

A Policy Review of the Toxicity TMDL for the Calleguas Creek Watershed

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INTRODUCTION

The development and implementation of a Total Maximum Daily Load policy is intended to carry out the provisions of the Clean Water Act (CWA). As such, the TMDL should represent the best available science and should set targets and load allocations that will meet the goals of the CWA. The goal of a policy review should be to determine whether the process for developing a TMDL follows a basic framework that is suitable to meet these goals. The general goal of the review should be to determine whether the process was sound, whether the process was followed, and whether the goals of the Clean Water Act were satisfied in a way that meets the best interests of society.

There are no clear cut guidelines for a policy review of TMDLs. As a result, we worked with the Steering Committee to develop four questions that address various aspects of the TMDL development process. These four questions are:

1. Did the Calleguas Creek Watershed Management Plan (CCWMP) convene a broad-based stakeholder group, representing all viewpoints?
2. Did the CCWMP properly distribute information about the development of the Toxicity TMDL?
3. Did the CCWMP facilitate a process with clear ground rules for discussion and decision-making?
4. Did the CCWMP involve Los Angeles Regional Water Quality Control Board (LARWQCB) participation, and were there mechanisms and timelines for the Regional Board and EPA review of work products, key decisions, findings and conclusions?

This is a *post-hoc* review of the Toxicity TMDL process and as such relies on the provision of information about the TMDL process from the CCWMP. The review analyzes information provided by the CCWMP, which may not reflect all materials, participants, and outcomes in the multi-year process.

THE FOUR BASIC QUESTIONS

1. Did the WMP convene a broad-based stakeholder group, representing all viewpoints?

TMDLs are not required to include stakeholder participation, but increasingly, stakeholders have become active participants in the development of TMDLs. The “DRAFT Strategy for Developing TMDLs and Attaining Water Quality Standards in the Los Angeles Region” identifies five categories of stakeholder participation, listed below in order from least involved to most involved:

1. Notice and comment.
2. Periodic updates through watershed groups.
3. Policy coordination through advisory groups.
4. Technical collaboration through advisory groups.
5. **Stakeholder-led TMDL Studies.**

The Calleguas Creek TMDL process can be best described as falling into category five – the most involved level of stakeholder participation.

It is difficult to accurately assess stakeholder participation from the data provided. CCWMP provided us with a master contact list and a list of steering committee members. These lists, however, do not reflect the degree of participation by members on the list. Some members of the master contact list may never have participated in public forums; members of sub-committees may also have varied in their frequency of participation. Furthermore, committee meetings, like all other meetings, were open to the public and non-members could attend these meetings. Since sub-committee memberships are not defined, we can only use attendance at sub-committees to determine the composition of stakeholder participants at these meetings.

While the master contact list encompassed a large and relatively broad array of potential stakeholders, the actual participants in the Toxicity TMDL development process (i.e. members of the Steering Committee and Agriculture sub-committee) were comprised mostly of regulatees and consultants. Figure 1 demonstrates the proportional distribution of Steering Committee members; figure 2 demonstrates the proportional distribution of Agriculture Sub-Committee Attendees. Generally, the Steering Committee was composed of regulatees with some academics, elected official staff, regulators and some consultants. Coastkeeper, Santa Monica Mountains Conservancy, and Surfrider represented environmental interests. Interests outside of the watershed were represented by the Regional Water Board, EPA, and by the occasional participation by a representative from Heal the Bay.

It is common to have an uneven representation of stakeholders in a process that involves significant costs to participants. (A forthcoming article in the American Economic Review by Turner, Osbourne, and Rosenthal describes this phenomenon.) Three principal costs were incurred by participants in the Toxicity TMDL process: 1) meetings were long and frequent, 2) meetings were held during weekdays, and 3) the materials involved in the development of TMDLs are often highly technical and beyond the interpretation of non-professional stakeholders. As a result, participants in the Toxicity TMDL tended to be involved in the process largely through their jobs and professional institutions. The Steering Committee and Agriculture Sub-committee reflects the tendency towards participation by “professionals.” This “self selection” of participants does not represent intentional exclusion or bias by the CCWMP, but does undermine the impartiality of the process and the degree to which the public perceives their interests have been protected. Clearly, a process dominated by potential “regulatees” could differ in its outcomes within the statutory and technical constraints of the nationwide and statewide TMDL process compared to a process with more balanced participation.

