THE CITY OF SAN DIEGO

September 18, 2006

Hand Delivery

John H. Robertus
Executive Officer
Attn: Christina Arias and Julie Chan
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123

2006 SEP 18 P 4:43
SAN DIEGO REGIONAL WATER QUALITY CONTROL BOARD

Subject: Comments on the Total Maximum Daily Load for Indicator Bacteria, Project I - Beaches and Creeks in the San Diego Region

Dear Mr. Robertus:

The City of San Diego is pleased to provide the Regional Water Quality Control Board with the following comments regarding the Total Maximum Daily Load for Indicator Bacteria, Project I - Beaches and Creeks in the San Diego Region. The City of San Diego has been an active Stakeholders Advisory Group (SAG) participant since it began in March 2004. We have attached the SAG consensus comments to the City's comments provided in this letter. Please note that this letter also includes comments on the Regional Board's CEQA compliance for this project. Additionally, we have attached our February 2006 comments for the record.

The proposed TMDL affects approximately 356,733 acres of land within the City of San Diego, runoff from which enters receiving waters via approximately 4,660 storm drain outfalls. The proposed TMDL allows for zero discharge of human-generated indicator bacteria from these outfalls (i.e., before the storm water reaches receiving waters) regardless of weather conditions.

Significant concerns with the project are as follows:

- Recent data provided to the Regional Board at its February, 2006 workshop on this project suggest that indicator bacteria are not indicative of public health threats at southern California beaches. Indicator bacteria standards in the Basin Plan were established in the 1970s based on older and inapplicable epidemiological studies.

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- Recent studies conducted by the City of San Diego have concluded that bacterial contamination at beaches is largely due to kelp, birds, and flies on beaches.
- The Basin Plan standard for bacteria in relation the beneficial use "SHELL" was established in the 1970s to protect human health from consumption of shellfish. However, the State Department of Health Services, which actually has regulatory control
- over bacteria levels in commercial shellfish, uses a less conservative standard than that in the proposed TMDL.
- The Basin Plan erroneously applied SHELL to the mouth of Chollas Creek since the mouth of Chollas Creek has been dredged and surrounded by commercial uses since the 1920s.
- The Basin Plan erroneously applied REC-1 as a potential beneficial use throughout the Chollas Creek watershed since significant portions of the creek were channelized for flood control purposes prior to adoption of the Basin Plan.
- The only known technologies that will eliminate bacteria in storm water are diversion (to eliminate the storm water via, for example, infiltration) and treatment with chemicals (such as chlorine and ozone) or ultraviolet light. The TMDL requires maintenance of existing hydrology in receiving waters; therefore, treatment of at least dry weather flows is required.
- Diversion and treatment will both result in the removal of sediment from storm water discharges. The impact of sediment removal on creeks and beaches should have been documented during TMDL development.
- Allowing zero bacteria in storm water discharges, coupled with bacterial re-growth in storm drains, means that diversions and treatment facilities must be located in areas as close as possible to storm drain outfalls. Most of these areas are privately owned and developed.
- The potential for widespread use of infiltration, which is based on soil types in the watersheds, is unknown but should have been documented during TMDL development.
- The environmental impacts associated with the massive public works that must be undertaken for compliance are not disclosed in the Regional Board's CEQA analysis.
- The financial impacts associated with the massive public works that must be undertaken for compliance are not disclosed in the Regional Board's technical report.
- Many water bodies affected by this TMDL are currently listed as impaired. The City must address all pending TMDLs when it complies with this TMDL; therefore, the City recommends that this TMDL be integrated with other TMDLs on a watershed by watershed basis.
- The 10-year implementation schedule sets up the City of San Diego for non-compliance, the financial penalties associated therewith, and lawsuits from other stakeholders.

The City of San Diego requests that the Regional Board provide written responses to all comments, including our February, 2006 comments and the SAG comments. We believe it is important that a written record is kept on comments and the Regional Board's conclusions regarding those submitted comments. This record will benefit everyone involved as we move forward through the arduous process.

Additional comments are attached. We hope these comments and recommendations are taken into consideration by the Regional Board. We reserve the right to submit additional comments before next hearing and we reserve the right to submit additional CEQA-related comments prior to the final hearing on the project as allowed by Public Resources Code Section 21177. If you have any questions or require more information, please contact Storm Water Specialist Ruth Kolb at (619) 525-8636.

Sincerely,

Chris Zirkle
Deputy Director

CZ\rk

Enclosure:
- Comments on the Total Maximum Daily Load for Indicator Bacteria, Project I – Beaches and Creeks in the San Diego Region dated February 3, 2006
- Pacific Beach Point Bacteriological Study, 2006
- Excerpt from Caltrans' 2004 BMP Retrofit Study

cc: Scott Tulloch, Director, Metropolitan Wastewater Department
Bob Ferrier, Assistant Director, Metropolitan Wastewater Department
Tim Miller, Deputy City Attorney
Ruth Kolb, Storm Water Specialist
File

1. SHELL Total Coliform numeric targets should not be applied to freshwater creeks. SHELL Total Coliform Water Quality Objectives apply to marine salt waters, not to inland surface waters. This approach wrongly places SHELL Total Coliform numeric targets on fresh waters in the region. This change results in requiring more stringent Total coliform requirements on the creeks. The justification for this approach is to protect the SHELL beneficial use at the downstream beaches. The effect of this is to force the extremely low SHELL Total Coliform WQOs onto entire watersheds, not just the mouths. This is inappropriate, improper, and not fully accounted for in the CEQA analysis.

   Based upon evaluation of the data from studies conducted by the City of San Diego, we question the appropriateness of applying REC1 and SHELL beneficial use Water Quality Objectives (WQO) to entire watersheds. The Mission Bay Source Identification Study, funded by the State Water Resources Control Board Proposition 13 funding, found that the majority of the problems at the beaches were from the wrackline and birds. The City conducted the Bacterial Monitoring and Source Tracking for Pacific Beach Point, which built upon the Mission Bay study. This study was a source identification study and concluded that the problems at this beach were attributed to the wrackline, birds, and flies, not sewage or urban runoff.

