April 2, 2001

Honorable Steve Peace, Chair
Senate Budget Committee
State Capitol, Room 3060
Sacramento, CA 95814

Honorable Tony Cardenas, Chair
Assembly Budget Committee
State Capitol
P.O. Box 942849
Sacramento, CA 95814

Honorable Byron Sher, Chair
Chair, Senate Environmental Quality Committee
State Capitol, Room 2203
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Howard Wayne, Chair
Assembly Natural Resources Committee
State Capitol
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Honorable Hannah-Beth Jackson, Chair
Environmental Safety & Toxic Materials Committee
State Capitol
P.O. Box 942849
Sacramento, CA 94249

Dear Chairpersons Peace, Cardenas, Sher, Wayne, and Jackson:

As Co-Chairs of the AB 982 Public Advisory Group (PAG), established by an act of the California Legislature in 1999, we are pleased to provide you with a copy of the PAG's *Report on the Structure and Effectiveness of California's TMDL Program* ("PAG Report").

One of the principal purposes of the PAG Report is to provide the perspectives of a wide-range of stakeholders on efforts by the State of California to develop and implement TMDLs in California. To this end, the State Water Resources Control Board recently issued its own TMDL report ("SWRCB Report"), as required by AB 982. The PAG was not provided with a draft of SWRCB's Report prior to finalizing our own Report. Accordingly, on March 26, the PAG convened in Sacramento for the purpose of reviewing the SWRCB Report.

While the PAG appreciates the efforts of many who were involved in the preparation of the SWRCB Report, we have two important, consensus concerns about its contents. First, AB 982 calls for a report on the *structure* of state TMDL efforts. We believe the SWRCB Report inadequately discusses the structure of the State's TMDL program, omitting important information on staffing, specific planned goals and deliverables, and other important logistical information necessary to fully evaluate the adequacy of planned activities. Second, related to this point, we believe that it would be useful if an appropriate legislative oversight committee specifically asked the SWRCB to provide a detailed workplan for the current fiscal year that includes a description of TMDLs and other programmatic actions that will be accomplished this year. This would aid the Legislature, as well as interested stakeholders, in evaluating not only budgetary needs—which continue to be significant—but also the effectiveness of the program.

We believe that our PAG Report contains many useful ideas that, if implemented, would improve the State's TMDL efforts and, most important, water quality. We hope that our Report will aid you in making decisions about this important water quality program. We would be happy to provide you or your staffs with additional information or perspectives.

Sincerely,

Craig S.J. Johns
Co-Chair

David Beckman
Co-Chair

Report on the Structure and Effectiveness of California's Efforts to Develop Total Maximum Daily Loads (TMDLs) to Restore Impaired Waters and Recommendations for Future Policy Development

Presented to the State Water Resources Control Board
By the AB 982 Public Advisory Group

Final
February 2001

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I. EXECUTIVE SUMMARY

In the Fall of 1999, the California Legislature passed, and Governor Davis signed into law, AB 982 (Ducheny) which directed the State Water Resources Control Board ("State Board" or "SWRCB") to convene an advisory group of interested persons to evaluate the structure and effectiveness of the state's program to implement Section 303(d) of the Federal Clean Water Act. This group, known as the "AB 982 Public Advisory Group" or "PAG" has met for fourteen days over the course of the last year in Sacramento, Whittier, San Diego and Oakland. The focus of the PAG has been to explore ways in which the State's implementation of the federal Total Maximum Daily Load ("TMDL") requirements can be improved.

This report of the AB 982 PAG is organized by issues as they arise in the TMDL process: (1) listing of impaired waterbodies; (2) TMDL development by Regional Water Quality Control Boards ("Regional Boards" or "RWQCBs"); (3) implementation of TMDLs; and (4) assessing future effectiveness of the TMDL Program. This Report contains eight summary recommendations that, if followed, will substantially improve the State's implementation of the TMDL Program and further the goal of attaining water quality standards throughout the State.

The Listing Process

The PAG achieved consensus on the following points relative to a suggested listing process: (1) as with other aspects of the program, the State and Regional Boards need more resources in order to improve their administration of the 303(d) List process; (2) the State Board should adopt a policy to maximize the use of existing water quality data around the state in making listing decisions; and (3) the State Board should adopt a policy, and a means to implement it, for the determination of what constitutes reasonable minimum acceptable information for listing decisions.

The TMDL Development Process

It is generally agreed that the state's current TMDL development process is not very effective. There have been few TMDLs adopted in California. Additionally, there does not appear to be a consistent policy from the State Board on a variety of critical issues. The PAG achieved consensus on a number of items that generally fall within the TMDL development process rubric. These are summarized below, as noted.

Statewide Process for Developing TMDLs. The PAG developed several consensus points with respect to the development of TMDLs in California. Among these consensus points are: (1) TMDLs should be established in accordance with the Clean Water Act and, where applicable, the Porter-Cologne Water Quality Control Act ("Porter-Cologne"), as well as other relevant state and federal laws; and (2) Regional Boards must maintain active oversight of TMDL development activities to assure impartial technical assessment.

Timelines for Developing TMDLs. The PAG achieved consensus on three general concepts with regard to timelines in developing TMDLs. Summarized, these are: (1) the Legislature should provide adequate funding and staffing for the State and Regional Boards to immediately develop and implement high priority TMDLs; (2) all TMDLs should be established as soon as reasonably possible, recognizing varying levels of TMDL complexity; and (3) there are numerous ways that the State Board can assist Regional Boards in developing TMDLs more quickly, including heightened staff training, technical information centers, roving teams of State or Regional Board staff with pollutant-specific expertise to develop those TMDLs in different regions, begin some "complex" TMDLs early instead of focusing all resources on the "easy" ones, and grouping of related pollutants in specific watersheds.

Role of Science. Among the most difficult issues for the PAG were those related to the level of information and technical rigor necessary to develop a TMDL. After lengthy discussion over several meetings, the PAG agreed that: (1) early external peer review is important; (2) "science-at-some-level" does play a role in the development of TMDLs, and (3) the necessary level of scientific understanding and technical rigor will vary from one TMDL to another.

