

Comments by the City of Oceanside



CITY OF OCEANSIDE

WATER UTILITIES DEPARTMENT

May 05, 2014

VIA EMAIL TO: bpulver@waterboards.ca.gov

Barry Pulver
Regional Water Quality Control Board, San Diego Region
2375 Northside Drive, Suite 100
San Diego, CA 92108

Subject: Comment Letter – TENTATIVE INVESTIGATIVE ORDER NO. R9-2014-0020
Reference Number ECM Place ID: CW-650652

Dear Mr. Pulver:

The City of Oceanside, Clean Water Program (City) appreciates the opportunity to provide comments on the Regional Water Board's Tentative Investigative Order R9-2014-0020, *An Order Directing the City of Oceanside to Design and Implement a Monitoring Program for the Loma Alta Slough, Oceanside, California, and to Implement the Phosphorus Total Maximum Daily Load for Loma Alta Slough Established in the Order* (Tentative Order). The comment letter consists of three parts: this cover letter which describes the overarching comments on the Tentative Order and the City's proposed alternative approach, both a redline/strikeout and clean version of the Tentative Order which implements the City's proposed approach (Attachment 1 and Attachment 3) and a comment table containing technical comments on the Tentative Order and supporting documents (Attachment 2).

As stated by Regional Board staff at the public workshop, staff is attempting to "do something different" in the Tentative Order. Specifically, the stated goal is to develop an innovative, flexible approach to address the eutrophication impairment in Loma Alta Slough in lieu of a traditional Total Maximum Daily Load (TMDL). If done correctly, this new approach would be consistent with the Practical Vision¹ adopted by the Regional Board in 2013 and could serve as a model for more efficient ways to address impaired waters, leading to measurable improvements in the Region's waterbodies.

In concept, the City is supportive of this new approach and believes that there are multiple benefits to an alternative approach. These benefits include:

- A truly new approach would provide more flexibility in addressing the impairment, allowing adaptation consistent with the latest science. The science supporting the development of Nutrient Numeric Endpoint (NNE) criteria in estuaries is evolving and a final NNE policy has not been adopted.

¹ San Diego Regional Water Quality Control Board. (2013). *San Diego Water Board Practical Vision – Healthy Waters, Healthy People*

- A truly new approach would be streamlined as compared to the TMDL process. This new approach would not require a Basin Plan Amendment, peer review, or CEQA. This approach would require fewer resources from the Regional Board and the City.
- Because a new approach could be developed and adopted more efficiently, implementation actions addressing the impairment could advance more quickly.
- Implementation of the new approach would be well aligned with existing MS4 Permit requirements, programs, and reporting elements. The new approach has the potential to leverage existing regulations, making for a more efficient use of Regional Board and City resources.

The potential to implement a new creative, alternative approach is appealing to the City, prompting continued engagement with Regional Board staff. The City has been working with staff to develop an approach that will be effective in addressing the impairment in the Slough, while balancing, and where possible leveraging, the City's other regulatory commitments. Based on the public workshop, and our meetings with staff, it appears that Regional Board staff and the City agree on almost all of the key elements of such a new approach, including the following:

1. The new approach should include the numeric goals that have been developed through the stakeholder process, but should allow for adjustments as the NNE and reference estuary science evolves.
2. Implementation of the "effectively prohibit" discharge prohibitions in Order R9-2013-0001 (MS4 Permit) via the Jurisdictional Runoff Management Programs (JRMP) and in accordance with strategies developed in the Water Quality Improvement Plan will address the City's contribution to the impairment.
3. Monitoring and reporting under the Investigative Order will help assess the effectiveness of the City's efforts to reduce eutrophication in Loma Alta Slough.
4. The new approach should include a sufficiently detailed schedule for achieving the numeric goals, but should allow for the efficient adjustment to the schedule, as necessary.

Although the City strongly supports the use of a new, legally sufficient approach to addressing the impairment in the Slough, the City is concerned that a key element of staff's proposal is not only legally insufficient but also, more importantly, undermines the goal of establishing a new, creative and flexible way of addressing the impairment. This key element involves merely using the Tentative Order as a short-cut to a TMDL rather than a new approach to addressing the impairment.

If the Tentative Order is used merely as a short-cut to a TMDL, rather than a truly new approach to addressing the impairment, the approach will lack the flexibility that is a key shared goal of the Regional Board staff and the City. Once adopted as a TMDL, the numeric targets and associated waste load allocations become rigid and can only be revised in limited circumstances that require cumbersome administrative processes.

(33 U.S.C. §1313(d)(4)(allowing revision to waste load allocations and effluent limitations based on TMDLs only in limited circumstances).) Any such revision would require re-approval

of the TMDL by EPA, which could only be provided if strict criteria were to be established. (33 U.S.C §§ 1313(d)(2) and (4); Aug. 2, 2006 Memorandum from Benita Best-Wong to Water Division Directors (noting that revision of loading capacity, wasteload and load allocations require re-approval by EPA).) The TMDL must also be included in the Basin Plan before or during the next triennial review, and future adjustments to the TMDL would thus require a Basin Plan Amendment. (See State Board's "Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options" (adopted by Resolution 2005-0050).) In short, using the Tentative Order as a short-cut to adopt the TMDL negates the ability of the parties to achieve the goal of having a flexible, adaptive approach.

Using the Tentative Order as a vehicle to adopt the TMDL also raises legal concerns. Although the State Board's Policy for Addressing Impaired Waters allows the Regional Board to adopt a TMDL through a "single regulatory action", the Tentative Order does not qualify as such an action. The State Board Policy only allows the Regional Board to adopt a TMDL through a regulatory process when every regulated person who could be subject to the TMDL is a party to the process. As the Policy notes, adoption of a TMDL without all covered parties involved would violate the California Administrative Procedures Act. It is undisputed that the TMDL, if adopted, would apply to parties that are not subject to the Tentative Order, including the County of San Diego and the City of Vista, among others. For this reason, adoption of the Tentative Order as proposed by staff would be inconsistent with State Board Policy, and suffers from the other legal defects as described further in the comment table (Attachment 2).

In addition to the legal concerns, the City has technical concerns with the analysis conducted to develop the wasteload and load allocations presented in the TMDL. The technical information presented in the linkage analysis is not sufficient to demonstrate that the identified allocations are necessary to meet the identified numeric targets. The City's technical concerns are outlined in more detail in the comment table (Attachment 2). While the Regional MS4 Permit does include a requirement that "non-storm water discharges into the MS4s are to be effectively prohibited", the requirement to meet a numeric wasteload allocation will add an additional permit requirement during the next permit renewal that is not currently included in the permit. By adopting the Tentative Order as an alternative TMDL, the wasteload allocations will be required to be included in the next permit renewal. As the City has technical concerns with the calculation of the wasteload allocations, inclusion of the wasteload allocations as an additional permit requirement is of significant concern.

To achieve the shared goals of the Regional Board staff and the City, while avoiding these serious problems, the City has developed an alternative approach that it asks the Board to consider. This approach is described in more detail below.

PROPOSED ALTERNATIVE TO A TOTAL MAXIMUM DAILY LOAD

The City has developed a proposal that provides an alternative to the Tentative Order that we believe will accomplish the shared goals of Regional Board staff, the City, and USEPA. This alternative to a TMDL is consistent with the key goals of the Tentative Order and would effectively resolve the remaining issues. Therefore, the City requests that the proposed alternative be considered as the preferred alternative for adoption. At a minimum, the City requests that the proposed alternative be presented to the Regional Board members for their consideration and possible adoption at the public hearing. The proposed alternative is described

below and reflected in the redline/strikeout version of the Tentative Order, included as Attachment 1. The City would be willing to provide Regional Board staff with additional material to support the adoption of the alternative approach, if needed.

Effective Prohibition

The eutrophication impairment in Loma Alta Slough was confirmed using monitoring data collected under Investigative Order R9-2006-0076.² Studies have indicated that nutrient loading associated with non-stormwater flows may be causing the impairment during the summer months.³ The intent of the Tentative Order and of the City's proposed alternative is to address the impairment through the effective prohibition of non-stormwater discharges to the City's MS4.

Order R9-2013-0001 (MS4 Permit), Provision A.1.b (Prohibitions and Limitations) requires the City to effectively prohibit non-stormwater discharges from entering the City's MS4 through the implementation of Provision E.2 (Illicit Discharge Detection and Elimination). Under Provision E.2, the City is required to implement a program to actively detect and eliminate illicit discharges into the MS4 in accordance with strategies developed in the Water Quality Improvement Plan developed under Provision B. The Water Quality Improvement Plan is currently under development and will define the highest priorities for the watershed (i.e., nutrients for the Loma Alta Hydrologic Area) and strategies to address the priorities. The Water Quality Improvement Plan will also include numeric goals, schedules, and a monitoring program to assess program effectiveness – all of which will be aligned with the proposed alternative. The City will then address non-stormwater discharges directly through local implementation of the strategies developed and vetted through the WQIP process.

