, at 18-19.
[114] Draft Order, at 19.
[115] Los Angeles Regional Water Quality Control Board, Fact Sheet/Staff Report for the County of Los Angeles Municipal Storm Water NPDES Permit (CAS004001) Order. No. 01-182, December 13, 2001, at 7 ("2001 Permit Fact Sheet") (emphasis added).
[116] 2001 Permit, at 70.

303, 304, 306, 307, 308, 403, and 404 of the CWA."[117] Contrary to the State Board's stated position now, both the 2001 and 2012 Permits were adopted to follow sections 301(b)(1)(C) *and* 402(p) of the CWA, therefore the statutory prohibition on backsliding under section 402(o) applies.[118]

ii. No Exception to the Regulatory Prohibition Against Backsliding Exists to Justify the 2012 MS4 Permit's Weakened Requirements

Even if the Draft Order's argument that the statutory prohibition against backsliding did not apply were correct, the regulatory prohibition against backsliding under 40 C.F.R. § 122.44(l) plainly does. This regulatory prohibition requires that "when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under [40 C.F.R. § 122.62].)" (40 C.F.R. § 122.44(l)(1).) The Draft Order's rationale for claiming an exception exists here is deeply flawed.

At the outset, the Draft Order conjectures that "With respect to the regulatory anti-backsliding provisions 40 Code of Federal Regulations section 122.44(1), the non-applicability is less clear cut," and that it has "found no definitive guidance . . . from USEPA or the courts applying the general provisions of section 122.44(l) in the context of municipal storm water permits."[119] While the Draft Order "acknowledges" a letter from U.S. EPA Region 3 applying the regulatory prohibition of 40 C.F.R. § 122.44(l) to permit provisions in a Draft Phase I MS4 permit for Prince George County, Maryland, the Order declines to accord it any weight. More critically, the Draft Order fails to consider the guidance contained in the U.S. EPA NPDES Permit Writers' Manual, which, applicable to all forms of NPDES permitting, states "this regulation [at § 122.44(l)(1)], in effect, addresses all types of backsliding not addressed in the [statutory Clean Water Act] provisions."[120] The Draft Order fails to cite to any guidance or other documentation to show that this regulation does not apply to stormwater.

As referenced above, modification or revocation of a MS4 Permit, and thus, potentially backsliding, would be allowed under section 122.62(a)(2) where new information is available to the agency, but "only if the information was not available at the time of permit issuance." (40 C.F.R. 122.62(a)(2).) The Draft Order echoes this statutory exception by stating that "backsliding would be permissible based on the new information available to the Los Angeles Water Board when it developed and adopted the Los Angeles MS4 Order." The Draft Order then concludes that the Regional Board has in fact gained a new understanding about both the approach and method to controlling urban runoff – namely that Permittees should collaborate on a watershed scale and treat stormwater as a regional asset. As discussed in Section V., above, none of these concepts are new. Nor were these concepts unknown at the time of the 2001 Permit's adoption.

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[117] 2001 Permit, at 60 (emphasis added).

[118] The Draft Order asserts that under *Defenders of Wildlife v. Browner,* 191 F.3d 1159, effluent limitation in MS4 Permits are only imposed pursuant to section 402(p). Draft Order, at 19, fn 60. Yet nothing in *Defenders* prevents permit writers from including, as in the 2001 Permit, *more stringent* limits pursuant to section 301(b)(1)(C). *See Defenders,* at 1166.

[119] Draft Order, at 19.

[120] U.S. Environmental Protection Agency, *NPDES Permit Writers' Manual*, EPA-833-K-10-001, September 2010, at 7-4, *available at* http://water.epa.gov/polwaste/npdes/basics/NPDES-Permit-Writers-Manual.cfm.

The impacts of MS4 discharges on receiving waters, the control measures available to reduce or prevent the MS4 discharges, including technologies such as low-flow diversions and full and partial trash capture devices, and the time needed for Permittees to implement those measures have all been discussed prior to 2001 Order adoption.[121]

1. The Concepts of Watershed-based Stormwater Management and Stormwater Capture for Water Supply Augmentation are not "New" Information to the Regional Board

As we detail earlier in our letter, the 2001 Permit explicitly called for stormwater management to be conducted on a coordinated, watershed basis.[122] Commenters including Heal the Bay, NRDC, and the Mayor of Signal Hill all pointed to the need for watershed-based approaches and regional projects during the adoption process of the 2001 Permit.[123] Moreover, both Regional Board staff and the State Board Office of Chief Counsel commented on, if not directly encouraged, the use of regional projects as a means of achieving water quality goals pursuant to the 2001 Permit.[124]

Similarly, the Regional Board was well aware of the concept that stormwater can be captured to provide a beneficial source of groundwater recharge or water supply prior the adoption of the 2001 Permit, having received, among other documents, a report by U.S. EPA detailing the water supply augmentation of infiltration practices,[125] as well as multiple Watershed Management Area Plans submitted by the Los Angeles County Department of Public Works detailing the presence of spreading grounds used to capture stormwater runoff and recharge groundwater in the region.[126]

Therefore, the State Board should not agree with the Regional Board that these approaches are "new" information that justifies the imposition of weaker requirements in the 2012 MS4 Permit.[127]

2. The Development and Implementation of TMDLs Does Not Constitute New Information

The Draft Order's additional claim that the Regional Board acquired new information through the development and implementation of TMDLs in the Los Angeles Region since 2001 is similarly flawed and contradicts the CWA's framework and goals.[128]

TMDL requirements implement water quality standards and are the CWA's ultimate tool to ensure WQSs are achieved when the Act's technology-based requirements have failed. (33 U.S.C. § 1313(d)(1)(A),(C); 40 C.F.R. §§ 130.2 (i), 130.7.) Thus, as a policy matter, using TMDLs to justify the

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[121] Los Angeles Regional Water Quality Control Board Response to Petitions Challenging 2012 MS4 Permit, October 15, 2013, at 51.
[122] 2001 Permit, at 11. *See also*, 2001 Permit, at 23.
[123] *See* Section V.b. above.
[124] *Id.*
[125] EPA Stormwater Infiltration Report, at 1, 6.
[126] *See, e.g.* Los Angeles County Department of Public Works (February 1, 2001) Watershed Management Area Plans (WMAP), Pursuant to NPDES Permit Order No. 96-054 (CAS614001), at Los Angeles River 3, 15; San Gabriel River at 3, 17.
[127] We note as well that even if these approaches could be considered "new," it would still not justify backsliding in this instance; as discussed above in Section V.a., an improvement or development of new technology provides the Permittees with *additional* options for meeting the requirements imposed on them by the prior permit and hence does not justify eliminating or delaying those requirements.
[128] Draft Order, at 20.

Permit's safe harbors, which excuse violations of the exact WQSs that the TMDLs were developed to achieve is irrational and undermines the directive and spirit of the CWA.

Further, none of the information the Regional Board claims to have acquired is actually new. First, the Regional Board's claim that it learned about MS4 discharges' impacts to receiving waters because of the development and implementation of the TMDLs is not supported by the evidence. In fact, the Board well understood the impacts of MS4 discharges on receiving waters prior to the adoption of the 2001 Permit because it had conducted "water quality assessments [which] identified impairment, or threatened impairment, of beneficial uses of water bodies in the Los Angeles Region" concluding that "[t]he causes of impairments include pollutants of concern identified in municipal storm water discharges by the County of Los Angeles in the Integrated Receiving Water Impacts Report (1994-2000)." (2001 Permit, at 2.)

Second, the Board was also well aware that the municipal stormwater control measures available at the time the 2001 Permit was adopted included technologies such as diversions of dry weather flows to the sanitary sewer system and full and partial trash capture devices.[129] Moreover, the Regional Board knew that these technologies were already being successfully implemented even before the 2001 Permit was adopted and understood that their design and implementation may require significant funding and coordination among permittees and agencies.[130]

Third, the Regional Board's assertion that the development and implementation of TMDLs somehow provided it with new information about the time necessary to implement stormwater control measures cannot justify backsliding. The Board has already considered and addressed this issue during the adoption of the TMDLs, and already provided Permittees with lengthy implementation schedules and interim and final compliance deadlines to ensure sufficient time will be allotted to ensure WQSs are met.[131] Furthermore, any concerns that additional time may be necessary to reach compliance for constituents not subject to TMDLs or constituents subject to TMDLs without implementation schedules or with expired implementation schedules can and must be dealt with through the Regional Board's enforcement authority as discussed in Section X. below, and not through an unfounded grant of additional time by the Permit itself.

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[129] *See* 2001 Permit at 51 (requiring Permittees to develop together with the Los Angeles County Sanitation Districts a study to investigate the possible diversion of dry weather discharges and create a list of drains for potential diversion); Draft Trash Total Maximum Daily Loads for the Los Angeles River Watershed, November 27, 2000, at 28-38 (discussing full and partial trash capture devices and their costs).

[130] *Id.*; *see also* Draft Total Maximum Daily Load to Reduce Bacterial Indicator Densities at Santa Monica Bay Beaches, November 8, 2001, at 42, 44 (discussing the completion of dry weather diversions by City of Los Angeles, County of Los Angeles and other Santa Monica Bay adjacent cities at 11 of 27 major storm drains and providing information on the costs of the diversions).

[131] *See e.g.,* Ballona Creek Estuary Toxic Pollutants TMDL, at 16-17 (final compliance deadlines for MS4 Permittees in 2021 (metals) and 2025 (PCBs)); Ballona Creek Metals TMDL, at 16 (final compliance deadlines for MS4 Permittees in 2021); Santa Monica Bay Beaches Bacteria TMDL, at 9 (final wet weather compliance deadline in 2021); Dominguez Channel and Greater Los Angeles and Long Beach Harbor Toxics TMDL (final compliance deadline in 2032); Los Angeles River and Tributaries Metals TMDL, at 21 (final compliance deadline in 2028).

iii. Information Gained by the Regional Board Through Developing and Implementing Los Angeles Specific TMDLs Cannot be Used as a Basis for Statewide Application of the Draft Order

A separate and significant cause for concern in using Los Angeles Region TMDLs as a basis for backsliding from strict compliance with WQSs stems from the fact that the Draft Order directs other regional boards to consider incorporating similar WMP/EWMP provisions when issuing MS4 permits.[132] Assuming *arguendo* that the development and implementation of the 33 TMDLs in Los Angeles region has provided the Regional Board with new information that can justify backsliding from the 2001 Permit's RWL provisions, this information cannot support backsliding from the RWL provisions in *other* Regional Boards' MS4 permits because it is strictly based on Los Angeles region TMDLs. Moreover, for regions with few or no TMDLs applicable to MS4 discharges, TMDL development or implementation can never be grounds for backsliding.[133]

b. The 2012 MS4 Permit Violates Antidegradation Requirements

While the Draft Order acknowledges that the antidegradation analysis required by state and federal law is triggered by the 2012 MS4 Permit, rather than remanding to the Regional Board to conduct the required analysis, the Draft Order merely adds conclusory findings to the 2012 MS4 Permit. The Draft Order's analysis and findings thus are inadequate and fail to comply with state and federal law.

i. The Draft Order Violates Federal Antidegradation Regulations

The Draft Order spends considerable energy arguing that data to set a water quality baseline in the Los Angeles area is lacking.[134] Yet in doing so, the Draft Order ignores the absolute floor on degradation set by Federal Regulations—that existing instream uses and the level of protection necessary to protect existing uses be maintained. (40 CFR §131.12(a)(1).) As noted by EPA, 40 C.F.R. section 131.12(a)(1) "provides the absolute floor of water quality in all waters of the United States…If a planned activity will foreseeably lower water quality to the extent it is no longer sufficient to protect and maintain the existing uses in that water body, such activity is inconsistent with EPA's antidegradation policy, which requires that existing uses are to be maintained."[135]

There is ample evidence in the record that that water quality in the receiving waters of discharges permitted by the 2012 MS4 Permit is insufficient to maintain existing uses, and that those discharges contribute to their impairment.[136] Yet the Draft Order approves a continuation of the program that results in these exceedances, and moreover, deems that program, and the resulting discharges, in compliance with the Permit until (and potentially after) WMPs and EWMPs are fully implemented.[137] The Draft Order acknowledges that degradation will continue, at least in the "short term," which the

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[132] Draft Order at 48.
[133] *See* 2010 California List of Water Quality Limited Segments Being Addressed by USEPA Approved TMDLs, available at http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/category4a_report.shtml) (no TMDLs in Regions 7 and 8; one TMDL in Region 9.
[134] Draft Order, at 24-25.
[135] U.S. Environmental Protection Agency, *Water Quality Standards Handbook, Chapter 4,* EPA-823-B-12-002, accessed at http://water.epa.gov/scitech/swguidance/standards/handbook/, at 3.
[136] *See* Section II.a., above.
[137] Draft Order, at 25, fn 77.