Confirmation of Impairment. The PAG achieved no consensus with regard to whether Regional Boards should be required to confirm earlier impairment decisions for given waterbodies. The Environmental Caucus believes that confirming earlier listing decisions simply creates additional layers of process and is redundant, and supports the process advocated by US EPA, which calls for the development of a "Problem Statement" that would adequately identify whether an impairment still exists for a given waterbody.

The Regulated Caucus believes that whether or not a waterbody remains impaired can easily be confirmed in the early stages of the TMDL development process, and need not result in delay. In those instances where historical listings were based on little or no verifiable data, the Regulated Caucus believes that the process of confirming or denying impairment can result allow the re-direction of limited resources to other water quality problems.

Funding and Personnel. The PAG easily achieved consensus on a number of points with respect to the current inadequacy of funding and personnel devoted to TMDL development. The PAG agrees that the State and Regional Boards should encourage the use of Supplemental Environmental Project ("SEP") funding for TMDL development activities.

Stakeholder Involvement. The PAG achieved consensus on the following points with respect to stakeholder involvement, summarized as follows: (1) Regional Boards should be open to input from all interested parties during the TMDL development process; (2) TMDLs need not be based on consensus, but all interested stakeholders need to be heard; (3) Regional Boards should publish schedules for the start of stakeholder processes; (4) stakeholders must be allowed to participate in new listing decisions, early scoping sessions for TMDL development, draft TMDL Report review, and at final adoption; (5) the State Board should develop a mechanism, including funding, to encourage and maintain balanced stakeholder

representation in the TMDL development process; and (6) Regional Boards should consider education and outreach as part of TMDL development.

Contribution of Legacy Pollutants. The PAG achieved two consensus points with respect to legacy pollutants. First, the Regional Boards should establish a waste load or load allocation for sources of legacy pollutants that are currently contributing to the impairment. Second, the State and Regional Boards should aggressively use existing legal authorities to identify and hold responsible those parties contributing legacy sources of pollutants causing impairment.

Implementation

The PAG agrees that it is critical that a policy be developed that results in a consistent set of standards governing the development, adoption and implementation of these plans to achieve pollutant reductions.

The PAG achieved consensus on the following items, as summarized:
(1) implementation plans are an essential part of the TMDL process; (2) implementation plans are the blueprints which should govern actions of Regional Boards and contributors of impairing pollutants to meet TMDL targets; (3) the state must dedicate more resources to develop adequate implementation plans for each TMDL; (4) implementation plans should be formal, written documents, adopted by Regional Boards in conjunction with corresponding TMDLs; (5) implementation plans should identify specific control and/or management actions for all sources or categories of sources of pollutants, consistent with the Clean Water Act and, where applicable, the Porter-Cologne Act.

Role of US EPA in Approving Implementation Plans. The primary point of contention between the Caucuses concerning TMDL implementation plans was the role of US EPA in approving them. The Environmental Caucus believes that US EPA has a role in approving implementation plans. The Regulated Caucus disagrees, arguing that the implementation plan is purely a component of state law, and therefore not subject to US EPA approval.

Role of Economics. Another point of contention between the Caucuses is the role of economic considerations in the development of TMDL implementation plans. As noted above, the Environmental Caucus believes that because economic issues are considered earlier in the regulatory process, and by other sections of law, neither Porter-Cologne nor the Clean Water Act contemplates cost-benefit or similar analyses in connection with TMDLs. On the other hand, the Regulated Caucus believes that implementation plans prepared by Regional Boards should include a section that discusses the cost and feasibility of implementation measures proposed.

Interim Requirements. Interim requirements are issued prior to the adoption of a TMDL. The point source representatives within the Regulated Caucus are gravely concerned that Regional Boards are imposing so-called “interim” permit limits in NPDES permits for 303(d) pollutants, long before the actual TMDLs are completed. The Environmental Caucus

believes that it would be improper to delay or weaken NPDES permits, which are needed to protect impaired waters before TMDLs are prepared, because of the pendency of TMDLs.

Offsets. The role of "offsets" in TMDL implementation is a controversial issue that produced no consensus within the PAG, despite significant time devoted to discussion of the issues. The Regulated Caucus supports the development of an offset program provided that participation is voluntary and that offsets are not required before TMDLs are completed. The Environmental Caucus believes that allowing the discharge of an impairing pollutant to an already impaired water is environmentally destructive, and that there are serious structural and administrative hurdles to any offset program.

Time Frames for Implementation. There was no consensus reached on this issue. The Environmental Caucus uniformly wants to expedite TMDL implementation as much as possible. The Environmental Caucus believes that implementation plans must set a minimum amount of time to achieve the necessary reductions. In support of this position, the Environmental Caucus cites the fact that, contrary to the Clean Water Act, the requirement to protect and restore polluted waters with TMDLs has not been observed in California. The Regulated Caucus believes that an unrealistically aggressive time frame within which to achieve all of the pollutant reductions will only result in unmet expectations and, perhaps, additional regulatory controls on *de minimis* pollutant sources that yield no water quality benefits.

Implementation Compliance Monitoring. Both Caucuses support the concept of implementation compliance monitoring. The Environmental Caucus believes that implementation plans must have enforcement mechanisms within them. The PAG supports monitoring to determine the effectiveness of adopted implementation plans.

Adaptive Management of Implementation Plan. The PAG agreed by consensus that implementation plans may include interim milestones for load reductions and should provide ways by which appropriate revisions can be made to account for relevant, new information.

Cross-Jurisdictional Issues. The PAG reached consensus on two items regarding this issue: (1) the Regional Board should seek collaboration with other governmental agencies with applicable authorities as needed or required to ensure efficient implementation of the TMDL; and (2) TMDLs may, in some cases, involve cross-media sources of pollution which will need to be controlled in order to implement the TMDL, which requires Cal/EPA to design a specific mechanism that assures cross-jurisdictional enforcement of TMDL load reduction allocations.