The concept of adaptive management is also required throughout the Water Quality Improvement Planning process. This will help to provide and support the flexibility desired in the proposed alternative.

Investigative Order

In order to determine whether the programs are effective in addressing the impairment, a revised Investigative Order is proposed. A redline strikeout and clean version of the proposed Investigative Order are included as Attachment 1 and Attachment 3. Consistent with discussions with Regional Board staff and to provide sufficient information for the proposal to be considered an alternative to a TMDL, the revised Investigative Order contains numeric goals, a clearly defined implementation process, and a schedule for improvements. The revised Investigative Order requires the design and implementation of a monitoring program to assess progress in meeting the numeric goals, providing an indication of how well the programs are addressing the impairment. The goals, implementation process, and schedules contained in the proposed Investigative Order will drive the development of the WQIP, as related to the Loma Alta Watershed.

² McLaughlin K., M. Sutula, J. Cable, P, Fong. (2011). *Eutrophication and Nutrient Cycling in Loma Alta Slough: A Summary of Baseline Studies for Monitoring Order R9-2006-0076.*

³ *Ibid.*

Goals

The goals included in the proposed Investigative Order are consistent with those in the Tentative Order. The goals were developed through a stakeholder process over the past several years and will serve as a good starting point for the Water Quality Improvement Plan. In keeping with the concept of adaptation, it is expected that these goals could be adjusted in the future as new information becomes available.

Implementation Process

The intent of the Tentative Order is to address the impairment through the implementation of programs under the MS4 Permit. The City's proposed alternative incorporates the same approach. The implementation process is aligned directly with the development of the Water Quality Improvement Plan for the Carlsbad Watershed Management Area, which includes Loma Alta Slough. In developing the Water Quality Improvement Plan, the City will work with Regional Board staff, non-governmental organizations, and the development community in developing strategies to address the highest priority for the watershed – the City will be focused on eutrophication in Loma Alta Slough. Strategies will be aimed at implementing the effective prohibition requirements in the MS4 Permit. The strategies will lead to the development and implementation of programs targeting non-stormwater discharges in the watershed, which will be detailed in the updated Jurisdictional Runoff Management Program (JRMP) document, to be submitted concurrent with the Water Quality Improvement Plan.

Implementation will include development and submittal of a monitoring plan, similar to that proposed in the Tentative Order, that will be designed to measure progress towards meeting the numeric goals. The scope of the monitoring plan is focused on measurements of key indicators related to the eutrophication impairment in the Slough.

Adaptive management will be performed as part of the Water Quality Improvement Planning process. Elements of the Plan will be assessed periodically according to the Permit schedule, with some assessments occurring annually and a full assessment of the Plan near the end of the Permit term, as part of the Report of Waste Discharge.

Reporting will be aligned directly with the annual reports required under the Water Quality Improvement Plan. With monitoring occurring during the summer months, reports will be submitted in January of the following year. This is consistent with the Tentative Order and with the reporting requirements under the MS4 Permit. For efficiency, it is recommended that these reports are combined, with the reporting requirements under the Investigative Order submitted as part of the Water Quality Improvement Plan Annual Report.

Schedule

The implementation schedule included in the proposed alternative is consistent with that in the Tentative Order and is directly aligned with the Water Quality Improvement Plan development, implementation, and assessment processes required under the MS4 Permit. Key elements of the schedule include:

- 2014 – continued implementation of current programs and investigations with focused efforts in the Loma Alta Slough Watershed; development of goals, strategies, and

schedules for the Water Quality Improvement Plan;

- 2015 – submittal of the second deliverable for the Water Quality Improvement Plan (goals, strategies, and schedules); update of the JRMP; submittal of the full Water Quality Improvement Plan;
- 2016 – begin implementation of the Water Quality Improvement Plan strategies through the revised JRMP; implementation of the first year of monitoring under the Investigative Order;
- 2017 – submittal of the first annual report for the Water Quality Improvement Plan; implementation of the second year of monitoring under the Investigative Order; development of the Report of Waste Discharge for renewal of the MS4 Permit, including effectiveness assessments of all elements of the Water Quality Improvement Plan;
- 2018 – submittal of the second annual report for the Water Quality Improvement Plan; date to meet interim numeric goals required under the Water Quality Improvement Plan; renewal of the MS4 Permit, providing a key regulatory opportunity for assessment of and revisions to the Water Quality Improvement Plan requirements and for the Investigative Order; third year of monitoring under the Investigative Order;
- 2019 – 2022 – continued implementation of the Water Quality Improvement Plan strategies, JRMP programs, required monitoring, assessment, and reporting;
- 2023 – projected attainment of final numeric goals under the Investigative Order, as described in the Water Quality Improvement Plan; Report of Waste Discharge under the MS4 Permit and Permit re-issuance; key regulatory opportunity for assessment and revisions to the MS4 Permit and/or Investigative Order.

RECOMMENDED ACTION

With commitment to action from the City, enforceable provisions in the MS4 Permit to ensure that nonstormwater discharges are effectively prohibited, and a monitoring program designed to assess progress, City staff have developed a preferred alternative to a TMDL that will address the impairment in Loma Alta Slough and address the identified concerns with the proposed Tentative Order.

The preferred alternative is well aligned with the Regional Board’s Practical Vision as well as the recently developed long term vision for the Section 303(d) program from USEPA.⁴ The vision identifies one of six goals as the “Alternatives Goal” that explicitly supports the use of alternative approaches to TMDLs, especially where the alternative “may be more immediately beneficial or practicable to achieving water quality standards”. Alternatives may include “emerging tools, wherein impaired waters remain on the State’s CWA 303(d) list until water quality standards are attained, but are assigned lower priority for TMDL development as alternatives designed to achieve water quality standards are pursued in the near term.” One of the examples included in the vision is to establish subcategories of Category 5, which would be appropriate where an alternative regulatory mechanism is addressing the impairment. The goal

⁴ USEPA. (2013). *A New Long Term Vision for Assessment, Restoration, and Protection under the Clean Water Act Section 303(d) Program*.

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also supports adaptive management within the approach, as is provided within the context of the Water Quality Improvement Plan under the MS4 Permit. The preferred alternative will provide faster progress by utilizing existing regulations to ensure that eutrophication is addressed as a priority for the watershed, will build in adaptive management, and will ultimately set a positive precedent for a more streamlined approach to attainment of water quality standards.

The Regional Board's Practical Vision also appears to be supportive of the proposed alternative. The process has involved public engagement and participation in the decision making process, which will continue to be upheld through the Water Quality Improvement Planning process. The Practical Vision was developed to achieve healthy waters through collaboration, reliance on the latest science, prioritization of issues and actions, and prudent use of authorities. In this new paradigm, relationships are integral to the success of the program. Through the proposed alternative and continued Water Quality Improvement Planning process of adaptive management, the public, regional board staff, NGOs, development communities, and the City will be working together towards the goal of improved water quality in Loma Alta Slough. The vision acknowledges that actions need to institute new methods of measuring and reporting progress and that the tools used during the past 40 years must be augmented and adjusted to meet new challenges. The City believes that the preferred alternative will serve as a model in fulfilling this vision.

The City recommends that the Regional Board considers the preferred alternative for adoption at its hearing on June 26, 2014.

Thank you for your time and consideration of the City's proposal. If you have questions, please contact me at (760) 435-5803 or mlahsaie@ci.oceanside.ca.us.