2012 MS4 Permit anticipates to be a decade or more.[138] The Draft Order deems this degradation to be acceptable, given the long-term prospect of progress.[139] However, the CWA's antidegradation regulations do not allow this trade off. The 2012 MS4 Permit, through its safe harbor provisions, contemplates discharges that cause or contribute to exceedances of WQSs in Los Angeles area rivers and beaches while compliance plans are being developed and implemented, and therefore violates 40 C.F.R. section 131.12(a)(1).

ii. The Draft Order's Antidegradation Analysis Is Inadequate

Conceding that the 2012 MS4 Permit requires an antidegradation analysis, the Draft Order then contends that only a "generalized" analysis is required.[140] Yet, other than protesting that the task might be difficult, and that receiving water data dating to 1968 is limited, the Draft Order provides no rationale for its proscribed, but deeply inadequate, analysis.

In 1990, the State Board issued an Administrative Procedures Update.[141] APU-90-004 provides guidance for implementing California's antidegradation policy, Resolution No. 68-16, and the federal antidegradation policy.[142] Specifically, APU-90-004 directs that where an antidegradation analysis is required for an NPDES Permit, the permit findings should indicate:

1) The pollutants that will lower water quality;
2) The socioeconomic and public benefits that result from the lowered water quality; and
3) The beneficial uses that will be affected.[143]

APU-90-004 next provides criteria for applying a "simple" antidegradation analysis, [144] none of which apply here, and then describes a "complete" antidegradation analysis.[145] APU-90-004 directs that an antidegradation analysis begins by comparing receiving water quality to the water quality objectives established to protect designated beneficial uses.[146] Baseline water quality, or the best water quality in the receiving water since 1968, is used to determine the level of protection required by the permit.[147] The analysis is conducted pollutant by pollutant. Where baseline water quality is equal to or less than WQSs, permit limits must be sufficient to achieve those WQSs.[148] Where baseline water quality is better than WQSs, permit limits must ensure that this level is maintained, unless a reduction in water quality is offset by maximum public benefit to the people of the State.[149] Four conditions must be met for a reduction of water quality to be allowed:

1) The reduction is consistent with maximum public benefit;
2) The reduction will not unreasonably affect beneficial uses;

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[138] *Id*. at 25.
[139] *Id.*
[140] Draft Order at 26.
[141] Los Angeles Regional Water Quality Control Board, Administrative Procedures Update: Antidegradation Policy Implementation for NPDES Permitting, APU-90-004, July 2, 1990.
[142] *See* APU-90-004. .
[143] *Id*. at 1.
[144] *Id*. at 2.
[145] *Id*. at 4.
[146] *Id*.
[147] *Id.*
[148] *Id.*
[149] *Id.*

3) Water quality will not fall below water quality objectives; and
4) The proposed action is necessary to accommodate important economic or social development in the area.[150]

APU-90-004 provides a further four-step analysis to determine whether the reduction is needed for important social and economic development.[151]

The Draft Order and the 2012 MS4 Permit fall short of the requirements of APU-90-004 and Order No. 68-16 in myriad ways. Neither document identifies the pollutants lowering water quality, nor the beneficial uses affected, nor the extent of that impact. The socio-economic and public benefits resulting from the degradation are described in a cursory manner, and no explanation of how permitting WQS exceedances provides any instream flow, flood control, or public safety benefit is provided.[152] Finally, neither the Draft Order nor the 2012 MS4 Permit provides any of the analysis required by APU-90-004. As such, the Draft Order fails to conduct the antidegradation analysis required by law.

Dismissing the applicability of APU-90-004 to the 2012 MS4 Permit, the Draft Order asserts that APU-90-004 was intended only for discrete discharges or facilities, and not for stormwater discharges from a large region.[153] However, APU-90-004 was issued in 1990, four years after section 402(p) was added to the CWA, and the APU-90-004 itself does not exclude any type of NPDES permit from antidegradation analysis. Even if not mandatory for the 2012 MS4 Permit, the analysis described in APU-90-004 is instructive as to the adequacy of the Regional Board's review. A recent California Court of Appeal used APU-90-004 as the basis for the court's decision to reject as an antidegradation analysis for a Concentrated Animal Feeding Operation's Waste Discharge Requirements covering 1600 dairy farms throughout the Central Valley – a category of comparable scope and complexity as the 2012 MS4 Permit – despite the APU-90-004's focus on NPDES permits.[154]

The Draft Order next asserts that the Regional and State Boards lack the data to either conduct a pollutant by pollutant antidegradation analysis, or to set the baseline for water quality.[155] Yet, while data dating back to 1968 may be lacking, the Draft Order itself confirms that data extends back over more than twenty years.[156] In any event, a lack of data more than 20 years old does not lead to *elimination* of meaningful antidegradation analysis. Whether or not data to support *higher* levels of protection are available, an analysis of the contribution of MS4 discharges to current impairments is required.[157] (40 CFR 131.12(a)(1).)

Finally, the Draft Order argues that APU-90-004 is of "limited value" given the complexity of the issues raised by the region-wide 2012 MS4 Permit.[158] The Regional Board's decision – for administrative reasons – to issue a regional MS4 permit does not exempt that permit from antidegradation requirements. The Regional Board is nonetheless required to conduct the analysis mandated by state

[150] *Id.* at 4-5.
[151] *See id.* at 5.
[152] Draft Order, at 29.
[153] *Id.,* at 26.
[154] *See Association de Gente unida por El Aqua v. Central Valley Regional Board ("Aqua") (2012),* 210 Cal. App. 4th 1255, 1270.
[155] Draft Order, at 26.
[156] *Id.* at 24, fn 76; 28.
[157] APU-90-004 at 4-5.
[158] Draft Order, at 26.

and federal Law, whether the NPDES permit is for a small private facility or large multi-city stormwater permit. Although APU-90-004 points out that "A Regional Board may decide that an antidegradation finding is not required because the proposed discharge is prohibited. . . .",[159] the *Aqua* decision establishes that merely including a prohibition against discharges causing or contributing to WQS exceedances is not enough to ensure that a permit prevents degradation—monitoring sufficient to demonstrate water quality protection is required.[160] While the 2012 MS4 Permit includes a monitoring program to identify changes in water quality, rather than prohibiting discharges that cause or contribute to WQS exceedances, the safe harbor provisions *authorize* degradation of receiving waters while WMPs and EWMPs are developed, then approved, and then eventually implemented. This alternative path for compliance with WQS will cause more harm than good. The safe harbor scheme triggers complete antidegradation review, which has not been conducted and given the impairment of the receiving waters, ensures that the federal antidegradation policy cannot be complied with.

c. The 2012 MS4 Permit and the Draft Order Illegally Authorize Compliance Schedules for California Toxics Rule ("CTR")-based TMDLs Beyond May 18, 2010

Attempting to circumvent the antidegradation requirements of the CWA, the Draft Order asserts that the 2012 MS4 Permit's safe harbor provisions require strict compliance with WQSs, albeit "by implementing Watershed Management Programs/EWMPs with a compliance schedule."[161] This argument must fail for all of the reasons explained in Section VIII above. In addition, the Draft Order fails to recognize the requirements of the Inland Surface Water Plan, which prohibits compliance schedules for CTR-based TMDLs past May 18, 2010. Since the WLAs for the metal TMDLs in Los Angeles region are based on the CTR criteria, compliance schedules for these TMDLs are only authorized for a maximum of 10 years from the time the CTR criteria were first promulgated in 2001.[162] Thus, no discharger can be given a compliance schedule to meet Permit provisions based on CTR criteria after May 18, 2010.[163] As a result, to the extent the safe harbor provisions are characterized as compliance schedules for CTR pollutants, they are illegal.

d. The Findings Proposed by the Draft Order Are Not Supported by the 2012 MS4 Permit, the Draft Order, or the Evidence in the Record

The State Board must ensure that sufficient evidence is analyzed to support its decision and that the evidence is summarized in an appropriate finding.[164] The administrative decision must be accompanied by findings that allow the court reviewing the order or decision to "bridge the analytic gap between the raw evidence and ultimate decision or order."[165] This requirement "serves to conduce the

[159] APU-90-004, at 2.
[160] *Aqua,* 210 Cal App 4th, at 1286.
[161] Draft Order, at 28.
[162] State Board Resolution No. 2000-15, *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, at 19. *See also* October 23, 2006 EPA Letter re: California SIP, Compliance Schedule Provisions; State Board Memo dated September 15, 2006 Re: CTR Compliance Schedules; State Board Resolution No. 2008-0025 at 4; Final Staff Report, State Board Resolution No. 2008-0025 at 10; Final Response to Written Comments, State Board Resolution No. 2008-0025 at 6, 9, 10, 18-19, 26.
[163] *Id.*
[164] *See* Cal. Civ. Proc. Code § 1094.5(b); *see also, Zuniga v. Los Angeles County Civil Serv. Comm'n* (2006) 137 Cal.App.4th 1255, 1258.
[165] *Topanga Ass'n for a Scenic Cmty. v. County of Los Angeles* (1974) 11 Cal.3d 506, 515.

administrative body to draw legally relevant sub-conclusions supportive of its ultimate decision . . . to facilitate orderly analysis and minimize the likelihood that the agency will randomly leap from evidence to conclusions."[166]

The Draft Order adds a series of findings that purport to bring the 2012 MS4 Permit into compliance with antidegradation requirements. However, none of the findings make any reference to the record.[167] The findings of the Draft Order stating that "the order ensures water quality necessary to protect beneficial uses is maintained and protected," and "This order further requires compliance with receiving water limitations to meet water quality standards in the receiving water…" are not supported by any evidence in the record.[168] In fact, the findings are contradicted by the mass emission sampling data collected over the prior permit term, by the 2012 MS4 Permit's safe harbor provisions, and by the Draft Order itself. Finally, the record contains no evidence or analysis to support the findings that degradation is permitted because it is necessary to accommodate economic and social development, and existing uses are fully assured and protected despite the limited degradation.[169]

Given that the Draft Order fails to cite to, or provide any analysis or evidence to support the antidegradation findings, the proposed findings are arbitrary and capricious and an abuse of discretion.