   The Basin Plan SHELL designation is for the protection of human health from the consumption of shellfish. However, the California Department of Health Services is the state's designated authority regarding the regulation the harvesting and sale of shellfish for human consumption. Their regulations have higher levels of allowed bacteria than the Basin Plan and this TMDL. Therefore, the experts in this field need to be included in the design of the SHELL component of the TMDL to ensure that the numeric limit is appropriate and not overly-conservative. For example, the Tomales Bay TMDL requirements are not as strict as this TMDL and shellfish are commercially harvested in that bay. If the San Diego Regional Board will not unilaterally support an appropriate standard, the City of San Diego recommends that this issue be addressed on a statewide basis.

   Because the Regional Board is not funded to do so, the City of San Diego intends to pursue Basin Plan amendments to eliminate SHELL as a beneficial use at the mouth of Chollas Creek and REC-1 as a potential beneficial use throughout the watershed. Review of historical documents indicates that the harvesting of shellfish for human consumption was not occurring at the mouth of Chollas Creek on or after November 28, 1975. The mouth of Chollas Creek has been dredged and surrounded by commercial sites since the 1920's. Additionally, the City of San Diego has provided the Regional Board with documentation that large areas of the creek were channelized prior to the November 1975 Basin Plan adoption date. This documentation will be incorporated into a submittal to the

Regional Board requesting the removal of the potential REC1 beneficial use of Chollas Creek.

2. The City of San Diego questions the rationale for not providing Caltrans, General Industrial Permittees, other Phase II Municipal Storm Water Permittees (MS4s) and non-point sources with a waste load allocation (WLA). It may appear that their contribution is minimal; however, with 100% reductions required, all sources need to reduce their loading. This concept is particularity important with those entities that hold an existing NPDES permits and/or Waste Discharge Requirements (WDRs). It is improper that the Regional Board place the responsibility and liability to comply with this TMDL Phase I MS4s.

   The City of San Diego again requests a time line regarding when the Regional Board will contact the Phase II MS4 permittees for inclusion into this TMDL Program. Currently, University of California, San Diego, San Diego State University, University of San Diego, the Community College District's facilities and the San Diego Unified School District's facilities have not been included in this process. These Phase II MS4s and others are contribute loading to the listed impaired waterbodies and should be notified of their requirement to participate by the Regional Board. The City believes that, since bacteria reproduce in storm drains, all storm drains, including Caltrans', have a substantial potential for introducing bacteria into receiving waters. In addition, the City has documented issues with the discharge of food waste from outdoor eating areas at schools. These discharges also constitute potentially substantial contributions of bacteria that should be considered in the TMDL.

3. The City of San Diego is concerned about language in the TMDL which addresses "attaining" and "maintaining" 303(d) list status. Section 1.6 clearly defines what attainment is; however, it states that "WQOs are considered "maintained" when, upon subsequent listing cycles, the waterbody is not returned to an impaired condition via re-listing on the 303(d) list. This requirement does not clearly state the number of 3-year listing cycles it takes to meet the monitoring requirements of the subsequent listing cycles. This ruling is arbitrary and needs to be clearly defined. Additionally, this section uses 40 CFR Section 131.38 as justification for this requirement. This section is titled "Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California" and is for "*toxic*" pollutants. The three indicator bacteria are not included in any of the tables or lists in Section 131.38. In fact, this new requirement also appears to be in conflict with the State Water Resources Control Board (State Board) Resolution 2005-0050, Water Quality Control Policy for Addressing Impaired Waters: Regulatory Structure and Options. This State Board policy indicates that when listed waters which attain standards are to be delisted. There are no additional actions required. The City of San Diego is requesting the removal of the first paragraph in Section 1.6 based upon the review of both the cited 40 CFR section and the State Board policy. The Regional Board should prepare a new, separate TMDL if a water body is de-listed and then subsequently returned to impaired status.

4. Given the fact that this TMDL requires 100% compliance in all wet weather flows, we do not believe that this analysis evaluated all reasonably foreseeable methods. To achieve 100% compliance in wet weather flows, wet weather diversion or advanced treatment methods, beyond that of the Point Loma POTW, will be necessary to achieve storm flows that have NO bacteria. Treatment will be required to maintain existing creek hydrology at approximately 2/3 of the existing storm drain outfalls which currently flow in dry weather. Because of the Regional Board's interpretation of the tributary rule (page 13 of the Technical Report), and because bacteria are known to grow in storm drains, the Regional Board must consider the impacts of building advanced treatment works immediately upstream of the approximately 3,100 of the 4,660 outfalls which currently contribute to creek hydrology.

5. In good faith members of the Stakeholders Advisory Group participated in the Reference Beach Bacteria Study at San Mateo and San Onofre Creeks. The purpose of the study was to help Southern California Coastal Waters Research Project (SCCWRP) gather data from beaches that have minimal human development. This data was to be used to develop a baseline for natural bacteria background concentrations. Many SAG members volunteered staff time and resources. The City of San Diego volunteered many man hours to collect some samples and processed all the samples. How was this data used in the development of the TMDL?

6. The City of San Diego understands that Margin of Safety (MOS) is a required component for the development of TMDLs. This TMDL uses an implicit MOS that applies conservative assumptions throughout the development of the TMDL. However, the application of this conservative MOS is on top of the MOS the US Environmental Protection Agency (EPA) applied when they developed the REC1 standards. The City of San Diego questions the application of the implicit MOS with its conservation assumptions when another MOS Watershed already has been applied to this TMDL indirectly. The City of San Diego believes the use of an explicit MOS is more appropriate for this TMDL.

7. The label on "Table 9-3: Interim/Final Dry Weather TMDLs for Fecal Coliform as a Monthly Load" shows that both the interim and final loads are the same; therefore, a decision needs to be made as to whether this monthly load requirement is for interim or final compliance.

8. Table 9-5 Interim Wet Weather TMDLs for Total Coliform Expressed as an Annual Load's percentage of reduction appears to be in conflict with Table 11-4: Compliance Schedule and Interim Goals for Achieving waste load reductions.