Sincerely,



Mo Lahsaie, Ph.D.; REHS
Environmental Officer

Enclosures: Attachment 1 – City of Oceanside Proposed Alternative (Redline/Strikeout)
Attachment 2 – City of Oceanside Comment Table for Draft Tentative Order No. R9-2014-0020
Attachment 3 – City of Oceanside Proposed Alternative (Clean Version)

cc: Barbara Hamilton, City Attorney, City Attorney's Office
Cari Dale, Director of Water Utilities Department
Cindy Lin, USEPA Region 9, Water Division

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CC:
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Comment Number	Document	Page #	Section	Category	Comment
1	N/A	N/A	N/A	General	The City appreciates Regional Board staff efforts in crafting a framework to measure progress towards restoring beneficial uses in the Loma Alta Slough. Additionally, the City agrees with the Regional Board's approach in implementing the existing MS4 Permit to address the eutrophication impairment. If implemented as proposed in the City's revised Investigative Order (IO) (Attachment 1), the IO has the potential to be a useful and effective assessment tool to measure the effectiveness of permit implementation as related to improvements to the eutrophication condition.
2	N/A	N/A	N/A	General	The City proposes that the revised IO includes the following elements: (1) A Slough monitoring component with macroalgae Numeric Goals consistent with the original tentative IO to track changes to the extent and severity of the impairment. These goals would be incorporated into the Water Quality Improvement Plan (Order R9-2013-0001 Provision B) and refined through the adaptive process if needed. The Water Quality Improvement Planning process will also requires the City to set interim numeric goals within the Permit term to measure short term progress towards attainment. Additionally, the Slough monitoring could be integrated with the future Monitoring and Assessment Program under the Water Quality Improvement Plan. Annual reporting timelines would be aligned to maximize efficiency. (2) A defined schedule for the IO monitoring and final attainment of Numeric Goals, aligned with the WQIP and MS4 Permit cycle. This would include a Progress Evaluation aligned with the WQIP Interim Goals to assess the success of the City's strategies on addressing the eutrophication impairment to date. (3) Implementation plans and strategies from current and future MS4 Permit efforts. This references specific milestones of the Permit to create and implement programmatic changes such as the final Water Quality Improvement Plan, updated Jurisdictional Runoff Monitoring Program activities and MS4 source investigation work.
3	N/A	N/A	N/A	General	At this time, the City sees the TMDL as a redundant regulatory component where a more practical alternative exists to address the eutrophication impairment in Loma Alta Slough. The WQIP process, MS4 Permit discharge prohibitions, and the City's illicit discharge detection and elimination program are existing commitments which will identify and address controllable sources and activities contributing to the impairment. We suggest that a TMDL is not necessary, as the use of existing regulations to address a 303(d) water body is an excellent example of an alternative approach which aligns with the Practical Vision of the Regional Board, as well as USEPA's long-term vision for the 303(d) program. The USEPA's December 2013 Memorandum: <i>"A New Long-Term Vision for Assessment, Restoration and Protection under the Clean Water Act Section 303(d) Program"</i> details goals for alternatives to the traditional TMDL process, which considers other programmatic tools to address impaired waters (e.g. Category 4b listings, lowered TMDL priority and adaptive management scenarios). The Water Quality Improvement Plan and the City's jurisdictional programs, required under the Regional MS4 Permit, are appropriate implementation tools. A "clean" IO without reference to the TMDL, but with defined goals and milestones, offers the Regional Board and the City flexibility (as intended in the MS4

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					Permit) in defining and prioritizing the strategies most likely to result in beneficial use attainment.
4	N/A	N/A	N/A	General	The Investigative Order (I.O.) is not the type of action that qualifies as a "single regulatory action" through which a TMDL may be adopted. The legal authority to issue the I.O. is set forth in Water Code section 13267. Section 13267 applies when the Regional Board is "establishing or reviewing any water quality control plan or waste discharge requirements" or "in connection with any action relating to any plan or requirement." By its plain terms, "Water Code section 13267 is inapplicable at the TMDL stage...." (<i>City of Arcadia v. State Water Resources Control Board</i> (2006) 135 Cal.App.4th 1392, 1414.) An I.O. is a legal vehicle to require persons to furnish technical or monitoring program reports which the Regional Board requires. It is not a permit, a waiver, or an enforcement order that could serve as the "single regulatory action" through which a TMDL could be adopted, even if the other conditions required by the APA and the Impaired Waters Policy were satisfied. Adoption of the TMDL through the I.O thus exceeds the legal authority found in Section 13267.
5	N/A	N/A	N/A	General	By blending the adoption of a TMDL with the adoption of the I.O, the I.O imposes or creates compliance requirements beyond the scope of Water Code section 13267. Water Code section 13267 may be enforced through Water Code section 13268 if required reports are not timely submitted. Submission of the required reports or information is the only compliance standard for Section 13267 orders. By adopting the TMDL, with its numeric targets, through the I.O, however, the Regional Board is conflating several separate actions into one vehicle that cannot legally support the combined actions, and, in the process, is confusing the manner in which compliance is to be achieved. To address this confusion, the Regional Board should not include adoption of the TMDL through the I.O and should clarify that compliance with the I.O. is achieved by the submission of the documents required by the I.O to the Board at the times required. The goals of the TMDL can be achieved through the proposal made by the City.
6	N/A	N/A	N/A	General	Adoption of the TMDL through the I.O will result in the adoption of a TMDL that must satisfy all the requirements of a TMDL, including the process by which the TMDL may be amended. Adoption of a TMDL in this way does not create an alternative to a TMDL or avoid the constraints imposed by a TMDL. Thus, the Regional Board staff's proposed approach is not a new approach to addressing an impairment; rather, it is simply a legally deficient short-cut to adopt a TMDL. Once adopted, the TMDL and its wasteload allocations become rigid and cannot flexibly be amended as the Board staff intends. Specifically, once adopted as a TMDL and approved by EPA, the TMDL must be incorporated into the Basin Plan during or before the next triennial review. ((33 U.S.C § 1313(d)(2) ("If the Administrator approves such identification and load, such State shall incorporate them into its current plan under subsection (e) of this section."(Emphasis added)); Impaired Waters Policy, p. 9.)) Inclusion of the TMDL in the Basin Plan is required by federal law, and, contrary to the statements on page 42 of the TMDL, is not without regulatory effect. Federal law requires that TMDL be included in the Basin Plan in order to make sure that they have regulatory effect and are implemented by the States. The State Board has specifically

Comment Number	Document	Page #	Section	Category	Comment
					<p>acknowledged in its May 2001 report to EPA that "Federal law requires that TMDLs must be formally incorporated into the Basin Plan to be part of the basis for Regional Board actions." (Emphasis added.) Once in the Basin Plan, they can only be changed through a Basin Plan amendment, which would require State Board review. In addition, once adopted as a TMDL, the numeric targets and associated wasteload allocations become rigid and can only be revised in limited circumstances that require cumbersome administrative processes through EPA. (33 U.S.C § 1313(d)(4).) Any such revision would require re-approval of the TMDL by EPA, which could only be provided if strict criteria were to be established. (33 U.S.C § 1313(d)(2) and (4); Aug. 2, 2006 Memorandum from Benita Best-Wong to Water Division Directors (noting that revision of loading capacity, wasteload and load allocations require re-approval by EPA).) Adopting the TMDL through the I.O. will thus not result in a new, flexible approach that will allow for timely revisions based on the developing science. Rather, it will result in the same old approach that has proven so cumbersome and difficult to implement. In contrast, the City's proposed approach is new and flexible, while remaining consistent with state and federal standards. The City's approach is consistent with recent EPA policy regarding TMDLs, which recognize that listed impairments can be given lower priority when they impairment is being addressed by existing regulatory requirements, and also could be accommodated, is needed, through the Category 4b process.</p>
7	N/A	N/A	N/A	General	<p>Before adopting the TMDL, the Regional Board must comply with Health & Safety Code section 57004. Section 57004 provides that the Regional Board must not take any action to adopt the final version of a "rule" unless the Board has submitted the scientific portions of the proposed rule to external scientific peer review, has received a written report that contains an evaluation of the scientific basis of the proposed rule and has assessed and responded to that written report. Adoption of a TMDL falls within the definition of a "rule" set forth in Section 57004(a)(1). Because the TMDL has not been the subject of peer review, no written report that contains an evaluation of the scientific basis of the proposed rule exists and the Regional Board has not assessed and responded to the written report. Adoption of the TMDL would thus violate Health & Safety Code section 57004. The TMDL Report asserts on page 43 that this TMDL "does not require a scientific peer review because no rulemaking is occurring to adopt or implement it." This statement is inconsistent with the law and the facts. However it is originally adopted, a TMDL, once adopted and approved by EPA, must be included in the Basin Plan and will by definition apply to all dischargers subject to the TMDL, which here include all "NPDES permits and WDRs." (33 U.S.C § 1313(d)(2) ("If the Administrator approves such identification and load, such State shall incorporate them into its current plan under subsection (e) of this section."(Emphasis added)).) In fact, the State Board has specifically acknowledged in its May 2001 report to EPA that "Federal law requires that TMDLs must be formally incorporated into the Basin Plan to be part of the basis for Regional Board actions." (Emphasis added.) The TMDL is therefore a rulemaking. By definition, all TMDLs implement an existing standard (i.e., the applicable water</p>