IX. The Draft Order Has the Potential to Result in Severe Unintended Legal Consequences

In its effort to embrace the, in part, positive opportunities presented by the 2012 MS4 Permit, the State Board has unfortunately been forced into a position of conducting legal and policy acrobatics to justify the 2012 MS4 Permit's numerous unlawful provisions. The positions taken by the Regional Board and Draft Order result in potential unintended legal consequences that the State Board must take action to correct.

a. The Permit's EWMP/WMP Provisions Are Being Used by Permittees In an Attempt to Escape Accountability for Past RWL Violations and Undermine Monitoring Obligations

Of substantial concern, Permittees have already used the 2012 MS4 Permit's alternative compliance approach to argue that the 2012 Permit renders moot any remedy for their past violations of RWLs under the 2001 Permit. In a recent federal court brief, Los Angeles County and the Los Angeles County Flood Control District assert that, despite a previous ruling by the Ninth Circuit Court of Appeals that the County and District are liable for multiple violations of the 2001 Permit's RWL provisions, these same violations must now be ignored.[170] As basis for this claim, the County and District state that the 2012 MS4 Permit allows compliance with RWL provisions through "compliance with the WMP and EWMP programs, as well as TMDLs" with which the County and District allege they are "in full compliance."[171]

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[166] *Id.* at 516.
[167] Draft Order, at 27-29.
[168] *Id.* at 28.
[169] *See id.* at 29.
[170] Defendants' Memorandum of Points and Authorities in Support of Motion to Dismiss Plaintiffs' Second, Third and Fifth Claims for Relief or, in the Alternative, Dismiss or Strike Plaintiffs' Prayer for Injunctive Relief filed on January 14, 2015 by the County of Los Angeles and the Los Angeles County Flood Control District in Case No. 08-CV-01467 BRO (PLAx), *Natural Resources Defense Council & Santa Monica Baykeeper v. County of Los Angeles, et. al.* before the United States District Court for the Central District of California, Dkt. No. 395, at 19-22.
[171] *Id.*

Further, the County and District have taken the position that the monitoring required under the 2012 MS4 Permit is now precluded from being used to determine compliance with the Permit provisions. Specifically, the County and District argue that, under the 2012 MS4 Permit, "compliance with the WMP, EWMP, and TMDL programs … constitute[s] compliance with the permit's receiving water limitations provision, without regard to exceedances at the mass emission stations."[172] In fact, the County and District state that "[n]o monitoring is needed to determine whether a permittee is in compliance" with the RWL provisions of the 2012 MS4 Permit because a Permittee will be deemed in compliance "so long as it is participating in a WMP or EWMP or is in compliance with the permit's TMDL provisions."[173] We strongly disagree with the County's interpretation of these provisions. However, these examples of deliberate attempts to use the 2012 MS4 Permit's alternative compliance provisions to escape responsibility for remedying past Permit violations and to directly undermine monitoring efforts exemplify the unintended ramifications of the 2012 MS4 Permit's safe harbors, and point to the substantial harms these provisions have potential to cause.

b. The 2012 MS4 Permit Would Potentially Allow Non-Stormwater Discharges

Section 402(p)(3)(B)(ii) of the CWA requires Permits for discharges from municipal storm sewers to "include a requirement to effectively prohibit non-stormwater discharges into the storm sewers." To implement this requirement, the 2012 MS4 Permit states, under its Discharge Prohibitions section, that "Each Permittee shall, for the portion of the MS4 for which it is an owner or operator, prohibit non-storm water discharges through the MS4 to receiving waters. . . ."[174] However, the Permit's WMP/EWMP section appears to contain several confusing or directly conflicting provisions that pose a considerable threat to the 2012 MS4 Permit's legality, both as adopted and in practice.

First, the 2012 MS4 Permit requires that, rather than "effectively prohibiting" non-stormwater discharges to or through the MS4, Permittees developing a WMP or EWMP must "Prioritize water quality issues resulting from storm water and non-storm water discharges from the MS4 to receiving waters."[175] Second, Permittees developing an EWMP are required to retain all non-stormwater "where feasible," but does not appear to require additional action where retention is not feasible.[176] Third, in several instances, Permittees developing a WMP or EWMP must target implementation of existing watershed control measures "to eliminate non-storm water discharges that are a source of pollutants to receiving waters," rather than eliminating discharges entirely.[177] At best, the 2012 MS4 Permit's provisions addressing non-stormwater requirements are confusing; at worst, they create terms that appear to fold compliance with non-stormwater requirements under the WMPs/EWMPs with the implication that compliance with an approved WMP or EWMP constitutes compliance with the Permit's otherwise enforceable prohibition against non-stormwater discharges. The State Board must clarify that Permittees are required to meet the conditions for non-stormwater discharges identified under the Discharge Prohibitions section of the 2012 MS4 Permit[178] regardless of the WMP/EWMP provisions.

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[172] *Id.* at 21.
[173] Defendant County of Los Angeles' Response to Plaintiff Santa Monica Baykeeper's Interrogatory Nos. 24-25, in Case No. 08-CV-01467 BRO (PLAx), *Natural Resources Defense Council & Santa Monica Baykeeper v. County of Los Angeles, et. al,* at 6.
[174] 2012 Permit, at Part III.A.1.
[175] 2012 Permit, at Part VI.C.1.f.i.
[176] 2012 Permit, at Part VI.C.1.g.
[177] *See, e.g.,* 2012 Permit, at Part VI.C.2.a.ii(5)(a); Part VI.C.2.a.iii(2)(d)(i).
[178] 2012 Permit, at Part III.

c. The Broad Discretion Claimed by the Draft Order Presents Potential Unfunded Mandate Concerns

The Draft Order asserts that, overall, "the State Water Board has discretion under both federal and state law as to whether and how to require compliance with water quality standards for MS4 discharges,"[179] and notes generally that "the permitting authority has wide discretion concerning the terms of a permit."[180] To the extent the Draft Order is relying, in general terms, on the language of section 402(p) of the CWA, which states, MS4 permits must require "such other provisions as the Administrator or the State determines appropriate for the control of such pollutants," we agree that the Board has discretion to require additional controls. This language has been held by California courts to grant "the EPA (and/or a state approved to issue the NPDES permit) . . . the discretion to impose 'appropriate' water pollution controls in addition to those that come within the definition of 'maximum extent practicable.'"[181] As a result, while the MEP standard represents one element of permit requirements, the Regional Board and EPA maintain the authority to impose additional restrictions over and above MEP as they determine appropriate. Moreover, MEP itself is not meant to be a static requirement—the standard anticipates and in fact requires new and additional controls to be included with each successive permit. As EPA has explained, NPDES permits, including the MEP standard, will "evolve and mature over time." (55 Fed. Reg. 47990, 48052.)

These claims in the Draft Order are species of an argument that the Regional and State Boards have effectively unfettered discretion in determining how and under what conditions to develop Permit requirements, so long as they fit within the Boards' vision of MEP. However, the Draft Order fundamentally misunderstands that these are directives to implement stricter, not less stringent, requirements; despite the framework the Draft Order attempts to establish, it cannot simply reverse course and eliminate requirements it earlier determined appropriate.

Further, both the Regional and State Boards should exercise caution in claiming that all these provisions are implemented entirely at their "discretion." Currently before the California Supreme Court is a challenge to the 2001 Permit brought by Permittees on grounds that provisions of the 2001 Permit, adopted by the Regional Board at its discretion, constitute an unfunded mandate under the California Constitution.[182] While we disagree with the merits of these claims, should the California Supreme Court rule in favor of the Permittees, the Draft Order's claim that "whether and how to require compliance with water quality standards for MS4 discharges" are at the discretion of the Regional and State Boards could open the 2012 MS4 Permit to potential legal challenges as an unfunded mandate or on other grounds under state law. The Regional Board has previously acknowledged the risk it faces from potential challenges to its authority to properly administer the NPDES program in California, stating, in separate challenges to the Regional Board's ability to strictly enforce water quality standards, "the Regional Board's ability to enforce MS4 NPDES permits would be seriously undermined. Moreover, the

[179] *Id.* at 11,

[180] *Id. at 63.*

[181] *Building Industry Ass'n of San Diego County*, 124 Cal.App.4th at 883 (citing *Defenders of Wildlife v. Browner*, 191 F.3d at 1165–1167.

[182] *See* Opening Brief of County of Los Angeles and Cities of Bellflower, Carson, Commerce, Covina, Downey and Signal Hill in *State Department of Finance v. Commission on State Mandates*, California Supreme Court, Case No. S214855, filed on October 21, 2014.

Regional Board's NPDES program would be at risk for revocation by the U.S. E.P.A."[183] The State Board should recognize that the requirement to meet WQS is required by federal law, and exercise greater caution in its assertion of discretion in all facets of permit development.

X. Environmental Groups' Proposed Alternative Compliance Mechanism

Municipal dischargers, as evidenced by their comment letters, testimony, and petitions filed on the 2012 MS4 Permit and other MS4 permits throughout the state, consistently complain[184] about alleged uncertainty relating to compliance with RWLs in NPDES permits. On that basis, municipal dischargers have argued for unenforceably vague permit limits and/or safe harbors, which, as described above, are inconsistent with the requirements of the CWA and are therefore illegal.

Environmental Groups maintain, as we advocated at the November 8, 2012 Permit Adoption Hearing and in our December 10, 2012 Petition to the State Board, that the proper course of action for the State Board is to strike those portions of the 2012 MS4 Permit that incorporate safe harbors, which render the RWLs inoperative under certain circumstances. The offending language contained in the 2012 MS4 Permit at Parts VI.C.2.d. and VI.C.2.b. should be struck from the 2012 MS4 Permit. Moreover, related language providing a safe harbor for compliance with interim and final TMDL limitations in sections VI.E.2.d.i (4) and VI.E.2.e.i(4) should likewise be struck from the 2012 MS4 Permit.

However, potential alternative RWLs compliance determination mechanisms are available that would both comply with the CWA, and provide more certainty for dischargers, including those that petitioned the 2012 MS4 Permit. Alternative compliance mechanisms could also meet the State's goal to incentivize multi-benefit stormwater projects that address pollution and local water supply shortages. The WMPs do not meet these goals, because these programs do not require consideration of multi-benefit projects, and these programs should thus be immediately subject to applicable water quality limits. In concept, the EWMP approach could be a viable path toward such an alternative; in practice, however, the 2012 MS4 Permit's EWMP implementation process unlawfully deems Permittees in compliance with RWLs and TMDL limits while watershed management plans are being developed (and while an open-ended approval process proceeds), and also adopts a performance standard with no analysis or evidence in the record to demonstrate that meeting the stated standard will actually achieve compliance with WQSs.

A workable and *legal* RWL that would also provide more engineering certainty for municipal dischargers is available, however. This program would consist of pollution control programs (or enhanced watershed management plans; the name is immaterial) designed to achieve compliance with all applicable water quality-based requirements within the 5-year life of the Permit. Instead of providing the illegal "safe harbors" currently incorporated in the 2012 MS4 Permit, Time Schedule Orders ("TSOs") would provide time for implementation of the programs, and compliance with the TSOs would be determined based on compliance with the engineering standards in the program, and on meeting the interim and final deadlines for implementation within the Permit terms. Ultimate compliance with WQBELs and RWLs

[183] Brief of Amicus Curiae California Regional Water Quality Control Board, Los Angeles region, In Support of Plaintiffs' Motion for partial Summary Judgment and Opposing Defendant's Motion for Judgment on the Pleadings, in Santa Monica Baykeeper and Natural Resources Defense Council v. City of Malibu, at 5.
[184] See, e.g., City of Sierra Madre Petition; City of Carson Petition; City of Arcadia Petition.

would be determined via water quality monitoring pursuant to deadlines within the TSOs. Permittees would thereby gain certainty during the life of the Permit, pollutant loads would be significantly reduced, and the core requirement of the CWA – that ultimate compliance be determined via end-of-pipe monitoring *in the receiving water – would* be met.