9. Table 9-5: Final Wet Weather TMDLs for Total Coliform Expressed as an Annual Load's percentage of reduction does not allow for any bacteria in all storm events. It is unrealistic to expect that the City can achieve this goal in 10 years.

10. Table 9-8: Interim Wet Weather TMDLs for Enterococcus Expressed as an Annual Load's percentage of reduction appears to be in conflict with Table 11-4: Compliance Schedule and Interim Goals for Achieving Waste Load Reductions.

11. Table 9-9: Final Wet Weather TMDLs for Enterococcus Expressed as an Annual Load's percentage of reduction does not allow for any bacteria in storm events. It is unrealistic to expect that the City can achieve this goal in 10 years.

12. The label on Table 9-10: Interim/Final Dry Weather TMDLs for Enterococcus as a Monthly Load shows that both the interim and final loads are the same; therefore, a decision needs to be made as to whether this monthly load requirement is for interim or final compliance.

13. The TMDL states that the interim reductions must be required 10 years after OAL approval. It is the City of San Diego understands that TMDLs become officially once the EPA approval is given. We recommend that this statement be modified to reflect the complete process required by 40 CFR.

14. The Compliance Schedule, Table 11-4, timeframe of 5 to 7 years for a 50% waste load reduction is not realistic for wet weather flows. The control of wet weather flows is a substantial undertaking. Five to seven years allows inadequate time to determine the optimal location of BMPs, identify sources, develop plans, develop memoranda of understanding with stakeholders, secure funding, acquire land, pursue permits, bid contracts, and construct BMPs. This process normally takes the City of San Diego six to eight years for a single facility when funds are available.

    Additionally, this table appears to combine both wet and dry weather TMDLs. In the City of San Diego approximately 296 days of the year are dry weather days, and most recreational activities occur in dry weather. It will be counterproductive to combine the relatively small, but important, dry weather loads with the large, but infrequently occurring and difficult to control, wet weather loads. Other regions (e.g., Santa Monica) have separate bacteria standards for dry and a wet weather, and have applied different compliance schedules, as the control of wet weather loads is a considerable technical challenge that will take additional time and resources to achieve. As stated previously, we recommend a phasing of the wet-weather compliance schedule such that for Priority 1 locations the reduction target is 25% in year 5, 50% in year 10, and 75% in year 15 and 100% final TMDL compliance in year 20. The Priority 2 and 3 schedules should be adjusted accordingly.

15. Section 11.5.6 requires the named entities to investigate landfills as potential bacteria sources. The section states that 47of these landfills are currently regulated by the Regional Board by WDRs or by the General Industrial Storm Water Permit. This requirement is duplicative and is not required by the Clean Water Act or the MS4 permit

requirements. The City of San Diego strongly recommends that this section require Regional Board oversight of landfills.

16. The City of San Diego requests the inclusion of a Re-Evaluation clause with dates. This will provide an opportunity to analyze new land use data, new monitoring data and new scientific technologies under development by EPA and SCCWRP. The inclusion of dates will provide named entities motivation to participate in special studies so they can be included in the re-evaluation process.

17. The City of San Diego requests that the Regional Board assess compliance with their existing agricultural waivers and take actions as required. This action requires the review and evaluation of existing data submitted to the Regional Board, assessing the data, finding data gaps, inspect facilities as necessary, and initiate enforcement actions when required.

18. The City of San Diego coordinated with Weston Solutions regarding the Bacterial Monitoring and Source Tracking for Pacific Beach Point (CD attached). The study objective was to design and implement a bacterial investigation that would identify sources of bacterial contamination impacting the receiving waters at PB Point and subsequently recommend management actions to reduce or eliminate those sources. The study found that the bacterial sources from the wrackline, birds and flies, not sewage or urban runoff. This study points to the need for addition research to determine the human health risk for REC1 use when there is no human sewage and urban runoff sources. This information can also be used to help develop a natural sources exclusion approach to be included in the Basin Plan.

19. CEQA Compliance - The Analysis Impermissibly Applies Inconsistent Standards

The environmental analysis begins with a discussion of the standards that apply to the Basin Plan amendment. The document states that the Regional Board has specific obligations under the Public Resources Code because the TMDL establishes performance standards or treatment requirements, and sets out an abbreviated list of those specific requirements. *See* Basin Plan Amendment at 158 – 159. The document goes on, however, to state that the Regional Board "method of analysis" is similar to "tiering" and "limited its analysis in this document to the broad environmental issues at the Basin Plan amendment "performance standard" adoption stage." The documents then goes on to opine that "the Regional Board is not required, at the Basin Plan amendment adoption stage, to evaluate environmental issues associated with specific projects to be undertaken later to comply with the performance standards." *Id.* at 159. The document contains no citation to legal authority for these propositions. This is because these contentions are incorrect statements of the law.

**a. The Regional Board Does Not Fully Comply With Public Resources Code Section 21159**

Here, the Regional Board concedes that the provisions of Public Resources Code section 21159 apply. Having made that concession, the Regional Board does not have the option to ignore the other specific requirements of that section. Nevertheless, the Basin Plan Amendment, completely ignores the requirements of subdivision (c) of section 21159, which states:

> The environmental analysis ***shall*** take into account a reasonable range of environmental, economic, and technical factors, population and geographic areas, and ***specific sites***.

PUBLIC RESOURCES CODE § 21159(c)(emphasis added)

Looking at each category of analysis specified in Public Resources Code section 21159, subdivision (c), the Regional Board's analysis is deficient because the TMDL applies to various watersheds, including the Scripps, Chollas Creek, San Dieguito and San Diego River watersheds. Both the entirety of the Scripps and Chollas Creek watersheds are heavily urbanized, while the upper portions of the San Dieguito and San Diego watersheds are substantially open space. Thus:

- There will be distinctly different technical challenges to implementing even the most basic structural controls in Scripps and Chollas Creek watersheds compared to the upper portions of the San Diego River and San Dieguito River watersheds because most infrastructure installed in Scripps and Chollas will disturb existing structures, while there is open space available in the upper San Diego River and San Dieguito River watersheds;

- There will be distinctly different environmental challenges for these same reasons; particularly the potential for infrastructure within the upper watersheds to disturb sensitive habitat.