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					quality standard that is not being met), so the TMDL's claim on page 43 that peer review is not required because the "TMDL implements an existing standard and relies on existing requirements for implementation" is erroneous. It is the key scientific basis for the unique numeric targets in the TMDL that must be subjected to peer review, and which the Regional Board cannot adopt in the form of a TMDL until that review occurs.
8	N/A	Multiple	Multiple	General	As presented throughout the stakeholder process, the City is concerned that the impairment in the Slough is caused by a combination of point and nonpoint sources of nutrients. The City is required to address the point sources of non-stormwater entering its MS4 and effectively prohibit those that are not allowed under the MS4 Permit. Many of these sources are truly controllable under the City's authority. The City agrees that this will be effective in addressing nutrient loading to Loma Alta Slough. Also under the MS4 Permit, the City is required to address sources of groundwater that are found to be "contaminated" and therefore potentially contributing to the impairment in the Slough. However, potential implementation actions to address groundwater as a source may be challenging and costly and loads may take many years to dissipate. These sources may not be "controllable" at this time. With this understanding, the City will develop and implement strategies and programs aimed at eliminating those controllable sources of non-stormwater flows entering its MS4. In performing source investigations, the locations of non-point sources of nutrients will also be identified. Concurrent with implementation, the City will perform assessment monitoring in the Slough to evaluate changes in the impairment condition. Throughout the process, adaptive management will be critical to incorporate the latest science and any new information. There are also periodic regulatory check points, providing opportunity for the stakeholders and Regional Board to adapt their approach. Many of the comments below specifically address the groundwater concerns voiced by the City. The City feels that they have addressed these concerns appropriately in the redline/strikeout of the Tentative Order provided as Attachment 1 to the comment letter.
9	N/A	Multiple	Multiple	General	The City understands that multiple State and Regional Board permits and programs address dischargers other than the City in the Loma Alta watershed (City of Vista, County of San Diego, North County Transit District, Caltrans). We support the responsibility of the City in fulfilling the requirements of a revised Investigative Order as proposed in Attachment 1. However, if the Regional Board chooses to move forward with the current TMDL approach, other responsible parties with discharge potential must be included in the Investigative Order/TMDL. There are specific comments included below pertaining to the inclusion of all stakeholders in the Investigative Order and TMDL.
10	N/A	Multiple	Multiple	General	The hydrology in Loma Alta Slough plays an important role in the eutrophication impairment. Loma Alta Slough is a bar built estuary wherein the mouth of the Slough is closed the majority of the year due to natural sand migration. The City does not force the closure of the Slough. There are multiple references in the Tentative Order and in the TMDL Staff Report that incorrectly characterize the City's actions with respect to management of the mouth of the Slough. Specifics

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					are included below and should be addressed in all instances.
11	N/A	N/A	N/A	General	The City is actively conducting routine outfall investigations to identify controllable sources of non-storm water discharge from the City MS4 to Loma Alta Creek. These efforts will lead to the identification of both anthropogenic point source discharges, as well as non-point source discharges into the City MS4. Information gathered through this process will lead to more intensive monitoring at problem outfalls with persistent discharges. Focus on priority drainage areas and incorporation of monitoring information into the WQIP process will refine source reduction and elimination strategies. This requirement of the MS4 Permit will lead to the identification of controllable sources of flow and/or nutrients to the Loma Alta Slough and reasonable strategies to reduce or eliminate such discharges.
12	N/A	N/A	N/A	General	In order to maintain compliance with the current 2013 Regional MS4 Permit, the City is currently working to add language to its ordinance which specifically prohibits residential over-irrigation runoff and the pumping of groundwater to the City MS4 (unless conditionally approved by the State). Prohibiting over-irrigation runoff and pumped groundwater discharge without conditional approval are new requirements under the current 2013 Regional MS4 Permit and were not required under the 2007 Regional MS4 Permit.
13	N/A	N/A	N/A	General	The City is currently inspecting residential areas with a focus on identifying and eliminating over-irrigation runoff and pumping of groundwater to City MS4. Conducting inspections of residential areas is a new requirement under the current 2013 Regional MS4 Permit and was not required under the 2007 Regional MS4 Permit.
14	N/A	N/A	N/A	General	The current 2013 Regional MS4 Permit allows for different types of inspections. Therefore, the City has increased inspection frequency of high priority industrial, commercial, and municipal facilities in the Loma Alta watershed. In general, the City first conducts an on-site, in-person inspection. Then, City inspectors increase inspection frequency of the facility throughout the year by conducting a series of drive-by inspections. Drive-by inspections often focus on identifying non-stormwater discharges for elimination including over-irrigation runoff. Different inspection types were not allowed under the 2007 Regional MS4 Permit.
15	N/A	N/A	N/A	General	The City is currently inspecting the equipment and best management practices (BMPs) of mobile businesses which deal with water. Mobile Businesses which deal with water must pass a stormwater inspection upon original issuance or renewal of City business license. Mobile business inspections are not a requirement under the current 2013 Regional MS4 Permit.
16	N/A	N/A	N/A	General	The City is working towards identifying high priority drainage areas within the Loma Alta watershed and will increase the frequency of surveys, observations, and investigations in these areas.
17	N/A	N/A	N/A	General	Areas to target education outreach will be prioritized based on data and information gathered via the inspection program and the monitoring source assessment program. Target audiences (i.e. commercial, industrial, residential) will be identified in these prioritized areas in order to develop

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					effective outreach programs that will result in behavior change to prevent runoff that may contribute to the impairment in the Slough.
18	Tentative Order	N/A	N/A	Global	In order to provide consistency with the MS4 Permit, specifically the development and implementation of the Water Quality Improvement Plan, references to "numeric targets" should be substituted with "numeric goals" in all cases. Appropriate modifications are included in the redline/strikeout provided as Attachment 1 to the comment letter.
19	Tentative Order	N/A	N/A	Global	The decision to focus solely on phosphorous as the limiting nutrient in the Slough may not be the most effective means to solve the eutrophication impairment in the Slough. There are factors discussed in McLaughlin et al. (2011), aside from Figure 4.2 on page 60 (elaborating on the nutrient status of the Slough as measured from transect data in 2008) which suggests that both N and P loads from the watershed should be controlled. Negative residuals in Phosphorous budgets calculated by McLaughlin et al. (2011), as described in the report, may indicate that external P loads "are not sufficient to support the high biomass observed" and that internal recycling may play a significant part in maintaining the algal biomass seen during the summer months. Additionally, it's a commonly accepted phenomenon that decreasing salinity in estuarine environments (becoming exceedingly freshwater) during closure periods allows for greater binding of P into sediments with elevated Fe content, which can be recycled into the water column via decomposition of sediment organic matter. The microbial loop may also play a part in the recycling of deficit P in the Slough during the closed inlet period, as noted in the report. This discussion should also investigate relevant peer-reviewed literature focused on the need to control not just P, but also N inputs in estuaries, especially due to the complex physical and biogeochemical process observed in dynamic subtidal environments such as Loma Alta Slough. A review by Howarth and Marino (2006) provides a good starting point for this discussion, as it summarizes results from relevant studies over the past 30 years in a variety of environments where N controls biomass, regardless of P values. [Howarth, R.W., Marino, R. (2006). Nitrogen as the limiting nutrient for eutrophication in coastal marine ecosystems: Evolving views over three decades. <i>Limnol. Oceanogr.</i> 51:1, part2, pp364-376] The City recommends revisions to the Investigative Order to reference "nutrients" as opposed to only phosphorous, consistent with the redline/strikeout submitted as Attachment 1 to the comment letter.
20	Tentative Order	1	Finding 2	Purpose	The Purpose of Order section should reflect the intrinsic character of CWC Sec. 13267 for investigative monitoring reports (to "furnish technical monitoring reports") and should be revised to provide direction to answering the Slough Monitoring Program study questions. The City suggests that the finding be revised consistent with the redline/strikeout provided as Attachment 1 to the comment letter.
21	Tentative Order	2,4	Findings 6,12	Impairment	The reference of the 1996 303(d) listing for bacteria should be removed. The Tentative IO and associated TMDL is focused solely on assessing effects of reduced nutrient loads to Loma Alta Slough. Recommend revision consistent with redline/strikeout provided by the City (Attachment 1 to the comment letter).