RECOMMENDATIONS: TMDL stakeholder meetings and workshops should be held on evenings or weekends. For future stakeholder-based TMDLs, the LARWQCB and/or the CCWMP should consider the provision of stipends and technical help to non-profit, community, and non-professional stakeholder participants.

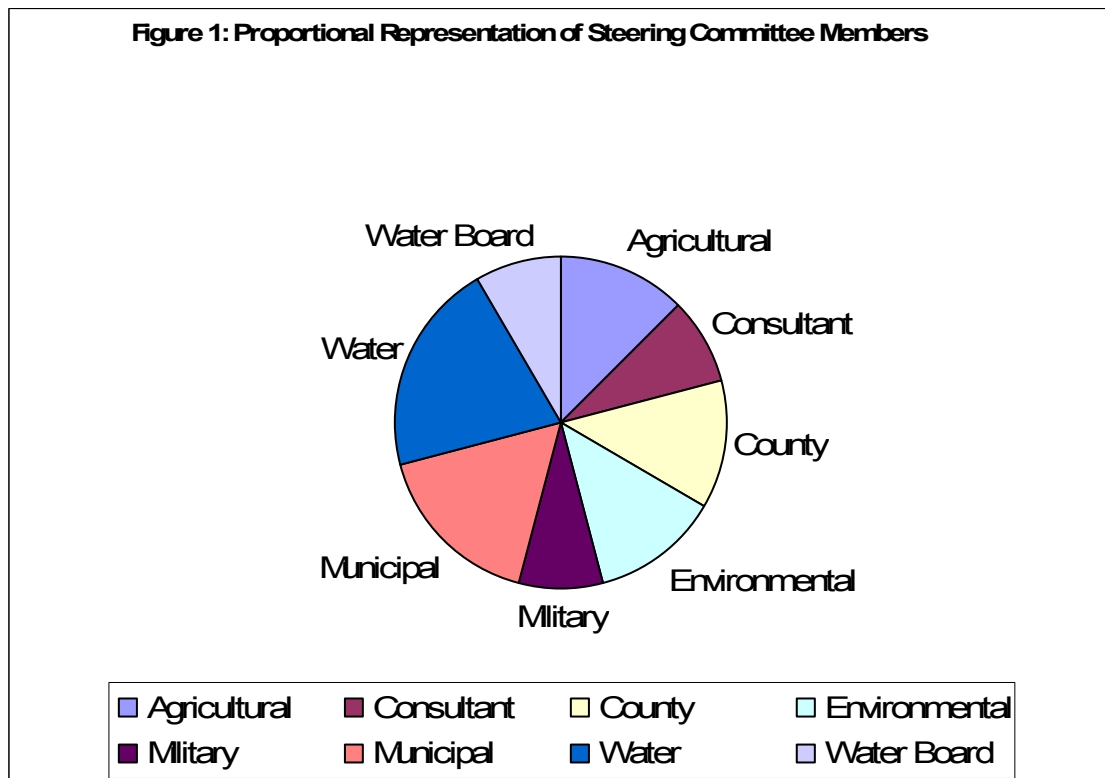
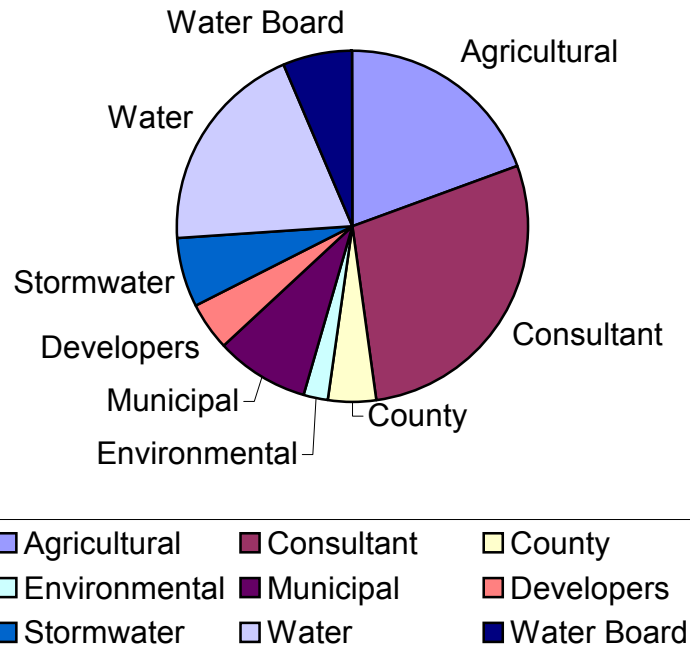