- If it is necessary for the City to acquire land to implement any structural controls, the economics of implementing these measures will be different in developed watersheds when compared to undeveloped watersheds because of the relative land values;

- Not one specific site is examined despite the unambiguous statutory requirement to do so.

Thus, the record clearly reflects that the analysis does not satisfy all of the statutory requirements of an environmental analysis under Public Resources Code section 21159.

The Regional Board has made two different contentions regarding the adequacy of the environmental analysis: (1) that treatment controls are not a reasonably foreseeable method of compliance; and (2) that the Regional Board is not required to do a site specific analysis. The first contention is not factually supported; the second is legally incorrect.

As respects treatment controls, the Regional Board ignores three critical facts in that regard:

- There is no evidence that compliance in all watersheds can be achieved in practice during both wet weather and dry weather conditions by using only non-structural controls.
- Public entities subject to this TMDL have already deployed treatment systems to combat this problem;
- At least one lead agency – the City of San Diego – has stated that it intends to implement treatment controls because it perceives treatment controls as the only means of attaining the treatment standard.

Thus, the only facts that are available undercuts the Regional Board's contention that treatment controls are a reasonably foreseeable method of compliance, which under Public Resources Code section 21159(a), must have its impacts analyzed.

As respects site specific analyses, Public Resources Code section 21159(c) unambiguously states that an analysis shall take into account a reasonable range of specific sites. A contention to the contrary is simply an incorrect statement of the law.

Even if the Regional Board does not believe that it has the responsibility to implement PRC Section 21159(c) as interpreted above, the City believes that the Regional Board has defined the TMDL with enough specificity, particularly with respect to required load reductions (which dictate the types of BMPs required), the tributary rule, and prohibitions on in-stream diversions (which dictate the possible locations of the BMPs), and failure to develop a design storm (which leaves open the acreage requirements of the BMPs), to conduct a "programmatic" level of analysis of the reasonably foreseeable means of compliance. In accordance with Section 15187of the State CEQA Guidelines this analysis could utilize numeric ranges and averages when specific data is not available. Section 15146 of the CEQ Guidelines addresses the level of specificity that is required for projects such as the TMDL. For CEQA purposes, adoption of the TMDLs by the Regional Board is comparable to adoption of a General Plan or Community Plan by a jurisdiction's legislative body with land use powers. What is required is the production of information sufficient to understand the environmental impacts of the proposed project. The current analysis does not fulfill this requirement.

**b. The TMDL and Environmental Analysis Do Not Satisfy the Criteria For Tiering**

When applying statutes, specific statutes control over general. *See Cavalier Acres, Inc. v. San Simeon Acres Community Services District*, 151 Cal. App. 3d 798 (1984) (Where there is a specific provision requiring community services district to increase rates via ordinance, that specific statute controls over general provision allowing public entities to increase rates via resolution).

Here, the general provisions relate to tiered CEQA documents. *See* PUBLIC RESOURCES CODE § 21093 and 21094. The environmental analysis attempts to justify giving short-shrift to

the topics required by Public Resources Code section 21159(c) under the guise of tiering; this violates the rule that specific provisions control over the general. Moreover, there are other problems with the Regional Board's reliance on the tiering provisions.

First, both Public Resources Code section 21093 and 21094 refer to the preparation of an environmental impact report as the first tier document. As the Regional Board readily notes, the environmental analysis for the basin plan amendment is **not** an EIR. *See* Remy, et al, *Guide to the California Environmental Quality Act*, 10th ed., at 495 (The definition of tiering "suggests that tiering must commence with the preparation of an EIR.") Thus, there is no authority for the proposition that the Regional Board may use a substitute document as a first tier CEQA document.

Further complicating this aspect of the Regional Board's environmental analysis are the specific provisions of CEQA Guidelines section 15253, which governs the use of an EIR substitute by a responsible agency. Specifically, subdivision (a) states a substitute document shall be used by another agency "granting an approval ***for the same project*** where the conditions in subdivision (b) have been met." Subdivision (c) of that same Guidelines section amplifies this limitation, stating:

> Where a certified agency does not meet the criteria in subdivision (b), any other agencies granting approvals ***for the project*** shall comply with CEQA in the normal manner.

Hence, the CEQA Guidelines make clear that the only permissible uses of a substitute document are with respect to that project, and not with subsequent related projects. Accordingly, it is inappropriate to treat the Basin Plan Amendment environmental analysis as a "first tier" document because no second tier document can legally flow from a "first tier substitute document."

It is also important to note that under CEQA Guidelines section 15253 subdivision (b), it is a responsible agency that may use the substitute document for subsequent approval of the project. Responsible agencies are "public agencies other than the lead agency which have discretionary approval power over the project." CEQA Guidelines section 15381. The only other California agency that has discretionary approval power over the Basin Plan amendment is the State Water Resources Control Board. Neither the Regional Board nor the State Board will issue subsequent approvals related to this project that will require CEQA compliance. Hence, the authorization in CEQA Guidelines section15253 does not apply to any subsequent activity that will involve site-specific impacts or any of the other analyses the Regional Board contends may be deferred until the second tier projects are implemented. Accordingly, the notion that the TMDL environmental analysis will serve as a first-tier analysis is inappropriate.

Second, Public Resources Code § 21093 states that the purpose of tiering is to expedite the construction of housing and other development projects by eliminating repetitive environmental review. Here, the project is not a development project; it is the imposition of

performance or treatment standards. Thus, this activity does not fall within the type of projects the Legislature sought to expedite through tiering, and accordingly, there is no legal basis for the Regional Board to rely upon these principles in analyzing the impacts of the TMDL.