One of the key elements of Environmental Groups' proposal submitted to the State Board in August 2013[185] requires Permittees to employ a pre-approved, peer reviewed computer model when determining stormwater control measures to meet water quality limits. This requirement is based on ongoing concerns about the County's WMMS model utilized in many of the WMPs and EWMPs. First, there is no evidence in the record that this model was peer-reviewed. Thus, there is no assurance that the model assumptions reflect real world conditions and are producing accurate results. Second, without those assurances, model inputs used by Permittees become more vulnerable to further inaccuracy in the output data. Environmental Groups have reviewed and submitted extensive comments on the deficiencies in submitted WMPs and EWMP Work Plans,[186] including improper assumptions and non-representative input data, thus an un-validated model only exacerbates those concerns. In contrast, our alternative approach requires a pre-approved (by the Regional Board) and peer reviewed computer model, which should be revisited at the beginning of each permit term or every five years, whichever is sooner. Additionally, any model approved should be continuously updated to reflect what is actually happening on the ground in terms of water quality, water supply and implemented BMPs.

The Draft Order questions the efficiency and appropriateness of using enforcement orders to ensure compliance with WQSs and TMDL limits by stating that "[g]enerally, permits are best structured so that enforcement actions are employed when a discharger shows some shortcoming in achieving a realistic, even if ambitious, permit condition and not under circumstances where even the most diligent and good faith effort will fail to achieve the required condition."[187] This position seems to erase history. Permittees have certainly exhibited over a decade of shortcomings in addressing stormwater pollution under the 2001 Permit, and for many years previously. Now is exactly the right time for the Regional Board to use its authority to ensure progress, and as discussed above, enforcement drives success. The proper use of TSOs will relay the seriousness of the Regional Board's commitment to addressing the region's stormwater pollution problem, while giving Permittees time to reach compliance where justified and closely monitored.

Environmental Groups propose a program that would facilitate engineered solutions while meeting the State Board's stated goals. The following elements would replace current Permit language:

a. Where TMDLs Have Been Adopted

The 2012 MS4 Permit provides illicit safe harbors under Parts VI.E.2.d.i(4)(d) ("Upon notification of a Permittee's intent to develop a WMP or EWMP and prior to approval of its WMP or EWMP, a Permittee's full compliance with all of the following requirements shall constitute a Permittee's

[185] *See* Response to State Water Resources Control Board Request for Comment on Receiving Water Limitations and Opposition to Petitions for Review on Limited Receiving Water Limitation Issues, submitted by NRDC, LA Waterkeeper, and Heal the Bay, August 2013.
[186] *See* Environmental Groups' Comments on the Draft Watershed Management Programs and Coordinated Monitoring Plans submitted to the Regional Board on August 18, 2014; *see also* Environmental Groups' Comments on Enhanced Watershed Management Program Work Plans and Monitoring Plans submitted to the Regional Board on September 16, 2014.
[187] Draft Order, at 31.

compliance with provisions pertaining to interim WQBELs with compliance deadlines occurring prior to approval of a WMP or EWMP"), VI.E.2.d.i(4) ("A Permittee shall be considered in compliance with an applicable interim water quality-based effluent limitation and interim receiving water limitation for a pollutant associated with a specific TMDL if… the [p]ermittee has submitted and is fully implementing an approved Watershed Management Program or EWMP…") and VI.E.2.e.i(4) ("A Permittee shall be deemed in compliance with an applicable final water quality-based effluent limitation and final receiving water limitation for the pollutant(s) associated with a TMDL if" an approved EWMP is implemented.). Parts VI.E.2.d.i(4)(d), granting a safe harbor prior to implementation of a WMP or EWMP should be struck from the Permit, and requirements under the Permit's EWMP provisions pertaining to Parts VI.E.2.d.i(4) and VI.E.2.e.i(4) must be revised to incorporate the following components:

1. A demonstration that the proposed engineered Pollution Control Program (infiltration, treatment, diversion, LID, and combinations thereof) will achieve compliance with applicable WLAs where TMDLs have been adopted, including any applicable interim limits, during the five year life of the Permit. For example, a Program implementing capture and/or infiltration of all stormwater in a sub-watershed up to the 85th percentile rain event would be in compliance with Permit requirements where calibrated modeling demonstrates that this level of capture and infiltration will achieve compliance for each and every applicable WLA.

    a. The demonstration that the program will achieve compliance with applicable WLAs would be made using a Board approved, peer reviewed model, applied on a sub-watershed basis.
    b. The proposed programs would be subject to public review and comment, and, if requested, a public hearing before the Regional Board.
    c. The program will include an enforceable schedule for implementation, including interim deadlines and interim load reductions.
    d. The Permit would *not* deem dischargers to be in compliance during the Program development process or the design and construction phase. Dischargers would only be deemed in compliance with the Pollution Control Program upon full deployment of the pollution control measures contained therein.

2. Where dischargers are not currently in compliance with interim or final WLAs with passed compliance deadlines, time for implementation of the Pollution Control Program sufficient to achieve compliance, not to exceed the five year life of the permit, could be provided via Time Schedule Orders, Cease and Desist Orders ("CDOs"), and/or Clean Up and Abatement Orders ("CAOs").
3. Compliance with the TSO, CDO or CAO would be based on implementation of the Program, including meeting interim deadlines and interim load allocations as set forth in such orders, rather than on receiving water sampling.
4. End-of-pipe and receiving water monitoring would continue for the life of the permit, and would be used to continue to calibrate modeling and to modify/adjust program elements where anticipated performance (i.e., compliance with interim or final WLAs) is not being achieved.
5. Ultimate compliance would be determined through end-of-pipe and receiving water monitoring.

b. Where TMDLs Have Not Been Adopted

For either 303(d) listed waters or waters identified as impaired but not included on the state's 303(d) list, the 2012 MS4 Permit provides illicit safe harbors under Parts VI.C.2.d. ("Upon notification of a Permittee's intent to develop a WMP or EWMP and prior to approval of its WMP or EWMP, a Permittee's full compliance with all of the following requirements shall constitute a Permittee's compliance with the receiving water limitations provisions in Part V.A. not otherwise addressed by a TMDL") and VI.C.2.b. ("A Permittee's full compliance with all requirements and dates for their achievement in an approved Watershed Management Program or EWMP shall constitute a Permittee's compliance with the receiving water limitations provisions in Part V.A."). Part VI.C.2.d., granting a safe harbor prior to implementation of a WMP or EWMP should be struck from the Permit, and requirements under the Permit's WMP and EWMP provisions pertaining to Part VI.C.2.b. must be revised to incorporate the following components:

For 303(d) listed Receiving Water parameters, without TMDLs

1. A demonstration that the proposed engineered Pollution Control Program (infiltration, treatment, diversion, LID, and combinations thereof) will achieve compliance with applicable WQSs. For example, a Program implementing capture and/or infiltration of all stormwater in a subwatershed up to the 85th percentile rain event (such as the LA County MS4 Permit) would be in compliance with Permit requirements where calibrated modeling demonstrates that this level of capture and infiltration will achieve compliance for each and every applicable WQS.

    b. The demonstration that the program will achieve compliance with the WQSs would be made using a Board approved, peer reviewed model, applied on a sub-watershed basis.
    c. The proposed programs would be subject to public review and comment, and, if requested, a public hearing before the Regional Board.
    d. The program will include an enforceable schedule for implementation, including interim deadlines and interim requirements
    e. The Permit would *not* deem dischargers to be in compliance during the Program development process, or the design and construction phase. Dischargers would only be deemed in compliance with the Pollution Control Program upon full deployment of the pollution control measures contain therein.

2. Where dischargers are not currently in compliance with existing WQS, time for implementation of the Pollution Control Program sufficient to achieve compliance, not to exceed the five year life of the permit, would be provided via TSOs, CDOs, and/or CAOs.
3. Compliance with the TSO, CDO, or CAO would be based on implementation of the Program, including meeting interim deadlines as set forth in such orders, rather than on receiving water sampling.
4. End-of-pipe and receiving water monitoring would continue for the life of the permit, and would be used to establish compliance (discharges from the MS4 are not causing or contributing to WQS violations, including concentration-based WQS) to calibrate modeling, and to modify/adjust program elements where anticipated performance is not being achieved.
5. Ultimate compliance would be determined through end-of-pipe and receiving water monitoring.

For Parameters Not 303(d) listed (Antidegradation)

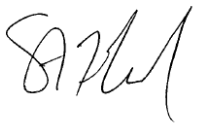
1. A demonstration that the proposed engineered Pollution Control Program (infiltration, treatment, diversion, LID, and combinations thereof) will for "high quality" waters protect water quality better than that minimum necessary for "fishable/swimmable" uses. For example, a Program implementing capture and/or infiltration of all stormwater in a sub-watershed up to the 85th percentile rain event would be in compliance with Permit requirements where calibrated modeling demonstrates that this level of capture and infiltration will achieve compliance with WQSs, and will maintain existing water quality for higher quality waters.

    a. The demonstration that the program will achieve compliance with antidegradation requirements would be made using a Board approved, peer reviewed model, applied on a sub-watershed basis.
    b. The proposed programs would be subject to public review and comment, and, if requested, a public hearing before the Regional Board.
    c. The program will include an enforceable schedule for implementation, including interim deadlines and interim requirements.
    d. The Permit would *not* deem dischargers to be in compliance during the Program development process, or the design and construction phase. Dischargers would only be deemed in compliance with the Pollution Control Program upon full deployment of the pollution control measures contained therein.
    e. Ultimate compliance would be determined through end-of-pipe and receiving water monitoring.

XI. Conclusion

For all the foregoing reasons, the Draft Order should be revised, and the State Board should strike the illegal safe harbor provisions of the 2012 MS4 Permit, including language in Parts VI.C.2.d, VI.C.2.b., VI.E.2.d.i(4)(d), and VI.E.2.e.i.