Figure 2: Proportional Representation of Agriculture Sub-Committee Attendees



2. Did the WMP properly distribute information about the development of the Toxicity TMDL?

OUTREACH

It is not clear from the materials that were provided or are publicly available that outreach for the Toxicity TMDL was targeted at all interested or potentially interested parties. From data provided by the CCWMP, emails announcing the ‘DDT’, ‘ABC’s’, and ‘Ag Waiver’ Stakeholder Workshops reached only subsets of the Master Contact list (i.e. the entire Master Contact list was not informed of the Workshops) although it is likely that these emails were forwarded more broadly.

We were not provided nor could we find on-line any information that indicated that methods of public notification beyond email were used to announce Stakeholder Workshops. We searched Lexis Nexis using a large combination of keywords and found only one article that mentions the Toxicity TMDL; this article, however, did not mention a Stakeholder Meeting. We also searched Google for “Calleguas TMDL Notice” and “Calleguas TMDL Notice Toxicity” and “Calleguas TMDL Stakeholder Meeting”. We did find notices for stakeholder meetings for the Calleguas Chloride TMDL and for the Santa Clara Nutrient TMDL, but nothing for the Calleguas Toxicity TMDL.

After searching the online minutes for the Steering Committee and the Agricultural Subcommittee, we found a reference to three newspaper articles, as well as a public television channel announcement.

The Calleguas Creek Watershed Management Plan website, www.calleguas.com, seems to be the major source of dissemination of information regarding opportunities for stakeholder participation in workshops. We draw several examples from the materials on the website:

According to online minutes from the July 21, 2004 Steering Committee Meeting:

Public Outreach/Education Subcommittee - No meeting was held in July. Adler has completed a draft of an outreach program. Laura and Kelle will be reviewing a draft power point presentation with Mark C. and others who have time immediately after this meeting. They will need volunteers for delivery of the power point presentation to interested groups.

Yet, we were not provided with this draft.

Finally, a new website www.calleguascreek.org was launched in December 2004, but we were never notified about this website.

In summary, it is difficult to make any definite conclusions about the quality of outreach and the distribution of information based on the limited information provided by CCWMP. The newly launched web-site is an improvement over the original CCWMP website and should be adequate to keep involved participants informed. It will not, however, provide adequate notification for the public at large about TMDL meetings and the opportunity for participation and public input.

RECOMMENDATIONS: More effort needs to be made to inform the public, especially the those beyond the master contact list, about watershed issues, TMDLs, and the opportunity for public involvement. The Outreach Sub-committee plays an important role in the TMDL process; the level of stakeholder participation on the committee and the attention to properly documenting the activities of the committee should be similar to that for other sub-committees.