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22	Tentative Order	3	Finding 10	Stakeholders	There is no mention here of the lands held by North County Transit District (NCTD) and Caltrans along the Loma Alta Corridor. Neither is referenced in the Tentative I.O. NCTD owns and is responsible for addressing flows from numerous private storm drain outfalls, transit stations and landscaped areas which could be considered potential sources. The NCTD Sprinter corridor along Loma Alta Creek contains multiple storm drain outfalls draining directly to Loma Alta Creek, which are inaccessible for City staff to monitor due to right-of-way restrictions. There are also NCTD-managed habitat mitigation areas near the El Camino Real detention basin which may be using irrigation for re-vegetation efforts. If the Regional Board continues with the approach in the Tentative Order, NCTD should be included in this discussion.
23	Tentative Order	3	Finding 11	Hydrology	It should be emphasized that Loma Alta Slough is a intermittently and seasonally subtidal estuary. "Coastal estuarine wetland" is too broad of a term and has implications for the methods from which the algal numeric targets were derived. Recommend revision consistent with redline/strikeout provided by the City (Attachment 1 to the comment letter).
24	Tentative Order	3,6	Findings 9, 19	Alternative Approach	The I.O. is not a "single regulatory action" through which the TMDL may be adopted. The State Board's "Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options" ("Impaired Waters Policy"), as well as the State's Continuing Planning Process, presumes that TMDLs will be adopted through a Basin Plan Amendment. (See Impaired Waters Policy, p. 1 ("it is anticipated that the majority of TMDLs will be established through an implementation plan adopted as a Basin Plan amendment."); see also, Report in Support of U.S. Environmental Protection Agency's Review of California's Continuing Planning Process, State Water Resources Control Board (May 2001), pp. 31-33 (noting that "TMDLs are generally adopted by the State and Regional Boards as Basin Plan amendments" and that "Federal law requires that TMDLs must be formally incorporated into the Basin Plan to be part of the basis for Regional Board actions.").) In very limited circumstances, TMDLs may be adopted through a "single regulatory action." A 'single regulatory action' is an action in which all "persons subject to regulations have the opportunity to participate in the process during which the assumptions underlying an implementation plan are derived." If the TMDL will apply to persons who are not a party to the action, adoption of the TMDL without a Basin Plan amendment would constitute "underground regulation" in violation of California's Administrative Procedures Act because it would subject persons "to subsequent requirements based upon assumptions determined in a previous proceeding to which they were not a "party." Here, the I.O. only applies to the City of Oceanside. However, as the TMDL Report demonstrates, the TMDL will apply to other parties in the future, including the County of San Diego, the City of Vista, the North County Transit District, Caltrans and a large number of other point and non-point sources. In fact, the wasteload allocation in the TMDL is assigned to "NPDES permits and WDRs", unequivocally illustrating that the TMDL will apply to multiple parties that are not part of this proceeding. (TMDL, p. 35.) As these other entities are not parties to the I.O., the I.O. is not and cannot be a "single regulatory action" through which the TMDL may be adopted. The key consideration is not that the I.O. and

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					the TMDL can be efficiently adopted through one vote of the Regional Board; the key consideration is that the TMDL will and must in the future apply to non-parties to the I.O. and therefore must be adopted as a Basin Plan Amendment as required by the Impaired Waters Policy and the State's Continuing Planning Process. While it may be efficient for the Regional Board to adopt the TMDL through the I.O., that action is not consistent with the APA or State Board policy.
25	Tentative Order	4	Finding 12	Impairment	Please provide reference to the study cited in which eutrophication was confirmed.
26	Tentative Order	4	Finding 12	Impairment	For consistency with Comment #19: "Loading of nutrients, specifically phosphorous, into the Slough associated with dry weather flows results in excessive algal growth during the summer months.
27	Tentative Order	4	Finding 13	Hydrology	The berm closes naturally due to sand accretion at the beach. Recommend revision consistent with redline/strikeout provided by the City (Attachment 1 to the comment letter).
28	Tentative Order	4	Finding 14	Impairment	With respect to the impairment of non-contact recreation beneficial use from macroalgae, only one applicable study is cited in an October 2011 memo from SCCRWP to the Regional Board, and in SCCWRP/CMA (2013), which elaborates on the selection of numeric targets (p.104) for percent cover. This study [Supplee et al. (2009)] provided information from a public survey in lotic streams of Montana to estimate the percent coverage at which recreation becomes undesirable. It is questionable to substitute results from this study to a lentic environment on the coast with different shared recreational uses and beneficial uses other than REC-2.
29	Tentative Order	5	Table 1	Numeric Targets	The numeric targets for macroalgal biomass and cover were selected based on the best available science; however, there are some shortfalls with the science at this time. While studies like the European Union Water Framework Directive [Scanlan et al. 2007] were used to derive values for this project, the targets were converted from data collected from estuaries across multiple geographic locations in Europe with variable estuary types (intertidal vs. subtidal). As noted in Sutula (2011) [" <i>Review of Indicators for Development of Nutrient Numeric Endpoints in California Estuaries. Southern California Coastal Water Research Project Technical Report No. 646. December 2011.</i> "] the Scanlan study did not clearly specify the geographic scope of specific thresholds for macroalgal biomass and percent cover. It is our understanding that the more recent work by Sutula et al. (2014, in press) has expanded the confidence of extrapolating threshold effects of macroalgae growth across California intertidal estuaries. We understand that the numeric targets were chosen based on the best science available at the time of drafting the TMDL Staff Report and Investigative Order. However, given that Loma Alta Slough is a subtidal, intermittently closed estuary, we recommend that the numeric targets are revised to "numeric goals" and are subject to adaptation as new information becomes available. Numeric goals and the incorporation of the adaptive management process is consistent with requirements of the Water Quality Improvement Plan in Provision B of the Regional MS4 Permit.
30	Tentative Order	5,6	Findings	Sources – MS4	If this section is to remain, change " <i>dry weather MS4 discharge</i> " to " <i>non-storm water discharge</i> "

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			16,17		for consistency with the MS4 Permit. Both findings include language stating that the primary source of pollutants affecting the eutrophic conditions and causing the impairment in the slough is the City's MS4. However, this has not been proven and the purpose of the IO is to find and eliminate the primary sources of pollutants causing the impairment. To our knowledge no other intensive studies other than those presented in the staff report have proven that the majority of phosphorous loading is from the City MS4. Ambient concentrations of P in perennial creek flows upstream of the MES may also be a source. Watershed monitoring by the City in 2010-2011 showed ambient creek water values of P >0.2mg/L when averaged above and below the mass emission station. Additionally, there is no discussion on the natural flow status of the creek; there is variable perennial flow from natural tributaries and springs (notably Garrison Creek) throughout the year that provides base flows in addition to those contributions from MS4 discharges. The language should be revised consistent with the redline/strikeout provided as Attachment 1 to the comment letter.
31	Tentative Order	5	Section 17, Paragraph 1, Last Sentence	Sources – MS4	The last sentence needs to be revised: "The Regional MS4 Permit requires the City to identify and eliminate controllable and illicit dry-weather sources of total phosphorus non-storm water flows discharging into the City's MS4 and from the MS4 to Loma Alta Slough and its tributary waters"
32	Tentative Order	6	Finding 18	Stakeholders	"Because the City's MS4 System is the primary source of pollutants affecting the eutrophic conditions, it is appropriate for the City to conduct the assessments" If the Regional Board continues with the approach in the Tentative Order, the statement should be revised to include mention of NCTD, Caltrans, the County of San Diego, and the City of Vista.
33	Tentative Order	6	Finding 19	Implementation	Consistent with Comment #24, the City would prefer that Finding 19 be deleted in its entirety. Should the Finding remain, the reference to the MS4 Permit should be revised as follows: " <i>Existing MS4 Permit requirements include adequate prohibitions and limitations needed to meet the numeric target...</i> "
34	Tentative Order	6	Finding 20	CEQA	Although the Regional Board is exempt from certain aspects of CEQA compliance pursuant to its status as a certified regulatory program, the Regional Board remains subject to all of those aspects of CEQA outside the scope of the exemption for certified regulatory programs, including CEQA's policy goals and substantive standards. (<u>San Joaquin River Exch. Contractors Water Auth. v. SWRCB</u> (2010) 183 Cal.App.4th 1110, 1125; <u>City of Arcadia v. SWRCB</u> (2006) 135 Cal.App.4th 1392, 1422.) As these cited cases illustrate, adoption of a TMDL typically requires the preparation of a substitute environmental review document because implementation of a TMDL almost always requires activities that may have environmental impacts. Here, there is more than a reasonable possibility that the TMDL and its implementation could have environmental impacts. For example, as suggested in the TMDL, the City could implement the TMDL through restoration projects that could have both short-term and long-term impacts from construction activities and work within the Slough. As also noted in the TMDL, compliance with the TMDL may result in increased bacteria loading at the beach that could have environmental