Summary Recommendations

During the course of its discussions on the State TMDL program, the PAG addressed a number of important and complex issues. While the PAG was not able to reach consensus on all of these issues, this Report provides a number of recommendations that the PAG believes will improve the State's TMDL listing, development and implementation process. The PAG

urges the Legislature, Governor and the SWRCB to move forward expeditiously to implement these recommendations.

The PAG believes that:

1. The Legislature and the Governor should dramatically increase resources available to the SWRCB and the Regional Water Quality Control Boards in order to implement the TMDL Program in California.

2. The Governor, working cooperatively with the California Congressional Delegation, should aggressively pursue additional federal funds to assist in the implementation of the TMDL Program in California.

3. The SWRCB should commit to the effective and timely implementation of the TMDL Program and, to further that goal, should improve both the pace at which TMDLs are developed as well as the quality of information on which they are based.

4. Through implementation of a variety of means recommended by the PAG, the SWRCB should assume greater responsibility for assuring that State and Regional Board staff have sufficient technical expertise at its disposal to efficiently develop high quality TMDLs.

5. The PAG's recommendations related to the Surface Water Ambient Monitoring Program for the State of California should be implemented immediately

6. Taking advantage of the Internet and other information technology, the SWRCB should assure that information generated from monitoring and TMDL related programs is readily accessible to the extent permissible by law.

7. The SWRCB should better coordinate with other agencies where needed to assure full implementation of TMDLs.

II. INTRODUCTION AND BACKGROUND

This report is the product of the AB 982 Public Advisory Group, which was created in response to legislation signed by Governor Gray Davis in September 1999.

AB 982 reflects the public interest that has been building in recent years regarding the State of California's compliance with requirements of the federal Clean Water Act. By way of summary, Section 303(d) of the Clean Water Act requires states to identify those surface waterbodies which fail to achieve water quality standards after the implementation of technology based controls imposed on so-called "point source dischargers." Once such waters have been identified and placed on the state's list of "impaired waters," Section 303(d) requires the state to establish the "total maximum daily load" (TMDL) for each source of impairment. After the TMDL is established, an implementation plan is prepared which is intended to achieve necessary pollutant reductions to attain water quality standards. These allocations are, in turn, used in a variety of regulatory and non-regulatory *fora* (*e.g.*, NPDES permits, Waste Discharge Requirements, policy and funding direction) to reduce the amount of the listed pollutant from the water segment. The end goal is to attain water quality standards after the implementation of the allocation reductions. These Clean Water Act requirements are collectively and loosely referred to as "TMDLs" or the "TMDL Program" ("TMDL" stands for Total Maximum Daily Load, the name given to the new pollution restrictions).

Specifically, TMDLs are an important tool for restoring and maintaining beneficial uses of impaired waters. TMDLs are intended to attain water quality standards, which were adopted to protect the use of our State's waters for swimming, fishing, wildlife habitat, and other important beneficial uses. TMDLs have particular relevance in California because, according to the State Water Resources Control Board, today California has over 500 waters, or segments of waters, which are listed as impaired. For reasons including these, California's performance in developing TMDLs is of great concern to many stakeholders and other members of the public.

AB 982 required the State Water Resources Control Board ("State Board" or "SWRCB") to convene an advisory group or groups to assist in the evaluation of program structure and effectiveness as it relates to the implementation of the requirements of CWA Section 303(d), applicable federal regulations, and monitoring and assessment programs. The bill requires the SWRCB to Report, on or before November 30, 2000, and annually thereafter until November 30, 2002, to the Legislature on the structure and effectiveness of its water quality program as it relates to Section 303(d). The bill also requires the SWRCB, on or before November 30, 2000, to assess and Report to the Legislature on the SWRCB's and the Regional Water Quality Control Boards' ("Regional Boards" or "RWQCBs") current surface water quality monitoring programs for the purpose of designing a proposal for a comprehensive surface water quality monitoring program for the State.

The AB 982 Public Advisory Group is unusual because of the range of stakeholders and interests represented. Throughout 2000, twenty-four representatives of environmental groups, industrial dischargers, municipal governments, agricultural interests and other

stakeholders from across California convened for a series of multi-day meetings in order to discuss the TMDL Program and the success of the State's TMDL efforts to date.

The outcome of these meetings is reflected in this report. The PAG has agreed on a significant number of recommendations and consensus points, each of which has the support of the PAG as a whole. As befitting the complexity of the matter and the range of interests represented, in a number of instances the PAG was unable to reach consensus. Where this is the case, the issue and the range of perspectives are summarized for the reader. In all, however, the PAG believes that the consensus recommendations in this report, if implemented by the State of California, would chart a new and significantly improved course for California's implementation of the federal TMDL Program.

By way of introduction, the PAG notes that it has drafted this report in a way that it hopes will clearly and simply communicate complex issues. As such, it is not the intent of the PAG that this report be viewed as resolving, or even addressing, legal disagreements regarding the TMDL program. Similarly, because this report often does not treat subjects exhaustively, no legally relevant inference should be drawn based on what is, or is not, written in the report. In short, this report intentionally uses simple, non-legal language to address important issues regarding the TMDL program. It should be understood in these terms.

Finally, references will be made throughout this report to the "Environmental Caucus" and the "Regulated Caucus." These references are intended to serve as a shorthand method of identifying the two general points of view represented on the PAG. Often, where individual members of either Caucus (*e.g.*, industrial dischargers, cities and counties, agriculture, or timber interests) maintains a variant viewpoint on a given issue, it will be noted accordingly.

Lastly, while this document reflects the work of the PAG as a whole, it has not been formally adopted by the individual organizations represented on the PAG.