20. CEQA Compliance - An Inadequate Project Description and Inadequate Examination of Compliance Alternatives Set the Stage for Failure

A critical component of an EIR is the environmental setting. In San Diego County watersheds, many of the tributaries: (1) are surrounded by developed areas within which storm water is conveyed by storm drains to outfalls at canyon rims; (2) lie within canyons and contain "waters" which originate at the end of the storm drains; and (3) are ephemeral and dominated by urban runoff during all but infrequent precipitation. However, the Initial Study (page R-1 of the draft Technical Report) describes the environmental setting of much of the affected areas in one paragraph, despite the fact that the some affected watersheds are distinctly different than others. For example, the environmental analysis is incorrect in characterizing the Miramar, Scripps, and Chollas Creek watersheds as having "inland areas [that] primarily consist of open space with some agricultural/livestock uses." Within the City of San Diego and with the possible exception of the San Dieguito watershed, these areas are almost completely urbanized; no portion of these watersheds "consist primarily of open space."

The project description is also a critical component of an adequate environmental document. *See Santiago County Water District v. County of Orange*, 118 Cal.App.3d 818 (1981) (EIR inadequate because of failure to discuss construction of water delivery facilities in project description). The project description in this case is influenced by Public Resources Code section 21159, which provides the ***minimum*** requirements for an environmental analysis of a rule or regulation that requires the installation of pollution controls.[1] That statute requires certain state agencies to analyze the following:

> (1) An analysis of the reasonably foreseeable environmental impacts of the methods of compliance.
> (2) An analysis of reasonably foreseeable feasible mitigation measures.
> (3) An analysis of reasonably foreseeable alternative means of compliance with the rule or regulation.

PUBLIC RESOURCES CODE § 21159(a)

Thus, the methods of compliance are part of the project description because the impacts, mitigation measures, and alternatives to the methods of compliance must be analyzed.

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[1] The statute clearly states that these topics are the minimum requirements for an adequate environmental analysis; other impacts must be identified if the impacts are a direct result or a reasonably foreseeable indirect result of the project.

With that in mind, it is easy to see that the project description in this case contained only a cursory discussion of the methods of compliance. The Technical Report for the TMDL states that the required reduction in pollutants may be achieved by education, street sweeping, storm drain cleaning, BMP inspection and maintenance, manure fertilizer management plans, buffer strips and vegetated swales, bioretention, infiltration trenches, sand filters, diversion systems, animal exclusion, and waste treatment lagoons (for manure storage). The TMDL document is devoid of evidence that suggests that the pollutant reductions required to achieve full compliance with the TMDL can be achieved by anything other than: (1) diversion or (2) treatment. Treatment is required in hundreds of locations to maintain dry flows in order to maintain creek hydrology. Again, MS4 operators the City of Laguna Niguel and Orange County installed a treatment system in Aliso Creek that reduced bacteria levels by 99%. The Caltrans Retrofit Pilot Study (2004) found removal efficiencies of no greater than 79% when the influent contained moderate levels of fecal coliform (Attachment 3) Thus, it is reasonably foreseeable that operators will install treatment controls (UV, chlorine/dechlorination or ozone), necessitating an analysis of the environmental impacts. In accordance with the Regional Board's interpretation of the tributary rule, these treatment controls would need to be installed upstream of the storm drain outfalls. Because bacteria re-grows in storm drains, the controls would need to be located as close to the outfall as possible.

Having identified the types of facilities that could be constructed to achieve compliance (diversion and detention/infiltration), Public Resources Code section 21159, subdivision (c) kicks in to specify the details of the analysis that is required in terms of environmental, technical, and specific sites. Thus, issues that must be included to properly address these considerations in the scope of this TMDL inlcude:

a. The "tributary rule," which subjects all receiving waters within the affected watersheds to the TMDL. The application of this rule in complying with this TMDL creates an interesting overlay in that the TMDL does not define "receiving waters, yet the San Diego County Municipal Storm Water NPDES permit states that in some instances receiving waters and the MS4 are the same;

b. Topography, which prevents BMP works from being built on canyon walls below storm drain outfalls but above receiving waters that are subject to the WQO in the TMDL;

c. The structural BMPs need to capture and treat a very high percentage of storm water due to the large level of loading reduction required by the TMDL; i.e., it is not reasonable to expect that works located far from the storm drain outfalls would, by themselves, meet the TMDL because significant amounts of storm water run into the conveyance system immediately above the outfalls.

d. Locating works some distance from the receiving waters would be infeasible because it would be necessary to construct a new, separate conveyance system to prevent the treated water from mixing with untreated water.

e. The number of control devices that may be required to achieve compliance is a technical consideration in complying with the TMDL. Because the TMDL defines the maximum loads of bacteria that may flow into receiving waters without regard to the size of a rain event, loading must be controlled in all storm events. Accordingly, certain assumptions must be made with respect to the size of the storm in order to design structural BMPs that will provide adequate contaminant reduction. Lacking a "design storm," or information on soil infiltration rates, the Regional Board's CEQA analysis must include assumptions regarding a design storm size and the acreage of detention/infiltration facilities that would be needed (including any manufactured slopes). Information is available from the City of San Diego, the California Department of Conservation, and the United States Soil Conservation Service on soil infiltration rates that would be necessary in this analysis. For purposes of revising the CEQA analysis, the Regional Board could use the following estimates of the number of storm drain outfalls within the areas affected by the TMDL:

- the Chollas Creek watershed has approximately 816 storm drain outfalls within the City of San Diego,
- there are approximately 1,315 outfalls within the City of San Diego within the San Diego River watershed, and
- there are approximately 61 outfalls within 300 feet of the beaches identified in the TMDL.

The project description in the CEQA analysis is devoid of any discussion or analysis of these issues, and thus is inadequate because the failure to include this information prevented a meaningful analysis of the impacts of compliance.

As indicated in our letter on the Chollas Creek Metals TMDL, it is reasonably foreseeable that the TMDL implementation could require the City to build a large number of relatively smaller sized works in areas immediately behind a geologically-safe setback above all existing storm drain outfalls which have receiving waters immediately below them. In the Chollas Creek watershed, these works could occupy 1,387 acres – almost 10 percent of the 16,273 total acres in the watershed.