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					impacts. Thus, the TMDL could have impacts on air quality, biological resources, transportation/traffic, greenhouse gas emissions and cumulative impacts, among others. Neither Class 8 nor Class 21 exemptions apply to the adoption of a TMDL. While the TMDL is intended to address the eutrophication in the Slough, its implementation may have other environmental impacts that must be assessed. Similarly, the TMDL establishes new numeric targets and is not merely an action to enforce a law, general rule, standard or objective. If the Regional Board intends to adopt the TMDL, it must do so in compliance with CEQA and prepare a substitute environmental review document.
35	Tentative Order	8,13	Finding 23, Section 7	Cost Recovery	As set forth in Finding 1, the regulatory authority for the I.O. is Water Code section 13267. The remedy for a failure to submit the technical or monitoring reports required by an I.O. issued pursuant to Water Code section 13267 is an enforcement action under Water Code section 13268. Section 13268 does not include a cost recovery provision. Water Code section 13304 and 13365 have no application to Section 13267 or to the I.O. under consideration by the Regional Board. Therefore, all references to cost recovery and to Sections 13304 and 13267 must be deleted from the I.O. Consistent with Finding 1, the regulatory authority for the I.O. is Water Code section 13267.
36	Tentative Order	8,12	Finding 24, Section 4	Compliance	The Investigative Order needs to provide clarification on what constitutes compliance. In meetings with Regional Board staff, it has been agreed that compliance with the Investigative Order will be gained through the development and submittal of required plans and reports and through performance of the required monitoring. Recommend revision to the Investigative Order consistent with the redline/strikeout provided by the City (Attachment 1 to the comment letter). The suggested revisions are provided in Section 5 of the redline of the Tentative Order (Section 4 of the Tentative Order). As asserted in Finding 24 of the Tentative Order, compliance related to implementation actions will be addressed via the Regional MS4 Permit.
37	Tentative Order	9	Section 1.a; Section 11.1.2	Monitoring	Monitoring questions should be consistent. See City's proposed redline/strikeout included as Attachment 1 to the comment letter for specific recommended revisions.
38	TMDL Staff Report	1	Executive Summary	Numeric Targets	The numeric target for macroalgal biomass is listed as 90 grams dry weight per square meter. The Tentative IO and Staff Report list the target volumetrically in cubic meters. Please correct.
39	TMDL Staff Report	1	Section 1	Hydrology	Suggest revised text: " <i>The impairment is limited to the summer-dry weather season when natural and anthropogenic activities sand accretion at the ocean inlet restricts the mixing of freshwater and saltwater/ocean water...</i> "
40	TMDL Staff Report	1	Section 1, Paragraph 4	Stakeholders	" <i>The implementation plan to achieve the TMDL is for the City of Oceanside (City) to comply with existing permits that prohibit the discharge of non-storm water and illicit discharges into the City's municipal separate storm sewer system (MS4).</i> " Other stakeholders should be referenced here, as in the Tentative I.O.

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41	TMDL Staff Report	6	Section 3.1	Hydrology	An explanation should be included in this section which describes how the delineation / extent of the Slough was determined (e.g., the extent of tidal influence during open berm periods, observed limits of eutrophic conditions) This has implications for the extent of the problem and therefore which areas should be monitored under the Investigative Order. Additionally, a more thorough description of the current and historical land uses surrounding the Slough and upstream watershed.
42	TMDL Staff Report	7	Figure 3	Hydrology	This section of Loma Alta Creek, according to the description in Section 3.1, is within the Slough boundary. Revise caption as necessary.
43	TMDL Staff Report	8	Section 3.1, Paragraph 3	Hydrology	Suggested text revision: " The City constructs a During the summer months, a berm naturally forms across the Slough and the City operates the Loma Alta Slough Ultraviolet Treatment Facility (FETD) during the summer months to maintain a constant water level in the Slough. " prevent water with high indicator bacteria from discharging to Buccaneer Beach and the Ocean."
44	TMDL Staff Report	9	Section 3.2, Paragraph 2	Stakeholders	NCTD is mentioned in this section, " <i>which has right-of-ways and rail facilities adjacent to Loma Alta Creek and other facilities that cross the Slough.</i> " Why are separate stakeholders mentioned here in the Staff Report and not in the Tentative Investigative Order?
45	TMDL Staff Report	11	Section 4.1	Sources – MS4	This section incorrectly assumes that the majority of dry weather watershed flows are solely from MS4 discharges and that perennial flows from inputs upstream are nonexistent. Also, remove the mention of the City's construction of the sand berm, which occurs naturally (see comment #10 above). A citation(s) should be included for the statement " <i>A healthy aquatic habitat cannot be supported when dissolved oxygen is reduced to below 2 milligrams per liter (mg/l), a condition called hypoxia.</i> "
46	TMDL Staff Report	11	Section 4.1	Hydrology	Statement describing the impairment should acknowledge that the restriction of tidal flushing occurs naturally. Recommend revised sentence to read: " <i>Eutrophication in the Slough is the result of the restriction of tidal flushing caused by natural sand accretion processes at the mouth of the Slough...</i> "
47	TMDL Staff Report	12	Section 4.2, Paragraph 1	Impairment	First paragraph should be under separate heading for impairment of WILD, EST, RARE, MAR beneficial uses.
48	TMDL Staff Report	13	Section 4.3, Paragraph 1	Impairment/ Hydrology	See comment #19 for addressing P as the causative pollutant in this section. Additionally, suggested text revision for the following: " <i>and the natural closing the mouth of the Slough by the City are the driving components in the eutrophication of the Slough</i> "
49	TMDL Staff Report	13	Section 4.3, Paragraph	Impairment/ Hydrology	The reference of bacteria in the first and last sentences in this paragraph should be removed as the I.O. and TMDL were developed to address the eutrophication impairment in the Slough. The "management plan" of the City closing the berm should also be changed as previously noted. The

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			3		Slough closes naturally during the summer months.
50	TMDL Staff Report	16	Section 5.1	Allocations	Please provide further clarification with respect to the TMDL calculation which is driving the waste load and load allocations for P into the Slough. After reviewing McLaughlin et al. (2011), and MACTEC (2009) which summarized the lagoon I.O. work, it appears that the value used to calculate P loading into the Slough was derived solely from one index period in July 2008 at the mass emission station. There needs to be clarification where this value came from, especially for what bin of P it represents (SRP, Total P, Dissolved P...). The value of 0.02 mg/L P appears to have come from Table 4-56 in MACTEC (2009); which shows the average P concentrations of six dry weather sampling events across the first two weeks of July 2008. Time-weighted composites were collected across a 30-min interval on each of the six days. These data were collected at the Mass Emission Station (MES), upstream of the major tributary confluence described in Tetra Tech (2013). Please verify if this is the case. Nutrient loading from this tributary and separate downstream sources were noteworthy as described in Tetra Tech (2013). Use of the MES data was limited in scope, did not account for downstream tributary sources, and only represented a subset of the critical loading period. It remains unclear why this value was used, rather than a modeled value for the upstream segment simulated across the entire critical period. Additionally, due to discrepancies observed in the 2008 MES flow data which arose during the modeling effort, flow data were recollected in 2011 to resolve differences between observed data and the calibrated model. From July to August 2011, the flow maintained a rough mean of 0.55cfs, which is reported on p.39 of SCCRWP/CMA (2013) and is used in the TMDL calculation in this section. The methodology behind using averaged P concentration from the MES in July 2008, coupled with new flow values from August 2011, brings the results of the TMDL calculation into question. The use of these two values from very brief and different time periods poses implications for the validity of the calculated reduction and maximum load values., as inputs below the MES could be assisting the cumulative nutrient loading into the Slough (see Tetra Tech 2013).
51	TMDL Staff Report	16	Section 5.1	Impairment	There needs to be a focus on both nitrogen and phosphorous inputs. There should be a reference to a study, report, or article here showing the reasoning behind selecting P as the focus of the TMDL.
52	TMDL Staff Report	17	Section 5.2.1	Hydrology	To more accurately reflect the natural processes at the mouth of the Slough, the City recommend revision to read: " <i>The hydrological status of the Slough is variable and dependent upon precipitation events and the status, both natural and from the actions of the City, of the sand berm at the beach</i> "
53	TMDL Staff Report	17	Section 5.2.2	Numeric Targets	See comment #29 above regarding the discussion of macroalgae numeric targets. The "reference condition" for <u>subtidal</u> estuaries such as Loma Alta is still being researched. Numeric adverse effect thresholds have been converted from <u>intertidal</u> environments. The order and staff report should provide for flexibility in these target values depending on the results of the reference condition thresholds for subtidal estuaries through adaptive management protocols as prescribed under the Regional MS4 Permit.