III. STRUCTURE AND EFFECTIVENESS EVALUATION & RECOMMENDATIONS

CHAPTER 1: PROGRAM FUNDING

- *PAG finds that there are inadequate resources for the state to fulfill its obligation under the TMDL program. Therefore, PAG recommends there be adequate resources for the development and implementation of effective TMDLs statewide. Further, PAG recommends that the Regional Boards assess and request resource needs for an adequate 303(d) listing process and TMDL development/ implementation through the SWRCB from the Legislature.*

- *The SWRCB and Regional Boards should allocate adequate resources and staff positions to develop and maintain appropriate TMDL expertise in-house.*

- *The SWRCB and Regional Boards need an efficient process for acquisition and retention of necessary scientific and technical expertise.*

- *The PAG encourages the RWQCBs to consider TMDL development when approving Supplemental Environmental Projects (SEPs) not otherwise legally required of dischargers.*

The PAG finds that currently, and historically, California has provided inadequate attention and resources to the TMDL program. With the increased attention to the TMDL program, the state must provide adequate resources to develop TMDLs. In this connection, there is a need for the Governor to request, and the Legislature to appropriate, adequate resources for the development, implementation and long-term monitoring for an effective TMDL program that meets federal requirements. To date, budgetary appropriations for the TMDL program in California have been dramatically inadequate.

In the view of the Environmental Caucus, the number of TMDLs that have been actually completed by the State vary from none to a few. It is clear to the members of the Environmental Caucus that California's performance in establishing TMDLs has been, by any measure, unacceptably poor. California generally has failed to comply with deadlines it has established in previous Section 303(d) lists of impaired waters. While TMDLs for impaired waters were required beginning in 1979, the TMDL program in the nine Regional Water Quality Control Boards has been non-existent until very recently, when citizen litigation resulted in legally binding requirements to develop TMDLs in some regions of the California.

The Regulated Caucus recognizes the need for adequate State resources for the TMDL development process. Without adequate resources, California's status as a delegated state with primacy over Clean Water Act programs could be jeopardized. Members of the Regulated Caucus do not agree that the State is solely responsible for failing to prepare TMDLs since 1979. TMDLs are required under the CWA for those waters where the State determines that

effluent limitations are not stringent enough to meet water quality standards. This alone implies that there must be time for the effluent limitations to be in effect before determining if the limitations are adequate. In any event, to satisfy the interests of both Caucuses in expediting TMDL development, the Regulated Caucus urges the Governor and the Legislature to consider greater reliance on outside contracting for TMDL-related services.

CHAPTER 2: LISTING OF IMPAIRED WATERS

A. Overview of Existing Listing Program

The nine Regional Boards assemble water quality data and other types of information, and use it to compile the regional 303(d) lists of impaired waterbodies which, after a 30-day public review process are submitted to the SWRCB. The SWRCB compiles the regional lists into a statewide 303(d) list. The SWRCB conducts a public workshop on the statewide list, followed by a public meeting for approval of the list. The SWRCB submits the statewide list to US EPA, which then reviews the State's list and can approve or disapprove of it. If US EPA disapproves the State's list, US EPA must prepare and adopt its own list.

The SWRCB prepared its first list of impaired waters pursuant to Section 303(d) in 1990, and has prepared and submitted a new list to the US EPA in 1992, 1994, 1996 and 1998. California's most current (1998) list includes 509 waterbodies, many of which are listed for multiple pollutants. The list is usually revised every two years; however, a federal rule suspended the 2000 submittal. The next revision of the list is due in April of 2002.

B. Effectiveness of Existing Listing Program

The listing of waterbodies as impaired pursuant to Section 303(d) is an important step in the TMDL process. Listing of a polluted water on the Section 303(d) list creates the basis for new restrictions intended to assist impaired waterbodies in meeting water quality standards and protecting beneficial uses. To the extent that waters are improperly listed, this could divert funds from other programs and could have other societal and economic impacts. Alternatively, to the extent that waters are improperly excluded from the list, impaired waters may not receive the attention and resources needed to restore and protect them.

While disagreeing on the efficacy of current practices, the PAG believes that the listing aspect of the TMDL process could, in any case, be improved. These different perspectives are discussed further in detail below.

C. Discussion of Listing Considerations and Recommendations

The PAG believes that the critical issues related to the listing process are:

- Adequacy and consistency of funding and personnel resources at state and local levels
- Need for better program direction from the SWRCB and enhanced consistency among Regional Boards
- More comprehensive and effective statewide monitoring program
- Better utilization of all existing data
- Amount of information and scientific rigor needed for listing

Adequacy of Resources at State and Local Levels

While there is disagreement about the adequacy of current practices, both the Environmental and Regulatory Caucuses recognize that resource limitations necessarily affect the ability of the State Water Resources Control Board to refine the listing process. Accordingly, as reflected in its consensus recognition that the TMDL program in California is underfunded, the PAG believes that significant funding increases are necessary before the State can improve the quality and quantity of information available about waterways, including those that are impaired and those that are not.

It is important to recognize that allocating adequate resources is necessary and Regional Boards should also explore opportunities to streamline hiring and contracting processes in order to acquire qualified personnel and contractors in a timely manner.

Enhanced Consistency Among Regional Boards and Need for SWRCB Listing Policy

While no formal consensus point was reached during full PAG discussions, there is agreement between the Environmental and Regulated Caucuses that the SWRCB should establish a baseline methodology that will foster consistency in listing criteria among regional boards, while still allowing for some local flexibility.

The PAG agrees that additional articulation of the process by which 303(d) listing decisions are made would be beneficial, and that the state's listing policy should be subject to public review and comment prior to adoption and implementation. The PAG urges the SWRCB to move forward with development of a listing methodology immediately, to allow adequate time for public review and comment prior to the next listing cycle.

While based on federal regulations, the process used in compiling Section 303(d) lists over the years has varied to some extent among the nine regional boards. The PAG agrees that some flexibility at the local level is necessary, greater consistency among the nine regional boards will improve the public's understanding of the process and the ability of stakeholders to fully participate in the listing process. In particular, improving the "transparency" of the process and the clarity of Regional Board decision-making is in the interest of all stakeholders.

More Comprehensive and Effective Statewide Monitoring Program

Perhaps the greatest potential improvement to the State's listing process would be the design and implementation of a comprehensive and effective statewide surface water quality monitoring program. California's monitoring program is dramatically incomplete: for example, according to the latest Clean Water Act 305(b) Report, California monitors only 7% of its rivers and streams. It is impossible to effectively address all of California's water quality problems when some have not been identified due to lack of monitoring.