21. CEQA Compliance – The Environmental Analysis Does Not Analyze the All Impacts Associated With Construction of Structural BMPs

Only when a meaningful discussion of the environmental setting is set forth and a thorough project description has been prepared can an adequate analysis of impacts and mitigation measures be prepared. *County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185 (1977). Here, the Regional Board has put itself in an "Catch-22." While the Regional Board contends that it is not reasonably foreseeable that treatment controls will be used as a compliance method, it nevertheless analyzed the impacts – albeit poorly – of diversion structures. Having analyzed some of the impacts to diversion structures, the Regional Board must ensure that the analysis is complete, and supported by substantial evidence. CEQA determinations related to quasi-

legislative decisions must be supported by substantial evidence. *See* PUBLIC RESOURCES CODE § 21167.5; *Western States Petroleum Association v. Air Resources Board*, 9 Cal.4th 559 (1995).

Substantial evidence is defined in CEQA as:

> For the purposes of this section and this division, substantial evidence includes fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.
>
> Substantial evidence is not argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence of social or economic impacts that do not contribute to, or are not caused by, physical impacts on the environment.

PUBLIC RESOURCES CODE § 21080(e)

The following analyses in Chapter 12 and Appendix R are deficient because the conclusions are not supported by substantial evidence:

a. Aesthetics –

Appendix R states that the creation of structural BMPs can create adverse aesthetic impacts. The Regional Board's analysis of this impact states:

> Depending on the controls chosen, the project may result in the installation of urban runoff storage, diversion, or treatment facilities and other structural controls that could be aesthetically offensive if not properly designed, sited, and maintained. Many structural controls can be designed to provide habitat, recreational areas, and green spaces in addition to improving urban runoff water quality. In-creek diversions should not be used as controls, therefore, there should be no adverse impacts on aesthetics resulting from construction of concrete-lined basins or treatment facilities within creeks.

This analysis is legally inadequate because it does not state what constitutes a significant aesthetic impact and how designing the treatment works to serve as habitat, recreational areas, or green spaces mitigates any adverse aesthetic impact, much less mitigating any significant, adverse impact below the level of significance. It addition, the analysis ignores the reasonably foreseeable size and location of the BMPs described above, the works would be too small and subject to too many edge effects to create sustainable habitat. Moreover, regular maintenance would require periodic removal of plant growth and sediments. Topographically, it is reasonable to assume that basins associated with the works will need to be excavated and that significant

portions of the basins would consist of manufactured slopes, limiting recreational opportunities. Deeper infiltration basins could be built to reduce acreage requirements; however, maintenance needs would preclude the construction or re-construction above these vaults and pumps would be needed in areas of impermeable soil to convey overflows to treatment controls. Moreover, deeper equalization basins would not be able to take advantage of evaporation or evapotranspiration. Thus, the "analysis" is merely "speculation, unsubstantiated opinion or narrative" that does not support the conclusion that the listed impact will be reduced below the level of significance, and is not, therefore, supported by substantial evidence, as required by law.

b. Air Quality –

Appendix R makes the following statement regarding Air Quality:

> The construction of structural controls might adversely affect air quality because construction might require the use of diesel fuel engines to operate equipment. Potential impacts are likely to be limited and mostly short-term in nature. Impacts may be mitigated through measures such as limiting hours and amount of construction, eliminating excessive idling when vehicles are not in use, limiting construction during periods of poor air quality, and/or using alternative fuel vehicles rather than diesel fuel vehicles. Any impacts to air quality, both short-term and long-term, would be subject regulation by the appropriate air pollution control agencies under a separate process.

This analysis is deficient because the analysis does not state what the threshold of significance for impacts to air quality from toxic air pollutants, nor does it have any basis for concluding that the programs implemented by air pollution control agencies will, in fact, reduce any impacts below the unstated threshold of significance. Thus, the "analysis" is merely "speculation, unsubstantiated opinion or narrative" that does not support the conclusion that the listed impact will be reduced below the level of significance, and is not, therefore, supported by substantial evidence, as required by law.

c. Biological Resources –

Appendix R states that there are potential impacts to riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service, but that those impacts would be reduced below the level of significance through mitigation.

The analysis does not state what sensitive species are located within the project area. It does not mention the San Diego County Multiple Species Conservation Plan – a regional plan that addresses impacts to sensitive species. The analysis that is done seems to assume that the only manner in which habitat or species can be impacted is through urban runoff flow diversion;

even though the construction of treatment works could displace non-riparian species. Given the experience in Aliso Creek noted above, it is reasonable to assume that upland impacts may occur as a result of the need to intercept sheet flow runoff from canyon walls (immediately below developed areas) for treatment before these flows enter receiving waters. These interceptors would logically be located near and above the receiving waters - in areas where many canyons support native, upland vegetation and sensitive species. Impacts would result not only from construction of the diversions, but also from construction of treatment works and the associated pumps that would be necessary to put the treated water back into the receiving waters at a location near its diversion point.

Once again, the analysis does not contain facts, reasonable assumptions predicated on facts, or expert opinion based on facts; it is merely "speculation, unsubstantiated opinion or narrative" that does not rise to the level of substantial evidence.

d. Cultural Resources –

Appendix R completely fails to address potential impacts to cultural resources. There is ample evidence available from local land use agencies about the location of cultural resources in San Diego County.

The affected watersheds are located in parts of San Diego that are designated as "Urbanized" or "Urbanizing" by the City's Progress Guide and General Plan because they are fully developed or in the process of being developed. Many structures within the watersheds were built prior to 1960, making them at least 45 years old and thus potentially significant historic resources under the criteria in 14 C.C.R. section 15064.5(a)(3)(C). Thus, with regard to checklist item V(a), the loss of an undetermined number of significant historic structures (located above storm drain outfalls/tributaries) should be considered a potentially significant effect.

With regard to checklist item V(b), it is generally accepted by land use agencies that because many older structures were built prior to or without the benefit of heavy earth-moving equipment, the soils underneath older structures have the potential to contain potentially significant archaeological resources. Therefore, the excavation of soils under potentially significant historic resources should be considered to have a potentially significant effect on archaeological resources.