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54	TMDL Staff Report	19	Section 5.2.2	Impairment	"... This condition was evident in the Slough during the summer of 2008, when some of the highest algal biomass levels found in the Southern California Bight were recorded in the Slough while surface water nutrient concentrations generally met the Basin Plan's numeric interpretation..." The eutrophication may not be entirely attributed to loading from surfaced water; the impairment may be related to the bio-degradation of organic materials present in the slough.
55	TMDL Staff Report	22	Section 5.2.3	Sources – MS4	Suggested text insertion: " <i>There should be no loading of phosphorus from the City or other responsible agency's MS4 into the Slough during the summer dry season, and therefore the reductions would be required regardless of the selected numeric targets.</i> "
56	TMDL Staff Report	24	Section 6.1	Sources – MS4	"More recent inspections conducted by the San Diego Water Board also have confirmed dry season discharges of nutrient-enriched flows in the City's MS4 (San Diego Water Board, August 2, 2013)." The City should be provided the analytical results from samples collected during the "MS4 Audit" performed by RWQCB staff in August 2013.
57	TMDL Staff Report	25	Section 6.1, Last Paragraph	Stakeholders	Caltrans is noted here in the TMDL Staff Report as a potential contributor, but not in the Tentative I.O. The same is to be said for NCTD.
58	TMDL Staff Report	25	Section 6.2, Paragraph 2	Sources – Non Point	"Order No. R9-2013-0001 requires the City to address groundwater infiltration into the MS4 system if it is determined to be a source of pollutants to the receiving water. To date, no source analysis for suspected groundwater discharges has been conducted near the Slough or upstream of the mass loading station" There have been investigations in the L108 tributary drainage for sources of groundwater (Tetra Tech 2013) as well as upstream at the Loma Alta Creek headwaters under the Transitional Dry Weather MS4 Outfall Field Screening program required by the MS4 Permit provision D.2.a. These investigations have been mostly qualitative and limited to flow calculations and nutrient measurements, however the City has been conducting investigations into non-point source discharges into the MS4.
59	TMDL Staff Report	25	Section 6.2, Paragraph 3	Allocations	This paragraph elaborates on the findings of groundwater investigations as part of the Tetra Tech (2013) and City's monitoring efforts in August 2012 (Tetra Tech 2013). The text of the TMDL Staff Report states: "suspected groundwater contained an average phosphorus concentration of 0.003 mg/l, well below the Basin Plan's numeric interpretation of the Biostimulatory WQO of 0.1 mg/l. As stated in Tetra Tech (2013), the levels of phosphorus at the mass emission station are over an order of magnitude higher than that found in potential groundwater sources". The value presented here is misinterpreted; Tetra Tech (2013) listed this value in Table 2-4 (p.9) of their report as 0.003 TP (kgP/d) or, kilograms of P per day . This daily loading value was calculated from flow and nutrient data collected by City staff, which are presented in Oceanside & Vista's supplemental sampling summary. The nutrient results for the groundwater locations are presented in Table 4 of Oceanside's supplemental sampling summary which coincided with Tetra Tech (2013). The actual average Total P concentration across the three sampled groundwater sites was in fact 0.038 mg/L , which is higher than the averaged P loading estimates at the Mass

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					Emission Station used in the TMDL calculation. Additionally, using the Basin Plan's WQO of 0.1mg/L P in this statement is equally unjustified, as the average P loading used in the TMDL calculation was well below this benchmark as well. Regardless that the groundwater outfall data presented in Tetra Tech (2013) was high in Total N, this additional loading of P should have been considered in the Slough's pollutant loading calculation. The obvious increase in flow downstream of the tributary seen in Tetra Tech (2013), coupled with large increase in Nitrogen loading between the MES and downstream location, underscores the need to assess ambient nutrient concentrations below the MES as well.
60	TMDL Staff Report	26	Section 6.2, Second to Last Paragraph	Allocations	"Using an estimate of groundwater contributing 20 percent of the flow at 10 percent of the point source concentration level, the existing non-point source loading is estimated as no greater than 2.44 percent of the total, or 19.7 grams per month, phosphorus during the impairment period" It is unclear in this description which flow values are used (Tetra Tech values, or MACTEC values) as well as what was considered the groundwater P concentration, especially given the misinterpretation of the 0.003 kgP/d value as noted in Comment #59. Please elaborate on how these values were selected.
61	TMDL Staff Report	26	Section 6.3	Stakeholders	All other stakeholders with the potential to contribute to the impairment should be included as additional responsible parties to the Investigative Order. Page 26 of the TMDL Report states that there are a number of other potential sources, including NPDES permitted organizations, with discharge prohibitions. One additional stakeholder that should be included as a responsible party is Caltrans who holds a State issued Stormwater and Use of Recycled Water Permit. Caltrans has landscaped areas along L.A. Creek which they may irrigate using recycled water. Additionally, City staff are aware of at least one Caltrans-owned storm drain outfall which empties directly into Loma Alta Creek near Interstate 5. Recycled water may contain phosphorus and/or nitrogen (contributes to impairment).
62	TMDL Staff Report	25	Section 6.2, Last Paragraph	Sources – Non Point	"Therefore, evidence to date fails to confirm that groundwater-based Phosphorous has a significant impact, if any at all, on the eutrophication impairment of Loma Alta Slough." This statement may be true, however the groundwater appears to contribute significant nitrogen loads to the Slough, potentially contributing to the eutrophication impairment in the Slough as well.
63	TMDL Staff Report	28	Section 6.3.1, #6	Sources – Point	"There are no permanent dewatering discharges regulated...in the Loma Alta watershed." While this may be true, there appear to be several non-permitted groundwater discharges into the creek that should be regulated.
64	TMDL Staff Report	28	Section 6.3.1	Sources – Point	"Aside from dischargers regulated by the MS4 permit, none were identified as a significant source of phosphorous to the Slough during the summer impairment. Most other discharges are of infrequent duration or occur outside of the seasonal impairment." Based on the City's experience, this statement is incorrect. Several other notable dischargers are located within the watershed including Evergreen Nursery, multiple mobile home parks, and communities discharging groundwater to prevent landslides.

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65	TMDL Staff Report	29	Section 6.3.2	Implementation	The City's Water Efficient Landscape Regulation applies to the new developments only. This should be noted within the paragraph.
66	TMDL Staff Report	30	Section 7.1, Paragraph 2	Sources – Non Point	McLaughlin et al. (2011) also suggested that nutrient mineralization through the microbial loop could also provide a means of the biomass sustaining itself during berm closure, although the budgets were a coarse estimate of sources/losses of P. (See comment #19). Again, in this section, remove mention that the City closes the berm. It occurs naturally.
67	TMDL Staff Report	33	Section 7.3, Last Paragraph	Implementation	"At the February 20, 2014, Loma Alta TMDL stakeholder meeting, City staff stated that the transitional monitoring was already underway and that new MS4 discharges and outfalls in the watershed had been identified." City staff also mentioned at this meeting that new discharges of groundwater and non-point source discharges into the MS4 had been identified in the upper watershed as well.
68	TMDL Staff Report	34	Section 10, Paragraph 2	Hydrology	Remove reference of the City maintaining the berm. It closes naturally. Increased tidal flushing in the summer would likely require constant dredging of the berm or creating a permanent opening with jetties.
69	TMDL Staff Report	36	Section 10.3, Paragraph 1	Sources – Non Point	Investigations conducted under the MS4 Permit suggest that the MS4 is not the only source of nutrients to Loma Alta Creek and Slough. Sources are under investigation and preliminary results indicate the presence of controllable point sources (e.g., illicit discharges) and uncontrollable non-point sources (e.g., groundwater).
70	TMDL Staff Report	36	Section 11	Implementation	"The Numeric Targets should be met as soon as the City eliminates controllable dry-weather sources of phosphorous in its MS4." Language related to adaptive management should be included here to recognize the possibility that the eutrophication impairment may not be completely solved through the effective prohibition of non-stormwater discharges. If the City has demonstrated that it has been able to effectively prohibit non-stormwater discharges, and the impairment continues, the Regional Board and City will need to re-assess the approach with respect to other sources within the watershed.
71	TMDL Staff Report	36	Section 11	Schedule	This section references the Tentative I.O. that will "demonstrate that the numeric targets and the TMDL are met by 2022." This should be reworded, as the I.O. is an information-gathering effort to assess whether strategies and programs implemented to effectively prohibit non-stormwater discharges to the MS4 were effective on meeting the targets.
72	TMDL Staff Report	37	Section 11.1, Paragraph 3	Implementation	Due to the challenges and timeframes associated with remediating nutrient rich groundwater, the TMDL should acknowledge that the City's primary focus will be on controllable non-stormwater discharges to the MS4. If the control of these sources is found to be insufficient to address the impairment, other sources will be considered in the future.
73	TMDL Staff Report	38	Section 11.1.1	Implementation	This section mentions the San Luis Rey Watershed Management Area. This is not applicable to the Loma Alta Slough. Suggest removing reference to San Luis Rey Watershed and replace with Carlsbad Watershed Management Area.
74	TMDL Staff	39	Section	Impairment	"To address the indicator bacteria the intake of the FETD may need to be relocated to allow

Comment Number	Document	Page #	Section	Category	Comment
	Report		11.1.3, Bullet 1		<i>treated water to be discharged in the Slough and flow to the ocean.</i> " While it makes sense to recognize the inherent conflict in managing the nutrient and bacteria impairments within the Slough, it is premature to make a recommendation for management actions as these options have not been fully investigated and may not be feasible. This consideration should be deleted.
75	TMDL Staff Report	40	Section 12.1, Paragraph 1	Compliance	This first paragraph sounds like the I.O.'s purpose is a compliance assessment tool to enforce the MS4 Permit. " <i>Investigative Order No. R9-2014-0020 requires the City to design and implement a monitoring program to evaluate compliance with the dry-weather prohibition within the MS4 permit...</i> " This seems as if the IO is going above and beyond its purpose, which is to submit monitoring results and reports that will allow the assessment of progress in addressing the eutrophication impairment. Compliance with the "effectively prohibit" provision in the MS4 Permit can only be measured with respect to the implementation of requirements in Provision E.2 of Order R9-2013-0001.