Members of the PAG recognize that a comprehensive and effective statewide Surface Water Ambient Monitoring Program (SWAMP) should be developed, implemented and utilized if the State is to achieve an effective listing process. The Recommendations on Ambient Monitoring by the AB 982 Public Advisory Group Report to the State Water Resources Control Board, submitted in October 2000, represent unanimous agreement between the Environmental and Regulated Caucuses on the establishment of a SWAMP. The importance of the SWAMP cannot be over-emphasized, as it is a fundamental building block of an effective surface water quality program. The reader of this Report is strongly urged to review the PAG Report on the SWAMP.

Better Utilization of All Existing Data

Both Caucuses agree that the listing process would be improved if the State and Regional Boards utilize all existing data that are reasonably available to them. With limited state resources to undertake a comprehensive monitoring program, it is essential to utilize all available, relevant and reasonably obtainable data provided they meet certain quality control and quality assurance criteria.

With regard to existing data issues, the PAG reached the following consensus point:

- *The State Water Resources Control Board should formally adopt a Policy to maximize the Regional Water Quality Control Boards consideration of existing data during the 303(d) process.*

Given the monitoring efforts currently underway, including monitoring requirements in National Pollutant Discharge Elimination System ("NPDES") permits, citizen monitoring, collaboration with various academic institutions, and other efforts, the State and Regional Boards must take advantage of the significant opportunity to coordinate these existing efforts and leverage resources so as to make the statewide monitoring effort more comprehensive and effective. The SWRCB should also explore opportunities to coordinate volunteer monitoring programs to help provide training and quality assurance to citizen monitoring groups. Members of the PAG also agree that the State must improve its information management capabilities.

Amount of Information and Rigor Needed for Listing and De-listing

The PAG believes the level of scientific rigor used for listing and de-listing impaired waterbodies is an important issue that must be addressed in assuring an effective listing process. The Regulated and Environmental Caucus perspectives vary as to how much information and scientific rigor is needed to list or de-list an impaired waterbody--or if and when a waterbody should be de-listed. The Regulated and Environmental Caucus disagreement on the amount of information and scientific rigor needed in the listing and de-listing process center on three key issues: (1) whether a multi-component listing process is appropriate; (2) whether a more detailed rationale for listing is required; and (3) the methodology needed for de-listing.

The Environmental Caucus believes that the listing process has been well founded and that it is appropriate to use all relevant data in the listing process. A review of SWRCB and RWQCB records reveals that considerable data and analysis have been compiled by California in support of waterbody listing. California's most recent listing decision has survived legal challenge. The Environmental Caucus also believes that, where judgment calls are required, the Regional Boards must err on the side of environmental and human health protection. De-listing should only occur under very narrow circumstances.

The Regulated Caucus, however, believes the listing process has, in many cases, seriously lacked both scientific and technical rigor. For example, information provided by State Board staff suggests that several water segments were placed on the State's list years ago for the sole purpose of qualifying for federal grant money from US EPA. Given the significant resources necessary to develop TMDLs at a time of limited State and federal funding, the Regulated Caucus believes that Regional Boards must exercise more care in making listing decisions. Moreover, simply because the most recent listing decisions have withstood legal challenge does not mean that all historical listing decisions were accurate at the time they were made.

a) Need for Multi-Component Listing Process

The Regulated Caucus believes that the listing process should included a multi-component listing process, where waters would be categorized as impaired, non-impaired, or "of concern" and placed on a separate "watch" list. Due to potentially significant impacts to dischargers, waters should only be listed when there is a high degree of confidence that they are impaired. A "watch" list will allow for collection of additional monitoring data in cases where scientific evidence of impairment is insufficient, and would avoid premature imposition of strict, regulatory requirements within a waterbody. Upon evaluating sufficient monitoring data, a decision can be made as to whether the waterbody is impaired. This approach is consistent with the Clean Water Act, which provides that states are to identify all waters not listed as impaired for the purpose of "developing information."

The Environmental Caucus notes that listing requirements are controlled by national regulations, which of course apply in every state. Accordingly, Regional Boards must use all relevant, reasonably available data (*e.g*. water quality, sediment, fish tissue, photos, narrative standards) to list waters. Listing should occur if evidence under reasonably foreseeable conditions indicates that a standard (*e.g*., California Toxics Rule, National Toxics Rule, Basin Plans, beneficial uses) is, or will be, violated. Delaying the TMDL process to include a unique, overly complicated multi-component listing process is inappropriate. Finally, in considering this issue, it is important to understand that the listing process was not intended as an exercise in protracted technical investigations or 'high science' debate—but rather as a ready tool to ensure timely restoration of impaired waters.

b) Need for More Detailed Rationale for Listing

As noted above, the Environmental Caucus believes that listing approaches are set nationally, and therefore complicated and unique California approaches are not appropriate. While the Environmental Caucus supports well-founded lists, there is more than sufficient data available now in connection with the current 303(d) list to initiate the TMDL process. It would be inappropriate to revisit the current listing process by adding an unnecessarily complicated listing rationale, as the current listings have gone through public review, have been subjected to (unsuccessful) legal challenge, and are based on standard, national regulations.

The Regulated Caucus believes it is important to enhance the transparency of the process by which waters are listed. To aid in public review of listing decisions**,** the SWRCB should require the Regional Boards to: (a) identify the pollutant and the numeric or narrative water quality standard exceeded and its source (*e.g*., CTR, Basin Plan, etc.); (b) identify the specific data used in the evaluation; and (c) describe the methodology used to determine that the water quality standard was exceeded. The Regulated Caucus does not view this as adding a "complicated" process, but rather as public disclosure of the methodologies used for listing. Some waters have been included on the 303(d) list without any clear connection to the exceedances or nonattainment of an applicable water quality standard. For example, the Regional Board must translate the words of the narrative standard (*e.g*., "no toxics in toxic amounts") into a quantifiable measure of impairment.

c) Methodology Needed for De-Listing

The Regulated Caucus believes that parity in the methodologies for listing and de-listing of waters is a crucial component of the listing process. Many waters have been listed with very limited information. As more monitoring data become available, additional waters will be listed and, conversely, some listed waters will meet applicable water quality standards and therefore should be de-listed. The criteria used for listing and de-listing should be applied fairly. Where adequate information exists to de-list a water segment, the Regional Boards should promptly consider de-listing the water segment.