Similarly, many formational materials within the watersheds are fossiliferous (Kennedy, 1977). Therefore, given that excavation of detention works could penetrate through surficial soils and into ungraded formational materials, the response to checklist item V(c) should indicate that this impact is potentially significant.[2] Because the environmental analysis does not discuss

[2] The "Kennedy Maps" are maps of geologic formations that may contain specific paleontological resources, and are specifically used by planning and land use agencies to identify the potential for significant paleontolgical resources. Such resources occur within the City of San Diego, and therefore could occur within the Chollas Creek watershed. *See* Geology of the

impacts to these resources or propose mitigation measures, the environmental analysis is inadequate.

e. Hydrology and Water Quality

Appendix R states that the diversion of storm flows and dry weather urban runoff would cause impacts to existing drainage patterns, but concludes that any such impact would be less than significant because "diversion of the entire stormflow of a creek is not required to meet wasteload allocations."

This statement is not supported by facts, reasonable assumptions predicated on facts, or expert opinion based on facts. There is no technical way for an MS4 operator to ascertain what percentage of a storm flow must be diverted for a particular storm to ensure that the pollutant loads do not exceed the wasteload allocations. If treatment is necessary, all storm flow must be detained and treated to ensure that the standards are met. Thus, the conclusion that this impact will be less than significant is ; "speculation, or unsubstantiated opinion" that does not rise to the level of substantial evidence.

f. Geology and Soils –

Appendix R concludes that there will be no impacts to Geology and Soils. This conclusion is no supported by substantial evidence.

Excavating infiltration works in the vicinity of canyon rims has the potential to make canyon walls unstable (only basins serving an equalization purpose could be lined). Increasing infiltration increases instability even if the slope in question is already engineered. For slopes that aren't engineered (and this is the case in older neighborhoods – see above), this instability can lead to failure. Increasing the integrity of slopes downhill of detention works could also result in increased impacts to biological resources or, if retaining walls are used, aesthetic impacts. Therefore, as a result of the project change, checklist item V(c) should indicate that the geology impact from the project is potentially significant.

For purposes of revising the CEQA analysis, we suggest that the Board consider that works which involve any level of infiltration be setback from a canyon rim such that a 45 degree line drawn from the bottom of the basin nearest the canyon rim does not intersect the canyon wall.

Infiltration or treatment of runoff will remove all sediment loading from the creeks. What is the impact of this on the creeks and downstream beaches?

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La Jolla, Del Mar, La Mesa, Poway, Point Loma, and Southwest Quarter of the Escondido Quadrangles, San Diego County, California, by Michael P. Kennedy, 1975; and Geology of National City, Imperial Beach, and Otay Mesa Quadrangles, Southern San Diego Metropolitan Area, California, by Michael P. Kennedy and Siang S. Tan, 1977.

In accordance with Section 15126.2, the Regional Board must consider the impacts of the environment on a project as well as the impacts of a project on the environment. Therefore, in concluding that infiltration can play a major role in implementing the TMDL, the Regional Board should, programmatically and on a site-specific basis, evaluate the permeability of soils within the areas affected by the TMDL.

g. Land Use and Planning –

Checklist Item IX(b) indicates that the project would not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for purposes of avoiding or mitigating and environmental effect." This conclusion is not supported by substantial evidence; substantial evidence supports the opposite conclusion. The following examples are taken from the Chollas Creek watershed; a similar analysis should be made of all watersheds.

First, while the Regional Board's environmental analysis foresees the need to construct works, because no analysis was done on the required number or location of treatment works, the analysis does not discuss the need for the City to acquire and demolish hundreds of acres of developed land uses in order to construct the works. This is inconsistent with the only listed impact in the draft environmental analysis, where Regional Board staff discusses the impacts from operating a works that detains water – the works has to be constructed before it can be operated. Because the Regional Board did not properly analyze this impact, the Regional Board's analysis incorrectly concludes that the impacts will be less than significant or that they can be mitigated to below the level of significance. This conclusion is incorrect because it does not consider the following:

*Housing*

The Housing Element of the City's adopted General Plan and the position taken by the City Council when declaring a "Housing State of Emergency" both have as a basic objective an increase in the housing supply. According to Appendix E of the Technical Report, low and high density residential uses account for almost 64% of the land uses within the Chollas Creek Watershed. On average, this means that 64% of the 480-1400 acres if land that would be occupied by treatment works (307 to 896 acres) is currently developed with homes. Assuming an average of 10 dwelling units per acre (4,000 square foot lots are common in the watershed), this equates to the loss of 3,070 to 8,960 units. Removal of this number existing dwelling units would decrease the housing supply and is thus in conflict with adopted City policy.

*Industrial Land*

The Industrial Element of the City's adopted General Plan states that there is a serious shortage of large parcels suitable for industrial development exists in the City. Related goals and recommendations include:

"Insure that industrial land needs as required for a balanced economy and balanced land use are met consistent with environmental considerations" (p.286)

""Protect a reserve of manufacturing lands from encroachment by non-manufacturing uses." (p. 286)

"As mentioned earlier, in allocating additional land for industrial use it is imperative that sufficient acreage be designated to meet projected needs so that the existing market can operate effectively." (p.287)

The general theme of the existing Industrial element is precisely this shortage of industrial land, high industrial and prices, etc. and how the economy is negatively affected by the non-industrial use of industrial land. The supply increased only slightly since 1979 and has not increased since. In fact it is now at crisis level proportions.

According to Appendix E of Region 9's Technical Report, low and high density residential uses account for 3.12% of the land uses within the Chollas Creek Watershed. On average, this means that 3.12% of the 480-1400 acres of land that would be occupied by treatment works (15 to 43.7 acres) is currently developed with industrial uses.

The removal of housing and industrial acreage from the City's stock in order to build storm water treatment works required to comply with the TMDL would conflict with the City's General Plan and its declared Housing State of Emergency. Therefore, as a result of the project change, checklist item IX(b) should indicate that the Land Use and Planning impact from the project is potentially significant with respect to the loss of residential and industrial lands. The environmental analysis in inadequate because it failed to analyze this impact.