Sincerely,



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STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of NRDC, Los Angeles Waterkeeper, and Heal the Bay, for Review of Action by the California Regional Water Quality Control Board, Los Angeles Region, in Adopting the Los Angeles County Municipal Separate Stormwater National Pollutant Discharge Elimination System (NPDES) Permit; Order No. R4-2012-0175; NPDES Permit No. CAS004001	) REQUEST FOR OFFICIAL NOTICE RE: ENVIRONMENTAL GROUPS' COMMENTS ON DRAFT ORDER WQ 2015- IN THE MATTER OF REVIEW OF ORDER NO. R4-2012-0175, NPDES PERMIT No.CAS004001 WASTE DISCHARGE REQUIREMENTS FOR MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) DISCHARGES WITHIN THE COASTAL WATERSHED OF LOS ANGELES COUNTY, EXCEPT THOSE DISCHARGES ORIGINATING FROM THE CITY OF LONG BEACH MS4, SWRCB/OCC FILES A-2236 (A)-(KK)

The Natural Resources Defense Council ("NRDC"), Los Angeles Waterkeeper ("Waterkeeper"), and Heal the Bay (collectively, "Environmental Groups"), in conjunction with our Comments on the Draft Order WQ 2015- In the Matter of Review of Order No. R4-2012-0175, NPDES Permit No.CAS004001 Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watershed of Los Angeles County, Except Those Discharges Originating From the City of Long Beach MS4, SWRCB/OCC Files A-2236 (a)-(kk) ("Draft Order"), hereby request that the State Water Resources Control Board ("State Board") take official notice of the following documents, pursuant to Section 648.2 of Title 23 of the California Code of Regulations:

1. Attached as "Exhibit A" is a true and correct copy of Defendants' Memorandum of Points and Authorities in Support of Motion to Dismiss Plaintiffs' Second, Third and Fifth Claims for Relief or, in the Alternative, Dismiss or Strike Plaintiffs' Prayer for Injunctive Relief filed on January 14, 2015 under Docket No. 395 by the County of Los Angeles ("County") and the Los Angeles County Flood Control District ("District") in Case No. 08-CV-01467 BRO (PLAx) in the United State District Court for the Central District of California. Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, "[t]he Board or presiding officer may take official notice of such facts as may judicially be noticed by the courts of this state." Evidence Code section 452(d) allows California courts to take judicial notice of "[r]ecords of … any court of record of the United States." The document attached as Exhibit A is a record of a United State Court and therefore is subject to official notice by the State Board. This document will assist the State Board in evaluating the impacts of the alternative compliance approach proposed in Order No. R4-2012-0175, NPDES Permit No.CAS004001 Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watershed of Los Angeles County, Except Those Discharges Originating From the City of Long Beach MS4 ("2012 LA MS4 Permit").
2. Attached as "Exhibit B" is a true and correct copy of Defendant County of Los

Angeles' Response to Plaintiff Santa Monica Baykeeper's Interrogatory Nos.24-25 filed by the County on January 5, 2015 in *Natural Resources Defense Council, Inc. and Santa Monica Baykeeper v. County of Los Angeles, et al.,* Case No. 08-CV-01467 BRO (PLAx) in the United State District Court for the Central District of California. The document attached as Exhibit B is a record of a United State Court and therefore is subject to official notice by the State Board pursuant to Section 648.2 of Title 23 of the California Code of Regulations and Section 452(d) of the California Evidence Code. The document will assist the State Board in evaluating the impacts of the alternative compliance approach proposed in the 2012 LA MS4 Permit.

3. Attached as "Exhibit C" is a true and correct copy of a report by the United States Environmental Protection Agency ("U.S. EPA") titled "Case Studies Analyzing the Economic Benefits of Low Impact Development and Green Infrastructure Programs" issued in August 2013. Evidence Code section 452(c) allows the Board to take official notice of "[o]fficial acts of the legislative, executive, and judicial departments of the United States and of any state of the United States." Courts have found that "official acts" under Evidence Code section 452(c) "include records, reports and orders of administrative agencies." (*Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518.) Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, the State Board should take official notice of this document as it will assist it in evaluating the benefits of green infrastructure in relations to the provision of the 2012 MS4 Permit.

4. Attached as "Exhibit D" is a true and correct copy of Environmental Groups' Comments on Enhanced Watershed Management Program Work Plans and Monitoring Plans Pursuant to Requirements under the Los Angeles County Municipal Separate Storm Sewer System Permit, NPDES Permit No. CAS004001, Order No. R4-2012-0175, including Exhibits A through K, submitted to the Los Angeles Regional Water Quality Control Board ("Regional Board") on September 16, 2014. Evidence Code section 452(c) allows the Board to take official notice of "[o]fficial acts of the legislative, executive, and judicial departments of the United States and of any state of

the United States." Courts have found that "official acts" under Evidence Code section 452(c) "include records, reports and orders of administrative agencies." (*Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518.). Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, the State Board should take official notice of this document as it will assist it in evaluating the alternative compliance approach proposed in the 2012 LA MS4 Permit.

5. Attached as "Exhibit E" is a true and correct copy of the Lower San Gabriel River Watershed Management Program submitted by the Cities of Artesia, Bellflower, Cerritos, Diamond Bar, Downey, Hawaiian Gardens, La Mirada, Lakewood, Norwalk, Pico Rivera, Santa Fe Springs, Whittier, Long Beach and the Los Angeles County Flood Control District to the Regional Board on June 27, 2014, with appendices. Evidence Code section 452(c) allows the Board to take official notice of "[o]fficial acts of the legislative, executive, and judicial departments of the United States and of any state of the United States." Courts have found that "official acts" under Evidence Code section 452(c) "include records, reports and orders of administrative agencies." (*Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518.). Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, the State Board should take official notice of this document as it will assist it in evaluating the alternative compliance approach proposed in the 2012 LA MS4 Permit.

6. Attached as "Exhibit F" is a true and correct copy of a memorandum from Michael Lauffer, Staff Counsel, State Board Office of Chief Counsel to Dennis Dickerson, Regional Water Quality Control Board, Los Angeles Region, dated November 9, 2001. Evidence Code section 452(c) allows the Board to take official notice of "[o]fficial acts of the legislative, executive, and judicial departments of the United States and of any state of the United States." Courts have found that "official acts" under Evidence Code section 452(c) "include records, reports and orders of administrative agencies." (*Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518.). Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, the State

Board should take official notice of this document as it will assist it in evaluating the alternative compliance approach proposed in the 2012 LA MS4 Permit.

7. Attached as "Exhibit G" is a true and correct copy of the Draft Total Maximum Daily Loads for the Los Angeles River Watershed by the California Regional Water Quality Control Board, Los Angeles Region, dated November 27, 2000. Evidence Code section 452(c) allows the Board to take official notice of "[o]fficial acts of the legislative, executive, and judicial departments of the United States and of any state of the United States." Courts have found that "official acts" under Evidence Code section 452(c) "include records, reports and orders of administrative agencies." (*Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518.). Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, the State Board should take official notice of this document as it will assist it in evaluating the alternative compliance approach proposed in the 2012 LA MS4 Permit.

8. Attached as "Exhibit H" is a true and correct copy of the Draft Total Maximum Daily Load to Reduce Bacteria Indicator Densities at Santa Monica Bay Beaches by California Regional Water Quality Control Board, Los Angeles Region, dated November 8, 2001. Evidence Code section 452(c) allows the Board to take official notice of "[o]fficial acts of the legislative, executive, and judicial departments of the United States and of any state of the United States." Courts have found that "official acts" under Evidence Code section 452(c) "include records, reports and orders of administrative agencies." (*Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518.). Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, the State Board should take official notice of this document as it will assist it in evaluating the alternative compliance approach proposed in the 2012 LA MS4 Permit.

9. Attached as "Exhibit I" is a true and correct copy of the 2010 California List of Water Quality Limited Segments Being Addressed by USEPA Approved TMDLs approved by the U.S. Environmental Protection Agency on October 11, 2011. Evidence Code section 452(c) allows the Board to take official notice of "[o]fficial acts of the

legislative, executive, and judicial departments of the United States and of any state of the United States." Courts have found that "Official acts" under Evidence Code section 452(c) "include records, reports and orders of administrative agencies." (*Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518.). Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, the State Board should take official notice of this document as it will assist it in evaluating the alternative compliance approach proposed in the 2012 LA MS4 Permit.

10. Attached as "Exhibit J" is a true and correct copy of the Water Quality Standards Handbook issued by the United States Environmental Protection Agency. Evidence Code section 452(c) allows the Board to take official notice of "[o]fficial acts of the legislative, executive, and judicial departments of the United States and of any state of the United States." Courts have found that "official acts" under Evidence Code section 452(c) "include records, reports and orders of administrative agencies." (*Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518.). Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, the State Board should take official notice of this document as it will assist it in evaluating the alternative compliance approach proposed in the 2012 LA MS4 Permit.

11. Attached as "Exhibit K" is a true and correct copy of Environmental Groups' Comments on Watershed Management Plans and Monitoring Plans Pursuant to Requirements under the Los Angeles County Municipal Separate Storm Sewer System Permit, NPDES Permit No. CAS004001, Order No. R4-2012-0175, with Exhibits A-E, submitted to the Regional Board on August 18, 2014. Evidence Code section 452(c) allows the Board to take official notice of "[o]fficial acts of the legislative, executive, and judicial departments of the United States and of any state of the United States." Courts have found that "official acts" under Evidence Code section 452(c) "include records, reports and orders of administrative agencies." (*Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518.). Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, the State Board should take official notice of this

document as it will assist it in evaluating the alternative compliance approach proposed in the 2012 LA MS4 Permit.

12. Attached as "Exhibit L" is a true and correct copy of Environmental Groups' Comments on the Draft Individual Watershed Management Plans and Coordinated Monitoring Plans for the cities of Carson, Compton, Gardena, Irwindale, Lawndale, South El Monte and West Covina submitted to the Regional Board on August 18, 2014. Evidence Code section 452(c) allows the Board to take official notice of "[o]fficial acts of the legislative, executive, and judicial departments of the United States and of any state of the United States." Courts have found that "official acts" under Evidence Code section 452(c) "include records, reports and orders of administrative agencies." (*Rodas v. Spiegel* (2001) 87 Cal.App.4th 513, 518.). Pursuant to Section 648.2 of Title 23 of the California Code of Regulations, the State Board should take official notice of this document as it will assist it in evaluating the alternative compliance approach proposed in the 2012 LA MS4 Permit.

13. Attached as "Exhibit M" is a true and correct copy of the Opening Brief of County of Los Angeles and Cities of Bellflower, Carson, Commerce, Covina, Downey and Signal Hill in State Department of Finance v. Commission on State Mandates, California Supreme Court, Case No. S214855, filed on October 21, 2014. Evidence Code section 452(d) allows California courts to take judicial notice of "[r]ecords of … any court of record of the United States." The document attached as Exhibit A is a record of a United State Court and therefore is subject to official notice by the State Board pursuant to Section 648.2 of the Title 23 of the California Code of Regulations. The document will assist the State Board in evaluating the impacts of the alternative compliance approach proposed in the 2012 LA MS4 Permit.

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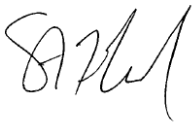
For the foregoing reasons, Environmental Groups respectfully request that the State Board take official notice of these documents.

Dated: January 21, 2015

NATURAL RESOURCES DEFENSE COUNCIL, INC.



Steve Fleischli
Attorneys for NATURAL RESOURCES DEFENSE COUNCIL, INC. & HEAL THE BAY

Dated: January 21, 2015

LOS ANGELES WATERKEEPER

Elizabeth Crosson
Tatiana Gaur
Attorneys for LOS ANGELES WATERKEEPER & HEAL THE BAY

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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San Francisco, CA 94105-3901

JAN 20 2015

Ms. Jeanine Townsend
Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor (95814)
P.O. Box 100
Sacramento, CA 95812-0100

Re: Comments to A-2236(a)-(kk)

Dear Ms. Townsend:

The following are EPA Region 9's comments on the State Water Board's draft WQ Order released on November 21, 2014, responding to the petitions (SWRCB/OCC files A-2236(a) through (kk)) submitted challenging NPDES permit No. CAS004001. This permit was issued in November 2012 by the Los Angeles Regional Board and authorizes discharges from the municipal separate storm sewer system (MS4) serving most of Los Angeles County. Region 9 offers the following comments on certain aspects of the Order.

A. "Safe Harbor" During the Planning Phase for a WMP/EWMP

Section VI.C.3.b of the LA MS4 permit provides that permittees are deemed in compliance with receiving water limitations (RWLs) upon notification to the Regional Board of their intent to develop a watershed management program (WMP) or enhanced watershed management program (EWMP). In our testimony at the November 2012 adoption hearing for the permit (and in a subsequent August 14, 2013 letter to the State Water Board), we recommended a change in the timing of when a permittee would be deemed in compliance. Rather than being deemed in compliance upon notification of intent to prepare a WMP/EWMP, we recommended that a permittee be deemed in compliance only after approval of a WMP/EWMP.