The Environmental Caucus believes that TMDLs should not be seen as "punitive" measures to be removed after a period of time. Rather they are intended to be enduring calculations of a waterbody's ability to assimilate pollution. Accordingly, legally, de-listing may only occur if it can be shown that the receiving water actually met standards through the application of technology-based effluent limits. If a water body failed to meet standards even after the imposition of water quality-based effluent limits, it must not be de-listed because the TMDL is necessary to assure that, after restoration, the water continues to be protected.

CHAPTER 3: TMDL DEVELOPMENT

A. Overview of Existing TMDL Development Efforts

By law, states must develop TMDLs that will achieve water quality standards for listed waters considering seasonal variations and allowing for an appropriate margin of safety. If the state does not prepare a TMDL, US EPA is required to step in and prepare the TMDL for the state.

The TMDL is a quantitative assessment of water quality problems, contributing sources, and load reductions needed to restore and maintain water quality standards for impaired waterbodies. The TMDL is usually expressed as the amount of a given pollutant that can be contributed to the waterbody without impairing the beneficial use and meeting the applicable water quality standard. The United States Environmental Protection Agency ("US EPA") has requested that TMDL submittals include a problem statement, numeric targets to be reached in order to meet the associated numeric or narrative water quality standard, a source analysis, an estimate of the assimilative capacity of the waterbody for the pollutant(s) of concern, and allocations of allowable loads or load reductions among different sources, providing an adequate margin of safety. While it appears to the PAG that the Regional Boards in California generally follow US EPA guidance for developing the various elements of a TMDL, there may be various development methodologies being utilized by the Regional Boards.

B. Effectiveness of Existing TMDL Development Efforts

While recognizing that there are unique geographical and pollutant-specific problems encountered in each Region, the PAG encourages consistency in the State's approach to TMDLs as much as practicable. The PAG consensus points regarding TMDL development were based primarily upon the PAG's recognition of the need for increased resources in order to better implement the TMDL program.

C. Discussion of TMDL Development Considerations and Recommendations

The PAG believes that major issues related to TMDL development include:

- Statewide Process for Developing TMDLs
- Timeliness of Development
- Role of Science
- Confirmation of Impairment
- Statewide Process for Developing TMDLs]
- Funding and Personnel
- Economic Considerations
- Stakeholder Involvement
- Legacy Contribution of Pollutants

Statewide Process for Developing TMDLs

The PAG reached the following points of consensus about TMDL development:

- *TMDLs should be established and implemented in accordance with the Clean Water Act and where applicable, the Porter-Cologne Water Quality Control Act and other relevant state and federal laws.*

2. *Regional Water Quality Control Boards must maintain active oversight over TMDL development sufficient to assure unbiased technical assessment.*

The first consensus point recognizes the interplay between the federal Clean Water Act and the state's Porter-Cologne Water Quality Control Act ("Porter-Cologne"). The PAG supports the correct application of each law, and others, to properly develop and implement TMDLs.

While the Environmental Caucus does not dispute the importance of Porter-Cologne in regulating aspects of water quality protection in California, the primary authority for TMDL development is the Clean Water Act itself, from whence TMDLs derived. (As noted below in Chapter 3, "Implementation," because of the structure of the Clean Water Act, there is a greater role for Porter-Cologne authorities in implementing TMDLs, especially in connection with non-point sources of pollution.) In addition, the Environmental Caucus notes that even if Porter-Cologne Act did apply to the development of a TMDL, contentions that the Porter-Cologne Act requires economic analysis during TMDL development misunderstands and misstate that law's requirements. Porter-Cologne requires some economic considerations when the state adopts a water quality standard, a process that, by law, occurs separately and earlier than TMDL development.

The Regulated Caucus strongly believes that Porter-Cologne plays an essential role in determining the proper procedure for developing TMDLs. Under Porter-Cologne, Regional Boards are required to consider economics prior to adopting new water quality standards.

Similarly, Porter-Cologne must be applied when selecting numeric targets for a TMDL, as the targets are effectively water quality standards. This view is shared by the SWRCB Office of Chief Counsel, which has opined that a quantifiable TMDL target, together with load allocations, is a performance standard requiring an economic analysis similar to that for water quality objectives.

The second consensus point reflects the PAG's support of the Regional Boards has having the primary role in developing TMDLs. The PAG further recognizes the importance of an impartial Regional Board in developing or reviewing technical information related to the TMDL.

The Regulated Caucus is in favor of an approach whereby dischargers are permitted to submit technical and scientific reports to the Regional Board in connection with TMDL development. If, after careful review, the Regional Board finds that the submittals constitute credible information the Board can utilize this outside information to assist in the TMDL development process. In light of the resource limitations identified earlier, rejecting information deemed to be credible merely because the information was developed by or for the regulated community is impractical and unwarranted. In addition, given the very real constraints on Regional Board hiring and the need for specialized expertise in TMDL development, the Regulated Caucus also supports the use of third party contracts to develop TMDLs.

The Environmental Caucus, however, is concerned about "fox-guarding-the-henhouse" scenarios for TMDL development in particular. While the Environmental Caucus is in favor of using Regional Board studies, or creating a mechanism whereby members of the regulated community may support studies carried out by other parties who are supervised by the Regional Boards, the Caucus is not in favor of using reports or studies originating directly from the regulated community. Such materials often lack the requisite amount of objectivity and, additionally, may be undertaken in a manner that would make Regional Board oversight impractical, thus, for all practical purposes ceding TMDL development to those dischargers who may be impacted by TMDL requirement.