DISTRIBUTING DRAFT WORK PRODUCTS TO STAKEHOLDERS

The Protocol for Stakeholder input on interim work products was announced in the February 4th, 2004 EAP/RB/LWA meeting. The Protocol included language such that implies that the review of interim work products by the stakeholder community is not always required, but ‘only reviewed if necessary’. If an interim work product is to be reviewed, then the Protocol states that the work product should be presented at the next relevant “Stakeholder Meeting Date”, which is the Subcommittee meeting following completion of the draft work product. It is difficult to assess whether the Protocol was properly implemented, since the ‘only reviewed if necessary’ clause is open to

interpretation. The mechanism for determining which LWA interim deliverables “would not interest Stakeholders and would not need to be discussed at Subcommittee” is unclear.

At times, need for stakeholder input is mentioned (although turnaround times often very short - on the order of two weeks). Similarly, a summary table of stakeholder inputs is mentioned during the May 19th, 2004 Steering Committee, but we were never able to find this summary table.

The standard handling process for TMDL interim deliverables was agreed to be:

1. Interim deliverable completed by Larry Walker Associates (LWA) and transmitted to TRAC and the RAS and announced to the Steering Committee and the respective Subcommittee on or before the due date,
2. Interim deliverable forwarded to TRAC for transmittal to the TAC for comments based on LWA recommendation and/or Stakeholder consensus,
3. Interim deliverable contents discussed with respective Subcommittee where appropriate,
4. Comments on the interim deliverable [from RAS, TAC, Stakeholders] collected by LWA. These comments will be considered and responded to by LWA for the record when the interim deliverable is integrated into the draft TMDL Staff Report later in 2004. Comments that result in a material change in approach for the interim deliverable may be responded to sooner by LWA.

An Example: The Application of the Protocol to the “Modeling Approach”

By tracking the distribution, discussion and comment record of the Modeling Approach through the Steering Committee and Subcommittee minutes, we can test the application of the above process for handling interim deliverables. The Modeling Approach was first mentioned at the EPA/RB/LWA meeting on April 7, 2004, where it was noted that “There should also be a stakeholders’ meeting to present the approach (check on responsible subcommittee).” The Modeling Approach was then presented to the Joint Ag/Flood Subcommittee by LWA on May 10, 2004. Stakeholders commented on the lack of data in relation to developing a model. A record of this presentation was sent to Sam Unger and Cindy Lin. During the June 16, 2004 Steering Committee meeting, “Larry W. indicated that LWA had just completed the Modeling Approach memorandum for both Toxicity and Historic Pesticides.”

Although it appears that Stakeholders were given opportunities to review some of the interim deliverables and draft work products (such as the May 10 Joint Ag/Flood meeting mentioned above), there does not appear to be a clear and public process for summarizing stakeholder comments, deciding upon whether comments should be incorporated, facilitating a discussion of comments and reasons for not incorporating comments, and a final accounting of changes to draft materials as a result of stakeholder comments. That does not mean that comments were not solicited, received, and incorporated. It does mean, however, that a better system is needed for tracking these comments and presenting the outcomes of such comments. Such a summary of comments and actions should appear on the website.

RECOMMENDATION: There needs to be an improved web-based system for distributing draft materials (building on the new www.calleguascreek.org), soliciting comments (including having a web-based form for submittal of comments), summarizing stakeholder comments, and summarizing responses to comments.

3. Did the CCWMP facilitate a process with clear ground rules for discussion and decision-making?

Along with the consultants (LWA), the Technical Advisory Committee and regulatory staffs have the responsibility for ensuring that the science behind the Toxicity TMDL is sound. Therefore, the discussion and decision-making regarding technical work products and the underlying science are important indicators of the existence of clear ground rules within the Toxicity TMDL process. A protocol for the TAC review process was established in a Memorandum sent by Rick Alexander to the Steering Committee on September 15, 2004, titled “Item IV-A: Draft Revisions Technical Advisory Committee Protocols.” These draft revisions were adopted by the Steering Committee on the same day, 9/15/04. The process for facilitating the solicitation of comments, the summary of comments, and responses to comments from TAC includes five main items essential in the effective implementation of this process:

A. TAC Organization and Access

An acknowledged goal of the TAC Protocols is to assure that all Stakeholders have the opportunity to review TAC products in a fair and equitable manner.