Section II.B.6 of the draft WQ Order supports the LA MS4 permit with regards to the timing of when the "safe harbor" period would begin. Establishing a safe harbor during this planning phase is not warranted. The requirement that LA County permittees meet RWLs was in place for over eleven years prior to the issuance of this permit. We disagree that permittees should be considered in compliance with these limits solely based on a notification of intent to prepare a plan.

A provision consistent with our recommendation was drafted as one option for the draft Regional MS4 permit (NPDES permit No. CAS0109266) proposed by the San Diego Regional Board in April 2013. The San Diego Regional Board chose to stick with

an approach for compliance with RWLs that closely aligned with State Board Order WQ 99-05 (i.e., not this draft WQ Order's proposed option). In conclusion, the San Diego Board's option for finding permittees in compliance with RWLs only when a plan is approved should be incorporated into the State Water Board's final WQ Order responding to the LA MS4 permit petitions.

B. Compliance with RWLs Via Retention of the 85%, 24-Hour Storm for Drainage Areas with EWMPs

Section VI.E.2.e.i.4 of the LA MS4 permit provides that for drainage areas where a EWMP is developed, retention of the runoff from the 85%, 24-hour storm would constitute compliance with applicable Water Quality Based Effluent Limits (WQBELs) and RWLs for pollutants associated with TMDL Waste Load Allocations (WLAs). We raised concerns with this provision in our testimony at the November 2012 adoption hearing. It has been a long-standing EPA policy that where a MS4 permit does not incorporate TMDL WLAs as numeric limits, the permit's administrative record must demonstrate that specified control measures will be sufficient to ensure compliance with WLAs. In a December 4, 2012 letter, we requested that the Los Angeles Regional Board identify documents in the permit's administrative record which are the basis for the conclusion that the specified retention would result in achieving WLAs. Based on the Regional Board's April 11, 2013 response, we do not believe that the permit's record supports the conclusion that this retention will result in achievement of WLAs.

The draft WQ Order in section II.B.5 recognizes that the LA MS4 permit does not verify that TMDL-specific limitations will be met as a result of retention of the 85%, 24-hour storm. The draft WQ Order addresses this issue by requiring the submittal of a plan of additional control measures if the specified volume is retained, but water quality monitoring shows that RWLs and WQBELs associated with TMDLs are not in fact being achieved. While this is a step in the right direction, we are concerned that only requiring submittal of a plan could lead to an ineffective iterative process without any assurance that water quality will be protected. We recommend that the provision be strengthened to specify that the expectations for this plan must include: (1) a quantitative analysis demonstrating that proposed additional control measures will result in attainment of WLAs, and (2) a provision for the Executive Officer to have the option to require strict compliance with numeric WLAs if continued progress is not being made towards achieving these water quality limitations.

C. Applicability of the WQ Order to All Regional Boards

We note that some commenters on the draft WQ Order recommended that the State Water Board require that all Regional Boards follow the WMP/EWMP approach in the LA MS4 permit when issuing MS4 permits. As drafted, the proposed WQ Order (section II.B.7) directs all Regional Boards to consider the approach in the LA MS4 permit, but does not require its use. We believe it would be premature and inappropriate

to require the LA MS4 permit approach throughout the State, especially considering the previous two issues we've identified in this letter.

We appreciate the opportunity to provide our views on the draft WQ Order. If you have any questions regarding this matter, please contact Eugene Bromley of the NPDES Permits Section at (415) 972-3510.

Sincerely,

David Smith, Manager
NPDES Permits Section (WTR-2-3)

ORANGE COUNTY WATER DISTRICT
SINCE 1933
ORANGE COUNTY'S GROUNDWATER AUTHORITY

February 12, 2015

Ms. Michelle Beckwith
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501

Subject: ***Comments on Draft Order No. R8-2015-0001, NPDES Permit No. CAS 618030, National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements, Orange County Flood Control District, the County of Orange and the Incorporated Cities therein within the Santa Ana Region***

Dear Ms. Beckwith:

The Orange County Water District (OCWD) is a special district formed in 1933 to manage the Orange County Groundwater Basin. The basin currently provides approximately two-thirds of the drinking water for 2.5 million residents of north and central Orange County within the District's boundary.

8.1

In 1936, OCWD began actively managing recharge of surface water, including stormwater, into the groundwater basin. OCWD operates 30 recharge facilities in the Cities of Anaheim and Orange and unincorporated areas of Orange County. Stormwater capture and recharge provides the equivalent of a year's worth of drinking water for approximately 100,000 families (50,000 acre-feet per year). Given water supply realities in southern California, use of stormwater for groundwater recharge is a key water resources management strategy.

OCWD recognizes the environmental benefits of utilizing the principles of low-impact development (LID) and reducing pollution caused by urban runoff. The District's primary concern regarding the draft order is the management of infiltration from uses of LID BMPs in a manner that protects groundwater from degradation and contamination. Such protection is best accomplished through careful siting and management of LID BMPs utilizing knowledge of potential water quality impacts associated with various land uses within Orange County, site-specific land use conditions, depth to groundwater, and underlying groundwater quality, among other factors.

Please accept the following comments on the draft order R8-2015-0001. Suggested deletions are indicated with cross-outs and additional language indicated with underlines.

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1. The existing permit, R8-2009-0030, requires certain groundwater resource protections when utilizing structural infiltration BMPs. These protections listed in Section XII.B.5 include limits on vertical distance from infiltration systems to seasonal high water, minimum horizontal distances from water supply wells, and prohibitions on use of the systems for land uses that pose a high threat to water quality.

8.2

It appears that in the Draft 2015 permit, these protections apply only to use of infiltration LID BMPs (Section XII.J) and not to biotreatment control BMPs (Section XII.G). While biotreatment control BMPs typically may not be designed for infiltration, the permit language specifically requires these BMPs to be designed to maximize the infiltration of the design capture volume or flow (page 46 of 90). As the 2015 draft permit requires that all structural treatment control BMPs involve infiltration of stormwater into groundwater, the provisions in Section XII.J related to groundwater should apply to all structural treatment control BMPs.

2. Concerning groundwater agency review of infiltration BMPs, the language in Section XII.J.2 (page 49 of 90) is broad and should be changed to require groundwater management agency review for a more limited number of proposed projects. Suggested language changes are shown below.

8.3

> 2. Co-permittees must provide the local groundwater management agency with an opportunity for consultation on the potential impacts of any proposed infiltration LID BMPs <u>that (1) utilize a pipe or conveyance system to direct flow to a subsurface system, such as a dry well or infiltration trench, or (2) surface facilities that infiltrate and have a cumulative area greater than 5,000 square feet per project</u> prior to the approval of the final WQMP. If the agency requests consultation, the Co-permittee must provide the agency with adequate information to review the potential impacts of the BMP on groundwater quality.

3. The existing permit, R-8-2009-0030, requires a 10-foot vertical separation between the bottom of a LID BMP and the seasonal high groundwater level. This provides a buffer to allow for proper functioning of the BMP as well as providing for the protection of underlying groundwater. The draft 2015 permit allows for the reduction of this vertical separation from 10-feet to 5-feet under certain conditions. This reduction should also be conditioned on completion of a site-specific investigation that determines the level of seasonal high groundwater on that particular site. In many cases, the high seasonal groundwater level on a proposed development site is determined based on regional maps or other data from the general area rather than site-specific information. The 10-foot vertical separation requirement provides for a margin of safety to account for cases where high groundwater levels were estimated. Approval of a 5-foot separation should be conditioned on measurements of seasonal high groundwater levels at the project site.

8.4

Please change the text in Section XII.J.C (page 49 of 90) as follows:

> The vertical separation from the bottom of the infiltration LID BMPs to the seasonal high groundwater must be a distance of 10-feet or more. ~~Unless~~ If site-specific data are available to determine the level of seasonal high groundwater at the project site and the facility is known to pose a low risk of contaminating groundwater; ~~if the facility is low risk~~, the vertical separation may be reduced to 5 feet according to criteria established in the Co-permittee's written technical guidance. Where the groundwater does not support, or does not have the potential to support beneficial uses, the Co-permittee may approve infiltration LID BMPs with less vertical separation, provided that groundwater quality is maintained and that other potential hazards presented by such facilities can be mitigated to an acceptable level.

8.4

4. Section XXII J.5 contains unclear text, perhaps due to a drafting error. Please change the text (page 49 of 90) as follows.

> 5. ~~Where an infiltration LID BMP overlies known groundwater or soil contamination, i~~Infiltration facilities must not be used to infiltrate stormwater in areas that overlie groundwater or soil contamination unless specific studies are done, in coordination with the groundwater management agency, to demonstrate that infiltration would not adversely impact groundwater conditions. Infiltration facilities must not be used for storm water runoff associated with industrial activity, storm water runoff from highways subject to motorized vehicular traffic of 25,000 average annual daily traffic, automotive repair shops, car washes, motorized fleet vehicle storage, nurseries, or other land uses or activities that pose a high-threat to groundwater quality.

8.5

Thank you for the opportunity to submit these comments.

Sincerely,

Michael Markus, P.E., D.WRE, BCEE, F.ASCE
General Manager

cc: Richard Boon, County of Orange
Keith Linker, City of Anaheim
Gene Estrada, City of Orange

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February 13, 2015

VIA EMAIL (SANTAANA@WATERBOARDS.CA.GOV)

Santa Ana Regional Water Quality Control Board
Attn: Adam Fischer
3737 Main Street, Suite 500,
Riverside, CA 92501

Re: Comments on the Second Draft Orange County Municipal Separate Storm Sewer System Permit, NPDES Permit No. CAS618030

Dear Mr. Fischer:

The City of Santa Ana ("City") appreciates the Regional Water Quality Control Board's ("Santa Ana Water Board") release of a second draft of the Orange County Municipal Separate Storm Sewer System ("MS4") Permit, Order No. R8-2015-0001 ("Second Draft Order") and the opportunity to provide comments on the Second Draft Order. The comments in this letter focus on the revisions made to the Second Draft Order since the first draft was released. The City submitted comments in response to the first draft, and by submitting this comment letter, does not waive the comments previously submitted. The City is also aware that the County of Orange has prepared and submitted comments on the Second Draft Order. The City expresses its support for and joins in the submission of the County's comments. The comments in this letter supplement the County's comments, as well as the City's comments on the first draft, and are intended to allow the City to continue working toward the common goal of improving water quality in the region.

1. INCLUDE FURTHER CLARITY ON COMPLIANCE PLANS FOR RECEIVING WATER LIMITATIONS

9.1

The City appreciates the revisions in Section IV.D to more closely conform the Second Draft Order with State Water Resources Control Board Resolution WQ 99-05 ("Resolution 99-05"). Resolution 99-05 includes a requirement that "permittees . . . promptly notify and thereafter submit a report to the Regional Water Board . . ." after determining that a discharge causes or contributes to an exceedance of a water quality standard. (Resolution 99-05.) The Second Draft Order does not include the requirement that permittees "promptly notify" the Santa Ana Water Board of the intent to prepare a compliance plan prior to submitting a draft plan to the Executive Officer. (Second Draft Order, Section IV.D.) This omission removes notification

from the iterative process inconsistent with Resolution WQ 99-05. Including a notification requirement establishes a clear initiation point for the iterative process and clarifies plan submission deadlines.

Recommendation: Include a notification requirement in Section IV.D, consistent with Resolution 99-05, and make corresponding modifications to the Technical Report, as follows:

A. Second Draft Order Section IV.D

> Upon a determination by a Co-permittee or the Executive Officer that a discharge is causing or contributing to the exceedance of an applicable water quality standard, the responsible Co-permittee(s) must promptly notify and thereafter submit a draft plan to the Executive Officer describing actions that will be taken to achieve compliance. A plan to achieve compliance with TMDL waste load allocations-related water quality-based effluent limits related to the exceeded water quality standard, and prepared according to Section XVIII of this Order, also satisfies this Provision.