Timeliness of Development

- *The Legislature should provide adequate funding and staffing to allow the State and Regional Boards to immediately initiate the development and implementation of high priority TMDLs.*

- *All TMDLs should be established as soon as possible recognizing varying levels of TMDL complexity.*

- *Ways to assist in completing TMDLs more quickly may include: Training (such as US EPA's Water Quality Academy), Technical Centers (which would allow RWQCBs to share information and approaches, Strike forces or teams of SWRCB staff with specific expertise (e.g., nutrients, metals, sedimentation, etc.) that could address TMDL development in Regions, bring in staff from other agencies to*

assist in TMDL development (e.g., on pesticide issues), start some difficult TMDLs early as opposed to tackling the easy ones only at first (makes schedules more realistic), group related pollutants to expedite TMDL technical work (e.g., working on multiple pollutants in a waterbody).

The first consensus point reiterates the importance of adequate funding to initiate the TMDL development process. Due to the number of pending high priority TMDLs, the PAG realizes that timely development is important. In the PAG's view, the primary obstacle to TMDL development is adequate funding and staff to immediately initiate the development of TMDLs. The Environmental Caucus believes that the lack of completed TMDLs is of serious concern with regards to the state's responsibility for meeting its obligation to remedy serious pollution problems which affect the environment and human health. The Regulated Caucus believes that undeveloped TMDLs place point source dischargers into a situation where stringent "interim permitting" requirements with significant economic and development consequences may be imposed before the science-based TMDL is completed.

The second consensus point recognizes the varying degree of complexity associated with different TMDLs. Time factors are important issues to both the Environmental and Regulated Caucuses.

The Regulated Caucus supports the efficient development of TMDLs as long as adequate information exists to make scientifically sound judgments when developing TMDLs. Reams of available and credible information may be available for some waterbodies with specific impairments, making the development of the TMDL fairly quick and efficient. On the other hand, some waterbodies will have little or no information available regarding the impairment making it nearly impossible to quickly develop a TMDL. While time factors are important, urgency should not be a singular justification for a TMDL that lacks technical and scientific credibility.

The Environmental Caucus believes that TMDLs must have an adequate scientific basis. In the past, some who have been opposed to clean water progress have cited exaggerated or disingenuous "scientific" concerns as a basis for delay. It is often forgotten that TMDLs are required because California has over 500 waters that are polluted—including some of its most famous, highly used, and widely prized. The environmental and public health impacts posed by these impaired waters are significant and often unacknowledged. The need for prompt action is real. So while the Environmental Caucus acknowledges the sincere concerns of some in the Regulated Caucus with respect to prompt action to restore and protect waters, it is critical that data needs not be distorted in a manner that delays restoration programs that are, in many cases, decades overdue.

To expedite the TMDL development process, the Environmental Caucus (as well as some other members of the PAG) recommends sending TMDLs completed by Regional Boards directly to OAL and US EPA unless there is an appeal (this would require a change in the current Water Code). If an appeal were filed, consideration of the appeal by the SWRCB would be mandatory.

Role of Science

- *Encourage, where appropriate, early external peer review.*
- *Science should play a role in the development of TMDLs.*
- *The level of scientific understanding and technical rigor will vary for individual TMDLs.*

Among the most difficult issues for the PAG were those related to science and the level of information necessary to develop a TMDL. After lengthy discourse over several meetings, the PAG agreed that early external peer review was important, that "science-at-some-level" does play a role in the development of TMDLs, and that the necessary level of scientific understanding and technical rigor will vary among TMDLs.

The role of science is one of the most important issues to the Regulated Caucus. Since TMDLs are a numerical calculation of pollutant loads, it is essential that the methodologies and the information used to calculate waste load and load allocations for various sources be based on scientifically sound methods. The Regulated Caucus is concerned that some TMDLs have been and are being developed with cursory, desktop reviews and no actual water quality monitoring data. Once developed, a TMDL likely will control business and public agency actions for several decades. As such, TMDLs must be developed with good, credible scientific methods of assessment.

The Environmental Caucus agrees that science and technical understanding must be adequate under the circumstances that apply to individual TMDL development. The record in California suggests that this standard is being met. The Environmental Caucus wants to see TMDLs developed that are sufficient to achieve the water quality improvements that are necessary. However, calls for improved “science” are potentially never-ending and can be used to delay appropriate TMDL development. Congress generally intended that TMDLs safeguard polluted waters by being rapidly developed and implemented, and it specifically intended that TMDLs be developed and implemented with margins of safety sufficient to account for technical or scientific uncertainty. To implement the Clean Water Act, and respect the intent of Congress, the absence of “perfect” data should not be a determinative factor in deciding whether to adopt a TMDL.

Confirmation of Impairment

The PAG was unable to reach any consensus points with regard to the issue of confirming impairments identified on a Section 303(d) List during development of the TMDL.

The Environmental Caucus feels strongly that creating additional layers of process requiring confirmation of waterbody impairment prior to TMDL initiation should be discouraged because they are redundant and unnecessary. Further, they will only delay an

already substantially delayed program. US EPA guidance suggests that the TMDL "Problem Statement" will identify adequate background information regarding the pollutant(s) of concern being addressed, along with the rationale for TMDL development. Moreover, any concerns regarding improper categorization of waterbodies pursuant to section 303(d) should be addressed during the biennial review of the list. Finally, prioritization of listed waterbodies for TMDL development will result in attention to those waterbodies with the greatest impairment, and hence, the greatest amount of existing data.

The Regulated Caucus believes that waterbody impairment should be verified in the initial stages of TMDL development. This is especially true if the waterbody was listed on the 303(d) list with little or no verifiable data. The verification of impairment is an essential step in beginning TMDL development. Without the necessary information to verify the impairment and the extent of the impairment, it is difficult to begin developing an action plan to correct the impairment. The Regulated Caucus does not believe this step is an unnecessary delay in the TMDL development process, but rather, a necessary first step for proper TMDL development.

Economic Considerations

The PAG was unable to reach consensus regarding economic considerations when developing a TMDL.