B. Stakeholder Review and Comment Process; Feedback to TAC Members

LWA will create a list of technical work products that have been prepared and are ready for TAC review.

Upon receipt of comments, TRAC will post these comments on the WMP website and, if requested, set up a conference call with the TAC member(s).

LWA will prepare a memo that summarizes the plan to address the comments. That memo will be distributed with the comments for stakeholder review.

[If there is a conference call to resolve conflicts between LWA, TAC, and/or Stakeholders regarding LWA’s response to TAC comments, then] TRAC would post meeting notes [from the conference call] on the WMP website.

Stakeholder access to TAC products was equitable; all stakeholders had fair access to available TAC products on the CCWMP website, under the section titled “Reports”. However, the implementation of TAC protocol was incomplete; many TAC comments remain un-posted on either calleguas.com or calleguascreek.org.

For instance, according to Steering Committee minutes from 7/21/04, LWA submitted several Toxicity TMDL work products for TAC review:

Submitted Conceptual Model for TAC review; submitted the Interim Draft Introduction and Problem Identification to TAC to provide background information, submitted Interim Draft Numeric Targets for TAC review, presented findings of Interim Draft Source Analysis to Stakeholders at Joint Agriculture and Flood and Sediment Meeting. Submitted Draft Modeling Approach for TAC review.

Of the work products submitted for review, the CCWMP website displays comments only for the Conceptual Model and the Draft Numeric Targets. Additionally, the CCWMP website does not display five separate comments which we received as attachments accompanying minutes from the EPA/RB/LWA monthly meetings. Dr. David Sedlak submitted comments on 11/21/04. Both Donald Suarez and the Regional Board submitted comments on 11/29/04. Cindy Lin submitted comments on 12/3/04 and Dr. Ron Tjeerdema submitted comments on 1/24/05. None of these comments appear on the CCWMP website.

RECOMMENDATION: The CCWMP needs to establish deadlines for posting TAC comments to the CCWMP website. The CCWMP should include a website update report in the Steering Committee meetings so that timely and complete posting of TAC comments is ensured.

4. Did the CCWMP involve LARWQCB participation, and were there mechanisms and timelines for the Regional Board and EPA review of work products, key decisions, findings and conclusions?

Monthly meetings between the EPA, the LARWQCB and LWA were held at the downtown offices of the LA Regional Water Quality Control Board. Minutes for these meetings were recorded beginning on February 4th, 2004. Within the February 4th minutes, the purpose of the monthly meetings was established:

It was agreed that the “LWA/EPA/RB Meeting” would be held to decide on the formats/contents and deadlines of upcoming interim deliverables. An attendee at these meetings will be selected to prepare summary minutes – all attendees will then be provided the draft minutes for review and changes as necessary.

Meetings were held every month in 2004, with the exception of August. In December of 2004, several conference calls were held to supplement the December meeting.

The lists of attendees for the monthly meetings include the following people:

| | | |
|------------|-----------|--------------------------------|
| Casterline | Michael | Larry Walker & Associates |
| Desai | Ashli | Larry Walker & Associates |
| Erickson | Elizabeth | RWQCB |
| Johns | Craig | California Resource Strategies |
| Lettieri | Tony | Tony Lettieri, AICP Consultant |
| Lin | Cindy | EPA Region 9 Water Division |
| Luce | Shelley | Heal the Bay |
| McGovern | Lucia | City of Camarillo |
| Minton | Chris | Larry Walker & Associates |
| Mysliwicz | Mitch | Larry Walker & Associates |
| Ruby | Armand | Larry Walker & Associates |
| Unger | Sam | RWQCB |
| Walker | Larry | Larry Walker & Associates |
| Wheeler | Gil | Larry Walker & Associates |