9.1

B. Draft Technical Report Section XII.C

> . . . To implement this "iterative process", Section IV of this Order requires the Co-permittees to notify the Executive Officer of their intent to develop a compliance plan, development of a plan revising the storm water management program and its components to include additional BMPs, an implementation schedule and additional monitoring to address the exceedances; and implementing the revised storm water management program.

C. Draft Technical Report Section XII.O. The Technical Report's description of the method of complying with the WQBELs incorporated into Section XVIII of the Second Draft Order omits reference to the notification requirement. Revise the description of the method of compliance as follows:

> "(2) notifying the Executive Officer of the intent to develop a plan and thereafter implementing an approved plan that is designed to comply with final WQBELs"

2. REVISE TMDL SECTION TO PROVIDE FURTHER CLARITY ON COMPLIANCE PATHWAY

9.2

Consistent with TMDL requirements, Co-permittees have developed and implemented, or are in the process of developing and implementing compliance plans for several TMDLs in the Newport Bay watershed. The Executive Officer has reviewed and approved some of the plans and the Co-permittees are implementing approved plans. Where a TMDL provides for the

development and implementation of a compliance plan in fulfillment of the TMDL requirements, the Second Draft Permit should reflect such provision. Where Co-permittees are in the process of developing a TMDL and/or an implementation plan, such as the current selenium TMDL for Newport Bay, participation in the TMDL and/or plan development should constitute compliance with the TMDL, as incorporated into the Second Draft Permit.

9.2

Recommendation: Revise Section XVIII.A.3 to incorporate compliance pathways established in existing TMDLs and participation in the development of plans as compliance with the Second Draft Order, as follows:

> A Co-permittee may comply with WQBELs through any lawful means. Implementing an approved implementation plan, BMPs consistent with an approved plan, or a WQBEL compliance plan, as defined herein, constitutes compliance with this Order. Where an implementation plan, WQBEL compliance plan, or Time Schedule Order (TSO) is being developed, including the development of a TMDL for selenium in the Newport Bay and a corresponding implementation plan, a Co-permittee's participation in the development of such TMDL, plan or order constitutes compliance with this Order.

3. ELIMINATE STATEMENTS ASSERTING THAT AN MS4 CAN BE A RECEIVING WATER

9.3

Finding 13, the definition of "municipal separate storm sewer system," and Section V of the Technical Report continue to improperly consider some MS4s to be waters of the United States. An MS4 cannot be a water of the United States under the statutory and regulatory structure of the Clean Water Act, even if the MS4 exhibits characteristics of a water of the United States. (33 U.S.C. §§ 1362, subds. (12), (14); 40 C.F.R. § 122.26, subd. (b)(8).) The Clean Water Act's definition and treatment of the terms "navigable waters" and "point sources" create separate and distinct categories that do not overlap. (See, *Rapanos v. United States* (2006) 547 U.S. 715, 735.) Navigable waters are waters of the United States. (33 U.S.C. 1362(7).) A "point source" is a discernible, confined and discrete conveyance from which pollutants are or may be discharged into navigable waters. (33 U.S.C. 1362(14).) Writing for a plurality of the Supreme Court in *Rapanos*, Justice Scalia supported the distinction between these terms, stating, "[t]he definitions thus conceive of "point sources" and "navigable waters" as separate and distinct categories. The definition of 'discharge' would make little sense if the two categories were significantly overlapping." (*Rapanos, supra*, 547 U.S. at p. 735.) Attempting to diminish the distinction between MS4s and waters of the United States by "applying the definition [of waters of the United States] to . . . storm sewers . . . [and] man-made drainage ditches . . . stretche[s] the term 'waters of the United States' beyond parody." (*Rapanos, supra*, 547 U.S. at p. 734.) MS4s and waters of the United States cannot discharge into themselves. (*Los Angeles County Flood Control Dist. v. Natural Resources Defense Council, Inc.* (9th Cir. 2013) 133 S.Ct. 710, 713.)

Recommendation: Revise Finding 13, the definition of "municipal separate storm sewer system," and Section V of the Technical Report to remove dual classification of MS4s and waters of the United States, as follows:

A. Finding 13

Runoff Discharges to Receiving Waters. The MS4s discharge runoff into lakes, reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within the Santa Ana Region. ~~Development generally makes use of natural drainage patterns and features to convey runoff. Rivers, streams and creeks in developed areas used in this manner and under the ownership and control of the Permittees are part of MS4s regardless of whether they are natural, anthropogenic, or partially modified features. In these cases, the rivers, streams and creeks in the developed areas of the Permittees' jurisdictions are both an MS4 and receiving water.~~ Discharges of runoff from MS4s must occur through outfalls (point sources) into waters of the U.S. Outfalls do not include open conveyances connecting two municipal separate storm sewers. Outfalls also do not include pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. (40 C.F.R. 122.26(b)(9)).

9.3

B. Glossary

Municipal Separate Storm Sewer System ("MS4") – A conveyance or system of conveyances designed to collect and/or transport urban runoff (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, ~~natural drainage features or channels, modified natural channels,~~ man-made channels, or storm drains): (i) Owned or operated by a State, city town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes; (ii) Designated or used for collecting of conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW)

C. Technical Report, Section V

In summary, MS4s are defined in 40CFR122.26(b)(8) as "a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains)…designed or used for collecting or conveying storm water". ~~Due to the broad inclusion of the definition, portions of MS4s in the permit area will include open channels that are~~

~~waters of the U.S. In these cases, the channels are considered receiving waters whose beneficial uses must be protected.~~

Clean Water Act Section 502 defines a "discharge of a pollutant" and the term "discharge of pollutants" as "any addition of any pollutant to navigable waters from any point source" and "any addition of any pollutant to waters of the contiguous zone or the ocean from any point source other than a vessel or floating craft". The term "discharge", as used in this Order, means the discharge of a pollutant. Discharges regulated by this Order occur through "outfalls" which are a point source at the point where a MS4 discharges to waters of the U.S. An outfall does not include open conveyances connecting two municipal separate storm sewers. An outfall does not include pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. (40 C.F.R. 122.26(b)(9).)

9.3

4. RETAIN "BACKGROUND" AND "NATURAL" IN FINDING 2 AND SECTION IV.D.3

The Second Draft Order's modifications to Finding 2 replaced the phrase "background or naturally occurring pollutants or flows" with "non-anthropogenic pollutants or flows[.]" The terms "background" and "natural" loadings are technical terms and should not be replaced in their entirety by the term "non-anthropogenic." (40 C.F.R. § 130.2, subds. (e), (g), (i).)

Recommendation: Include the terms "background" and "naturally occurring" in Finding 2 and Section IV.D.3.h, as follows:

A. Finding 2

9.4

Regulated Sources and Activities. This Order regulates the discharge of pollutants from anthropogenic sources in urban runoff from MS4s or activities within the jurisdiction and control of the Co-permittees. Except as noted in Finding 8 below, this Order authorizes discharges of urban runoff from MS4s subject to the conditions and provisions herein. This Order is not intended to obligate the Co-permittees to address background, naturally-occurring, or non-anthropogenic pollutants or flows in receiving waters.

B. Section IV.D.3.h

provide evidence, acceptable to the Executive Officer, that the source of pollution is background, naturally-occurring, or non-anthropogenic, or that the cause of pollution is not within the jurisdiction or control of the Co-permittees.

5. RESTORE RECOGNITION OF LIMITATION ON MUNICIPAL AUTHORITY

Co-permittees' ability to enter private property and conduct inspections of stormwater facilities is limited by the United States Constitution, California's Constitution, and state and federal law. The Second Draft Order eliminates four references to this limitation, and requires Co-permittees to maintain legal authority that is adequate to enter, inspect, and gather evidence from industrial, construction, and commercial establishments. (Second Draft Order, Sections VI.C [general legal authority requirement]; VIII.B [construction inspection]; IX.B [industrial inspection]; X.B [commercial inspection].) Intentionally deleting reference to these limitations may imply that Co-permittees must have authority to enter private property in all circumstances. (See *Pacific Gas & Elec. Co. v. Energy Resources Conserv. & Dev. Comm'n* (1983) 461 U.S. 190, 220 [deletion of language in the drafting history may demonstrate consideration and rejection of the deleted proposition].) Restoring the original language eliminates this potential confusion.

9.5

Recommendation: Restore the original language in Sections VI.C, VIII.B, IX.B, and X.B, recognizing the constitutional and statutory limitations on municipal authority, as follows:

A. Section VI.C

> Each Co-permittee must secure and maintain legal authority, to the extent allowed by State and Federal Law, and subject to limitations on municipal action under the constitutions of the state of California and the United States, that is adequate to enter, inspect, and gather evidence (including pictures, video, samples, statements, and documents) from industrial, construction, and commercial establishments to determine compliance with ordinances, permits, conditions, and other requirements of the Co-permittees related to the control of discharges of pollutants to their MS4s.

B. Section VIII.B

> Each Co-permittee must inspect construction sites in their inventory, subject to limitations on municipal action under the constitutions of the State of California and the United States. Each Co-permittee must have written policies and procedures that describe how inspections and related enforcement actions are carried out. Inspections and related enforcement actions must be carried out in a manner that enforces compliance with applicable ordinance(s), plans, permits, or other requirements related to the control of discharges of pollutants to their MS4s.

C. Section IX.B

Each Co-permittee must inspect industrial sites in their inventory, subject to limitations on municipal action under the constitutions of the State of California and the United States. Each Co-permittee must have written policies and procedures that describe how inspections and related enforcement actions are carried out. Inspections and related enforcement actions must be carried out in a manner that consistently enforces compliance with applicable ordinance(s), plans, permits, or other requirements related to the control of discharges of pollutants to their MS4s.

9.5

D. Section X.B

Each Co-permittee must inspect commercial sites in their inventory, subject to limitations on municipal action under the constitutions of the State of California and the United States. Inspections must occur according to written processes and procedures, and in a manner to enforce compliance with ordinance(s), plans, permits, WQMPs, or other requirements related to the control of discharges of pollutants to their MS4s.

CONCLUSION

Thank you for the opportunity to comment on the Second Draft Permit and for your willingness to accommodate the City's request for regulation by a single regional water board. The City is committed to improving water quality in the region and provides these comments with the intent to participate in developing a permit that accomplishes this goal.

Sincerely,

J. G. Andre Monette
of BEST BEST & KRIEGER LLP

cc Tyrone Chesanek

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

February 13, 2015

Mr. Adam Fischer
Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3348

Re: Tentative Order/Draft MS4 Permit for Orange County and Co-Permittees (NPDES Permit No. CAS618030)

Dear Mr. Fischer:

Thank you for the opportunity to review and comment on the revised tentative order/draft permit (Order No. R8-2015-0001/NPDES Permit No. CAS618030) for discharges from the municipal separate storm sewer system (MS4) serving Orange County and co-permittees therein within jurisdiction of Santa Ana Regional Water Quality Control Board (Regional Board). We provided comments on the initial public draft (dated May 2, 2014) and we appreciate the Regional Board incorporating most of our recommendations in this revised draft, specifically in the areas of receiving water limits, TMDLs and water quality based effluent limits, toxicity statistical approaches, outfall monitoring, and the opportunity for public comment on the permittees' forthcoming monitoring program. As presented below, we have continued concerns about certain aspects of new and redevelopment requirements, along with two minor recommendations.