Given that none of the City's land use plans identify storm water treatment works and the nature of detention/infiltration works, the City believes that land use impacts would be significant and suggests that the Regional Board evaluate the City's plans to determine where and the extent to which inconsistencies would result.

h. Population and Housing –

Checklist item XII(c) indicates that there would be no displacement of substantial numbers of people, necessitating the construction of replacement housing elsewhere. Within the Chollas Creek watershed alone, the number of dwellings that would be lost as a result of the project change (3,070 to 8,960) should be considered substantial. According to U.S. Census Data, the average dwelling unit in San Diego houses 2.6 people. The loss of 3,070 to 8,960 dwelling units would therefore result in the displacement of 7,982 to 23,296 people. This number of dwellings that would be lost as a result of the project change should be considered substantial. Therefore, as a result of the project change, checklist items XII (b) and XII (c)

should indicate that the Population and Housing impact from the project is potentially significant.

The City believes that this is in and of itself a significant impact and suggests that the Regional Board conduct a similar impact evaluation in all of the watersheds that would be subject to the TMDL.

i. Utilities and Service Systems –

Checklist item XVI (c) indicates that the project will not require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. This is directly contradicted by the Technical Report, and given that the project change causes the additional significant impacts cited above, there is even more reason why this item should indicate that the Utilities and Service Systems impact from the project is potentially significant.

Given that the project change will result in previously undisclosed significant effects, CEQA compliance to date has deprived interested parties the opportunity to provide meaningful comment. In particular, we suggest that opportunity to comment be provided to historic preservationists, housing advocates, industrial developers, and those interested in public policy as it pertains to preservation of San Diego's shrinking supply of industrial lands.

Regional Board staff has, in the past, stated that it need not conduct a detailed analysis because it contends that the TMDL environmental analysis functions as a "first tier document," or would be speculative These statements are inaccurate because:

- Tiering does not excuse the lead agency from adequately analyzing the reasonably foreseeable significant environmental effects of the project and does not justify deferring such analysis to a later tier EIR or negative declaration." 14 C.C.R. Section 15152(b).
- Lead agencies cannot hide behind an inadequate analysis and leave it to the public to produce the necessary substantial evidence regarding adverse impacts. *Gentry v. City of Murietta*, 36 Cal.App.4th 1359, 1379 (1995). While foreseeing the unforeeable is not possible, the agency must find out and disclose all that it reasonably can. 14 C.C.R. § 15144.
- To claim that an impact is speculative and terminate a discussion requires analysis – it does not excuse a failure to investigate and analyze. *See Marin Municipal Water District v. KG Land California Corporation*, 235 Cal.App.3d 1652 (1991) *and* 14 C.C.R. Section 15145. The record does not support a finding that the Regional Board has conducted this investigation

22. CEQA Compliance – The Regional Board Has Not Analyzed the Cumulative Impacts of All Proposed TMDLs

CEQA requires that cumulative impacts be assessed as part of determining whether a project may have a significant effect on the environment (CEQA Guidelines Section 15064(h)(1). A Lead Agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan (CEQA Guidelines Section 15064(h)(3). However, Section 15064(h)(3) also requires preparation of an EIR (meaning a finding that the cumulative impact is significant) if there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding that he project complies with the specified plan. Cumulatively considerable means that the incremental effects of a project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

The initial study checklist indicates that cumulative impacts from the project will not occur, but no rationale is provided for that conclusion. CEQA Guidelines Section 15130(b) describes alternative lists of projects and projections that an agency is required to consider when evaluating significant impacts. Given that the Regional Board has a mandate to adopt TMDLs for receiving waters on the 303(d) list, the checklist should, at a minimum, consider the impacts of this project in the context of impacts that would result from reasonably foreseeable means of compliance with other TMDLs, such as the recently adopted TMDL for metals in Chollas Creek (see the attached letter from Deputy City Attorney Tim Miller to the State Water Resources Control Board regarding the Chollas Creek Metals TMDL for the impacts expected to occur from that project). Moreover, the analysis should include the impacts from TMDLs that are in various stages of consideration, adoption, or implementation throughout all the affected watersheds, including the Chollas Creek Dissolved metals TMDL, and – to the extent this TMDL affects the Scripps watershed – State Board activities related to discharges into Areas of Special Biological Significance.

23. CEQA Compliance – Chapter 12 and Appendix R Are Inconsistent

Appendix R concludes that all listed impacts are either insignificant, or can be mitigated below the level of significance. Nevertheless, Chapter 12 contains a statement that some impacts may not be mitigated below the level of significance, but that the goals of the Clean Water Act override these impacts. As noted previously, all findings must be supported by substantial evidence. To the extent that Appendix R and Chapter 12 conflict, one of the two conclusions is not supported by substantial evidence.

Unless mitigation to reduce potentially significant impacts to a level below significance is "guaranteed", the analysis must conclude that the impacts are significant (CEQA Guidelines, Section 15152(f)(3). In that case, "Findings" and a "Statement of Overriding Considerations" must be adopted

24. CEQA Compliance – Inadequate Alternatives Analysis

The State Water Resources Control Board regulations for complying with CEQA require a substitute document to contain an analysis of reasonable alternatives to the proposed action.

Here the only alternatives analyzed are the "no action" alternative, and the "reference system approach." This is an inadequate range of alternatives. *See Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal.3d 553 (1990)[Requiring a reasonable range of feasible alternatives.

Here, the Regional Board has failed to explain why setting the TMDL to a higher level is not a feasible alternative. Such an alternative may still result in Basin Plan compliance; however, the reduced need for BMP acreage would preserve more existing land uses, effectively mitigating (partially) the significant impacts to existing land uses. Alternatively, the environmental analysis should describe why such an alternative will not achieve the basic purposes of the project.

Another alternative that has not been addressed is, to the extent that the implementation plan is part of the project, whether a longer compliance schedule will result in pilot project technology becoming mainstream technology that can be deployed and reduce certain impacts.