During the meetings between LWA, the LARWQCB, and EPA, many technical issues, controversies, and conflicts were resolved. Given the highly technical nature of these meetings, it is unclear why the only outside stakeholders were Lucia McGovern and Shelly Luce participants, as opposed to other non-LWA/RB/EPA stakeholder. Their inclusion in the monthly meetings calls into question the degree to which stakeholder participation in scientific decision making was balanced.

Overall, the requirement for Regional Board and EPA review of work products was satisfied.

GENERAL RECOMMENDATIONS

From a policy perspective, the soundness of the process could be improved by a more balanced composition of the Steering Committee and the Agriculture Sub-Committee. Without a broader base of stakeholder participation, the fairness of the process will be questioned from a larger perspective, regardless of the reasons for the distribution of membership among stakeholders, the soundness of the science in the TMDL or the stringency of the loads and load allocations.

The technical aspects of TMDLs are beyond the grasp of most laymen. Generally, citizens entrust public environmental and health agencies to make scientific decisions. In theory, the public's interests in the TMDL process are represented by participants from County and City governments, the EPA, and the LARWQCB. However, in practice many of the stakeholders who could represent the public at large themselves represent institutions that are subject to the potentially costly regulations that could result from the TMDLs. The potential conflict of interest is obvious, even if all such stakeholders act honestly and openly on behalf of their constituents.

The Clean Water Act was created to protect the waters of the United States for the benefits of all Americans, not just the Americans living within the watershed in question.

The biggest hole in the Toxicity TMDL's stakeholder net lies in the lack of representation by stakeholders from outside of the watershed. The best interests of local constituents, governments, and agencies often are at odds with the best interests of society at large. In the Calleguas Creek Toxicity TMDL process, the interests of society beyond the watershed were represented mostly by the "regulators" (LARWQCB and USEPA).

The CCWMP should take major steps to improve the breadth of stakeholder participation in the TMDL process. Funded public seats on the CCWMP should be considered, stipends could be made available on a competitive basis to not for profit groups who commit to the arduous task of participation in committees and public discussions.

The technical burden of participating in the TMDL is beyond the resources of most public stakeholders, the CCWMP should consider an academic fellowship for a scientific ombudsman who could attend meetings and subcommittees, and who could report to the public as an outside, independent voice on the technical aspects of the process. If a policy review was developed concurrently with the TMDL, then changes in the TMDL development process could have occurred as soon as problems were identified. A post-hoc policy review cannot achieve policy changes in time to meet the consent decree deadlines. Thus, in order to avoid possible litigation by stakeholders who feel disenfranchised by the policy process and to facilitate an equitable and efficient development process, a "rolling" policy review should begin as soon as stakeholders are assembled.

Finally, improved data management is a leverage point for improving many of the above noted deficiencies in the TMDL development process. The CCWMP needs to continue to develop its (on-line) system for publicly tracking stakeholder input, responses to stakeholder input, and changes to technical and policy documents that result from stakeholder input. The added transparency of the process will further enhance the public credibility of the process and the public's trust in the soundness of the outcome. Furthermore, the CCWMP should anticipate future policy reviews of the TMDL process and begin to organize materials and information so that policy reviews can be conducted efficiently and can be based on a comprehensive understanding of the materials. For this Toxicity TMDL, public outreach and distribution of materials to stakeholders may have been adequate. However, because of limited data management resources in relation to demands of TMDL development, several documents that were referenced in CCWMP minutes were never made available to the reviewers. The continued development of on-line data clearinghouses (such as www.calleguascreek.com) is a cost effective way to improve the TMDL development process, to assuage the public's fear of impropriety and selective influence, and to improve future review of the process.