A. New and Redevelopment requirements

A few provisions in Section XII, New Development (including Significant Redevelopment), should be revised to clarify the expectations for controls at priority projects. While we generally agree that in most cases first priority consideration should be onsite "retention LID BMPs," we'd recommend that Section XII.F. be revised to enable compliance via offsite projects if water quality protections are in place at the site of the priority project and it's clear that the offsite projects will provide water quality benefits equal to or greater than onsite controls. Both the San Diego Regional MS4 permit and the Los Angeles County MS4 permit provide useful models for how this may be achieved. For example, the San Diego Regional MS4 permit (section E.3.c.1.b) states that alternative compliance (such as an offsite projects) may be utilized to comply with stormwater BMP requirements applicable to priority development projects. This permit specifies that in these situations, flow-through treatment control BMPs must be used to treat the portion of the design capture volume not reliably retained onsite. The San Diego permit also provides specific design expectations for these flow-through treatment controls. The LA County MS4 permit provides a similar avenue for implementing offsite

10.1

10.1 projects where there is a greater opportunity to replenish groundwater supplies at an offsite location. The LA County permit includes Water Quality Mitigation Criteria (VI.D.7.c.iii.7) that must be met when compliance with New Development and Redevelopment provisions is achieved via the implementation of offsite projects.

Section XII.H. of the draft permit lists the third priority for addressing development projects as the use of non-LID BMPs, if neither onsite retention LID BMPs nor biotreatment BMPs are feasible. This provision should be revised to make it clear that in these circumstances an offsite retention project or some other alternative means of compliance must also be implemented in addition to implementing non-LID BMPs. Such as revision would be consistent with the MS4 permits in place for neighboring counties. In the San Diego Regional MS4 permit (E.3.c.1.a.ii), in these circumstances it's necessary to use flow-through treatment controls in addition to mitigating for the design capture volume not retained onsite via an alternative compliance project (including offsite projects). In the LA County MS4 permit (VI.D.7.c.iii) if it's not technically feasible to retain or biofilter the required storm volume, projects must implement offsite

10.2 infiltration, groundwater replenishment or offsite retrofits in order to comply.
Section XII.K of the draft permit describes provisions for off-site projects. As noted above, we support the use of off-site projects in some circumstances, however the permit should be modified to explicitly state the performance expectations for offsite projects, including that they will result in achievement of equivalent water quality benefits to the implementation of onsite retention LID BMPs. Again, the San Diego Regional and LA County MS4 permits make this clear. The San Diego Regional MS4 permit (2013) states that priority development projects must mitigate for the portion of the design capture volume not retained onsite (E.3.c.1.b). On February 11, 2015, the San Diego Board amended the 2013 permit to include south Orange County and its co-permittees and it now requires the acceptance of Water Quality Equivalency calculations (E.3.c.3.a) for alternative compliance projects. The Los Angeles MS4 permit (IV.D.7.c.iii) clearly specifies the volume of stormwater runoff that must be controlled by offsite projects.

We recognize that in response to our June 20, 2104 comments, the hierarchy of treatment control BMPs was modified by adding section XII.I, allowing for compliance via retrofitting existing development. While we agree that it's a good idea to specify that off-site stormwater retention projects implemented to comply with the permit may include retrofits, this wasn't what we were suggesting in our 6/20/14 comments. Our recommendation regarding retrofits is that the permit

10.3 should be modified to require the identification of candidates for retrofitting within existing development areas covered by the permit, not just areas "owned or controlled by the Co-permittees." (Section XII.A.3) In the San Diego Regional MS4 permit each permittee must identify retrofit priorities within existing development. These strategies will identify developed areas where retrofitting will address pollutants that contribute to the highest priority water quality problems. It's recognized that retrofits aren't always feasible, but we believe the San Diego Regional MS4 permit's approach should be applied to the portion of Orange County in the Santa Ana Regional Board's jurisdiction. Also, the LA County MS4 permit (VI.D.9.d) requires the preparation of an inventory of retrofit opportunities within existing development, including prioritizing these opportunities and coordinating with private landowners.

B. Total Maximum Daily Load (TMDL) Requirements

10.4

Appendix C of this permit should be modified to be consistent with compliance deadlines provided within the Fecal Coliform TMDL in Newport Bay Watershed. Final permit Tables C-1 and C-2 should match dates included in Table 5-9f in Attachment to Regional Board Resolution 99-10.)

C. Monitoring Program

10.5

We appreciate the inclusion of neonicotinoides within the monitoring program; however, we reiterate our recommendation to include a broader suite of current use pesticides, specifically pyrethroids (e.g., bifenthrin, cyfluthrin, cypermithrin, esfenvalerate, fipronil, lambda-cyhalothrin, permithrin), which may have been inadvertently omitted. Pyrethroids are both widely used in urban areas and shown to be associated with toxicity in surface waters. (See Weston et al., *Aquatic Toxicity Due to Residential Use of Pyrethroid Insecticides*, Env. Science & Tech. 2005 and Ruby, *Review of Pyrethroid, Fipronil and Toxicity Monitoring Data from California Urban Watersheds*, CASQA report, 2013).

We appreciate the opportunity to provide our views on the revised draft permit. If you have any questions regarding this matter, please contact either Eugene Bromley at (415) 972-3510 or Peter Kozelka of the NPDES Permits Office at (415) 972-3448.

Sincerely,

Eugene Bromley

for David Smith, Manager
NPDES Permits Office (WTR 2-3)

The Walt Disney Company

Robert A. Antonoplis
Assistant General Counsel

February 12, 2015

Mr. Kurt V. Berchtold
Executive Officer
California Regional Water Quality Control Board
Santa Ana Region
3737 Main St., Suite 500
Riverside, CA 92501-3339

Subject: Comments on Second Draft Orange County Municipal Separate Storm Sewer System ("MS4") Permit, Draft Order No. R8-2014-0002, NPDES Permit No. CAS618030

Dear Mr. Berchtold:

The Disneyland Resort (Resort) greatly appreciates the opportunity to provide further comments on the Second Draft Orange County Municipal Separate Storm Sewer System ("MS4") Permit, NPDES Permit No. CAS618030 prepared by the California Regional Water Quality Control Board Santa Ana Region ("RWQCB") for implementation by the Orange County Flood Control District, the County of Orange and the Incorporated Cities therein within the Santa Ana Region for Urban Runoff.

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Our comments focus on the RWQCB's requirement for a compliance waiver when a project proponent elects to use credit programs in lieu of employing structural treatment control BMPs at the project site. Our Sub-Watershed BMP Plan for the Disneyland Resort dated December 12, 2013 shared with the RWQCB and approved on April 16, 2014, outlines how a credit program would be implemented at the Resort. Pursuant to this plan, the Resort would implement LID infiltration BMPs in areas of the Resort although not required by the MS4 Permit, and the volume of stormwater controlled by those infiltration BMPs could be banked as a "BMP credit" for future development projects. This entire banking process would be subject to the full inspection, monitoring and approval by the City of Anaheim, which is the lead agency for post-construction BMP strategies and facilities where the Resort is located.

In speaking to RWQCB Staff on February 3, 2015, staff believes the Resort's credit program would be subject to the "retrofit program" requirements and would have to meet the conditions of fourth priority consideration. The Resort's credit program does include credits generated from retrofits, but instead is an equivalent program to the first priority considerations that rely on retention or infiltration BMPs. We consider the Resort's robust credit program to be equivalent to or better than subsequent priority considerations (second through fourth) and should thus have its own section in the MS4 permit.

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We believe a credit program such as this result in a greater degree of environmental protection compared to project-by-project BMP implementation since:

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(1) Credits are always generated with retention LID BMPs, which is the first priority consideration in the draft MS4 Permit (MS4 Permit Section XII.F);
(2) Credits are generated by treating stormwater runoff although not required to be treated by the MS4 permit;
(3) The volume of water is treated prior to construction, and for a longer period of time, compared to volume treated on a project-by-project basis; and
(4) Post-construction stormwater that otherwise would have been discharged to the storm drain system is instead being infiltrated onsite and retained in the local water supply.

Because of this, we take strong exception to the provision that use of credit programs needs a "waiver" under MS4 Permit XII.L from the requirement to implement structural treatment controls contained in an approved WQMP. "Waiver" under Section XII.L is a finding that compliance with the MS4 Permit is not technically and economically feasible, necessitating relief from the compliance obligations. The granting of the waiver by the Board allows a project proponent to proceed with a lesser degree of environmental protection than would have otherwise been required by the MS4 Permit.

This is not the case when the Resort implements and uses credit programs. As discussed above, in generating a bankable credit for a future project, the Resort has treated and infiltrated a larger volume of runoff for a longer period of time compared to implementing BMPs at the future project site. By investing resources upfront, the Resort is providing a greater level of environmental protection sooner and is enhancing the local water supply. By requiring a waiver, we believe the Board is treating the use of credit programs as equivalent to a lesser degree of environmental protection. This is simply not the case.

11.2

There are also practical considerations for not requiring a waiver for use of the credit programs. Granting a "waiver" implies that the project proponent would have otherwise been in noncompliance with the MS4 permit. Since the Resort may be using credit programs on a periodic basis, the granting of multiple "waivers" by the Board could be misconstrued by some as a pattern and practice of systematic voluntary non-compliance by the Resort. This is hardly the case, given the environmental benefits of the voluntary LID retention projects and the full oversight by the City of Anaheim. In our view, the concepts of waiver and credit programs must be decoupled.

We believe that the goal of the "waiver" provision, as applied to the credit program, was for the Board to receive contemporaneous notification from the co-permittee (in our case, the City of Anaheim) that a project proponent is using a banked credit in its WQMP. If so, we have no objection to such a notification requirement or a requirement that the Board approve or reject use of the banked credit within a 30-day period. We therefore request that the credit programs language be placed in its own section in the MS4 Permit apart from the waiver section, and that the co-permittee be required to notify the Board whenever a project proponent elects to use a banked credit. We also recommend language be added in the MS4 Permit requiring the Board to approve or reject use of the banked credit

within 30 days, with no response from the Board after 30 days deemed an approval and thus offer the following language for Section XII.J Credit Programs:

11.2

> J. Credit Programs
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> 1. Co-permittees are authorized to allow transactions of all or any portion of the untreated design capture volume or flow "credits" between projects within the same watershed of the nearest receiving water of the U.S. The "credit" shall be generated when a LID BMP has been designed to treat the design capture volume or flow from an area that is outside of the project boundaries. Credits must be generated and traded subject to the following additional limitations:
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> a. Additional credits may not be generated by oversizing the LID BMP relative to its tributary area.
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> b. The Co-permittee managing the credit exchange or trading must provide written notice to the Executive Officer of the intent to approve the transaction at least 30 days prior to approval by the Co-permittee. If 30 days have elapsed without action by the Executive Officer, the proposed transaction is deemed approved. ~~The receiving project must be eligible for a waiver as described above.~~
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> c. The credit may only be used once for the receiving project; it may not be re-used for future projects in the same site as the original project receiving the credit.
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> d. The selection of structural treatment controls for future projects on the retrofit site must be based on the merits of the project alone and not on credits allowed for past projects in the same space.
>
> e. The Co-permittees where the affected projects are located must have and employ an effective system of accounting and tracking for the credit transfers.

If you have any questions or require additional information, please do not hesitate to contact Janina Galicinao at 714-781-3563 or me at 818-560-8943.

Sincerely,

Robert A. Antonoplis
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The Walt Disney Company

cc: Adam Fischer – RWQCB
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