Comments by the City of Vista

Pulver, Barry@Waterboards

From: Cheryl Filar <cfilar@ci.vista.ca.us>
Sent: Monday, May 05, 2014 5:08 PM
To: Pulver, Barry@Waterboards
Cc: Mo Lahsaie (mlahsaie@ci.oceanside.ca.us); cmallett@ci.oceanside.ca.us; Justin Gamble (JGamble@ci.oceanside.ca.us); Cheryl Filar
Subject: Comments--Tentative Investigative Order No. R9-2014-0020

Dear Mr. Pulver:

The City of Vista appreciates the Regional Board's effort to develop an innovative, flexible, streamlined approach to address the eutrophication impairment in the Loma Alta Slough in lieu of issuing a traditional Total Maximum Daily Load (TMDL). However, like the City of Oceanside, Vista does not believe it is necessary for the Board to issue a TMDL because other mechanisms are already available in the recently issued 2013 Municipal Storm Water Permit: the Water Quality Improvement Plans and supporting Jurisdictional Plans currently under development. Moreover, the proposed alternative to the Board's proposed process is aligned with the development of the Water Quality Improvement Plan for the Carlsbad Watershed Management Area, which includes Loma Alta Slough. Eutrophication in Loma Alta Slough will be addressed, in large part, by implementing the prohibition requirements in the 2013 Permit. Implementation will include programs targeting non-storm water discharges; program scheduling; monitoring plans; assessment; and reporting. All of these measures will be reviewed and approved through a rigorous, ongoing public process. Even though the 2013 permit is not fully effective until 2015, the City of Oceanside and Vista are already coordinating to better align their programs to improve the environmental health of the slough. This and other measures will be described in the Water Quality Improvement and Jurisdictional Plans.

Thank you for considering Vista's comments.

Cheryl Filar
Storm Water Program Manager
City of Vista
Engineering/Storm Water
200 Civic Center Drive
Vista, CA 92084-6240

760-726-1340, ext. 1373

760-683-4837, cell



Hotline: 760-726-1340, ext. 1686

Waterquality@cityofvista.com

Comments by the Friends of Loma Alta Creek

Pulver, Barry@Waterboards

From: Nadia <nadia550@sbcglobal.net>
Sent: Monday, March 03, 2014 10:53 PM
To: Pulver, Barry@Waterboards; Cheryl Filar; Cindy Lin; Kontaxis, Constantine@DOT; Hiram Srabia; JoAnn Weber; Jon Nottage; Justin Gamble; Katie Greenwood; Ken Schiff; Martha Sutula; Mo Lahsaiezadeh; Paul Hartman; Pei-Fang Wang; Roshan Sirimanne; Yazdanifard, Roya@DOT; Scott Smith
Cc: Haas, Jeremy@Waterboards
Subject: Re: Draft Investigative Order and TMDL Report Loma Alta Slough Eutrophication TMDL -

Thank you for sending this to me. I am pleased this matter is moving forward for our overworked and precious Loma Alta Creek & Slough. This slough supports numerous endangered and sensitive species in spite of it being ignored for years.

Please note we were stakeholders at the original meetings also.

I will defer the stats/calcs to Mr. Walker and Ms. Desai. Here are our comments and concerns:

- I do support p.6 #19a and p.9 1.a- regarding source of water investigation.
- I strongly support p.10 a i-v. a b.
- Also is there a spot in this to list upstream dischargers and what they are discharging? For example, I believe the Mission Linen Supply on Industry Street, Oceanside has a permit and this could certainly be contributing to water quality issues. Has this been analyzed? It was referred to in the report at p. 28 but I find no scientific data or source material referenced to make an allegation that this is not contributing to water quality issues. Also- See page 26 6.3 of the Report stating that point sources are present but no dischargers such as Mission are specifically referred to. Why not? We would like to see all dischargers/permits listed in the Order/Report/Appendix.
- Typo on p.9 1.d omits "Alta" after "Loma__Creek"
- Can you kindly clarify/correct your p.3 section10 on the building uses percentages -You have the overall stats wrong or somewhat misleading about residential use and that could be very misleading. Note that it should be 45% residential, etc. "Predominantly" doesn't give a very good picture of the stats. 45% of 70% seems much smaller than "predominantly". we would prefer you use the City of Oceanside's narrative as below.

10. Loma Alta Creek Watershed: The Loma Alta Creek watershed encompasses approximately 6,400 acres, of which approximately 70 percent includes urban development. Development is predominantly residential, with smaller portions of private, commercial and industrial developments, utilities, and public facilities. Approximately 95 percent of the watershed is within the City of Oceanside (City). The remaining area is within the City of Vista and the County of San Diego.

<http://www.ci.oceanside.ca.us/gov/water/clean/mass/lomalta.asp>

"Over 70 percent of the watershed is developed and is comprised of the following land uses: Residential (45 percent), industrial (7 percent), commercial (4 percent) and public facilities (16 percent)."

On the Draft Report:

- the photos should show some of the unaltered habitat/creek areas upstream- not all is slough or concrete channel, just to give a broader idea of the upstream conditions. I realize the report is more focused on Loma Alta Slough, but we all know water runs "downhill" from upstream sources too. This Creek, in spite of its condition, supports multiple endangered and sensitive species. Perhaps the Report should source the Draft SAP and MHCP

that Oceanside has to give a more accurate picture of why the TMDL is important, not just for water quality but for water quality protection.

- page 8, you should clearly state that "industrial" development resulted in fill. Simply saying "commercial and residential" does not capture the area accurately.
- page 11, recent projects have shown groundwater occurring much higher than 7 feet below the surface. Reference to Robertson's Concrete proposed project studies on Industry adjacent to Loma Alta Creek, where groundwater was found within 3-4 feet of the surface.
- page 15, kindly cite a reference from the watershed plan that indicates "a significant impact associated with urban development", emphasis on *urban*. I find that allegation unsupported by data or scientific reference. As you know this creek is bordered by heavy industry for quite long sections and one shouldn't solely attribute "urban: development for the problems. Storm drains, runoff and use of chemicals and hazardous wastes should all be considered, the later of which arise from industrial properties.
- Section 8.1 future growth- I disagree with the allegation that this is not going to be an issue, "de minimus". The City of Oceanside still is issuing development plans to industrial users on the Creek **in the floodway**, the area still floods out on an almost yearly basis allowing contaminants into the creek, in spite of the City's permitting system. There are also several large properties adjacent to the Slough that can be developed for either industrial or commercial uses. We have suggested to the City on multiple occasions that NO MORE development plans be allowed upstream in the floodway and heavily discouraged in the floodplain, but to date, have been completely ignored. There are little if any stormwater detention basins or BMPs in many of these industrial areas and for places like Waste Management on Industry, the stormwater BMP is a small curb of approximately 5 inches that does nothing to hold back flood waters as we just saw in the recent storm. We have observed flows going over this curb. Plus WM and several other businesses are located in the FLOODWAY. WM has a heavy industrial operation with heavy truck repairs, multiple hazardous chemicals stored onsite, diesel fueling, etc. on site. They have planned a compressed natural gas plant in the floodway and we have initiated litigation to stop it. They are one of many who do extensive auto repairs upstream and do not have adequate flood/runoff prevention in place.
- Last we completely support upstream monitoring, especially in the Industrially developed areas at Industry Street and upstream near Melrose.

Thank you for the opportunity to comment on this very important Order & Plan. We would be happy to chat with you anytime if you need clarifications or additional facts.

FRIENDS OF LOMA ALTA CREEK

Nadine L. Scott, Attorney at Law

550 Hoover St.

Oceanside CA 92054

760-803-6813

On 3/3/2014 8:50 AM, Pulver, Barry@Waterboards wrote:

Good Morning Loma Alta Slough Eutrophication TMDL Stakeholder Group,

Attached for your review are draft copies of *Tentative Investigative Order No. R9-2014-0020, Source Analysis of Waters Causing Impairment of Loma Alta Slough, Oceanside, California*, and the report titled *Phosphorus Total Daily Maximum Load for Loma Alta Slough, Oceanside, California*. Please feel welcome to contact me if you have any questions or comments regarding the documents.

Regards,

Barry S. Pulver, PG, CEG, CHG