As noted above, the Regulated Caucus believes that the adoption of TMDL targets is equivalent to adoption of water quality objectives, and is subject to the provisions of state law, including Porter-Cologne. Porter-Cologne requires the SWRCB and Regional Boards to consider several factors when adopting or establishing water quality objectives. The factors include water quality conditions that can reasonably be achieved through the coordinated control of all factors which affect water quality in the area, and economic considerations. State law also requires an estimate of the total cost of any agricultural water quality control program that is adopted into a Basin Plan. The fact that the requirement to develop TMDLs arises from the CWA does not render State law irrelevant. A superior court judge recently ruled, in the NPDES permit context, that neither the state, nor federal statutes and regulations can be viewed as isolated regulatory schemes and Regional Board actions must comply with both. While Porter-Cologne does not require a formal cost-benefit analysis, the law clearly mandates the consideration of economic impacts and other public interest factors.

The Environmental Caucus believes that neither Porter-Cologne nor the Clean Water Act contemplates or allows cost-benefit or similar analysis in connection with TMDLs. This is because an economic “pressure relief valve” already exists, making additional economic analyses both unlawful and unnecessary. If the Regional Boards deem compliance with water quality standards to be too expensive, the Clean Water Act allows “de-designation” of beneficial uses through a use attainability analysis process. In addition, economics will have already been considered during the standard setting process, as required by Porter-Cologne. Thus, it would be plainly destructive of the existing framework—and entirely circular—to consider economics yet again.

Those urging the view that various components of a TMDL are functionally equivalent to water quality standards, (and therefore require economic considerations) misinterpret the law. Although equity can be considered when determining which management practices to implement, timeliness of implementation, etc., implementation plans themselves must not require a cost-benefit analysis, a step which would be nearly impossible for Regional Board staff to accomplish. In this regard, though the Environmental Caucus is not insensitive to the fact that development (and implementation) of some TMDLs may be costly, there is the uniform belief that not developing and implementing TMDLs is far more costly—costly to human health, to the environment, and ultimately to the economy.

Stakeholder Involvement

- *Regional Board should be open to input during the TMDL process.*
- *TMDLs need not be based on consensus but everyone needs to be heard.*
- *The Regional Board should publish schedules for the start of the stakeholder participation process.*
- *Recommended framework for the TMDL development should include opportunities for public input, for new listing, for scoping of the TMDL, on the draft TMDL and on final adoption.*
- *A mechanism should be developed, including funding, to encourage and maintain balanced stakeholder representation, and assure stakeholders are afforded the opportunity to participate meaningfully, in accordance with TMDL deadlines.*
- *Regional Boards should consider education and outreach as part of TMDL development and implementation. Public outreach and education are important aspects in issue resolution and attaining water quality standards.*

The PAG agrees that there is a role for stakeholder involvement and public review within the TMDL development process. However, there are differences as to the level or degree of stakeholder involvement that should be sought during the development of individual TMDLs.

As primary stakeholders with a vested interest in the mandates created by a TMDL, the Regulated Caucus is very supportive of extensive stakeholder involvement, when appropriate. Each TMDL is a new and different process that must take into account the possible complexity and diversity of issues associated with that TMDL. As such, regulated entities may have essential information that should be considered by the Regional Board when developing the TMDL. In addition, not only do the chances for a successful TMDL increase dramatically with stakeholder "buy-in" on TMDL development, but also the likelihood of litigation should

diminish.

The Environmental Caucus recommends that wherever possible the Regional Boards should establish a focused and efficient stakeholder review process that allows all stakeholders to effectively participate. In addition to concerns about delay, the Environmental Caucus notes that elaborate "public" processes often create inequality of access. Because of he far superior economic resources available to some stakeholders, more process often equals less public participation. A lengthy stakeholder process therefore often has the unintended consequence of favoring stakeholders with greater resources and corresponding ability to devote large amounts of time. It is also inefficient for Regional Board staff and can cause all involved to lose cite of the fact that TMDL development is a regulatory process where consensus rarely will be achieved.

Legacy Contribution of Pollutants

- *Consistent with achieving water quality standards, the Regional Boards should establish a waste load or load allocation for sources of legacy pollutants that are currently contributing to the impairment.*

- *The State and Regional Boards should aggressively use existing legal authorities to identify and hold responsible those parties contributing legacy sources of pollutants causing impairments.*

The PAG considers legacy pollutant sources to be historic, man-made sources, as distinguished from natural background sources. These pollutant sources pose a special set of problems and issues when they contribute to water quality impairment. In some cases, it may be possible to identify a responsible party even if the responsible party is no longer operating within the watershed. In such cases, the PAG supports the SWRCB and Regional Boards in using existing legal authorities to pursue remedies against such parties responsible for the discharge of the pollutant. When a responsible party cannot be identified, the PAG urges the Regional Board to identify other methods for addressing the contribution. The PAG recommends that legacy sources of pollutants be included in the waste load or load allocations that are developed, and that a plan of action to address the legacy sources be included in the implementation plan.

When a truly responsible party cannot be identified, the Regulated Caucus believes that the State should become the responsible party. The Regulated Caucus members are concerned that if the state does not accept responsibility, other dischargers to the waterbody will be held responsible for the legacy pollutant contribution. Nonpoint source dischargers and landowners are concerned that they will be held responsible for the legacy contribution merely because the pollutant is associated with run-off from their property, even though they may have no culpability in creating the legacy pollutant source. Furthermore, in many instances legacy contributions arise from operations that were conducted in accordance with procedures which were expressly authorized at that time.

CHAPTER 4: TMDL IMPLEMENTATION

A. Overview of Existing TMDL Implementation Efforts

The TMDL itself is a calculation that means little unless it is implemented. Implementation plans are a means by which TMDL waste load and load reductions are implemented. Of the few state-adopted TMDLs with corresponding implementation plans, the implementation plans vary from region to region and by the pollutant involved.

The PAG discussed a number of issues related to implementation. Some of the issues relevant to TMDL development also arise with regard to implementation; however, because the issues are not identical in the development and implementation contexts, some sections have been repeated to insure full discussion of the topics.

In addition, due to the relatively recent focus on TMDLs and TMDL implementation efforts, it is difficult to assess the effectiveness of the Board's actions. Over the last two years, funding for the TMDL program has been substantially increased yet it still falls short in meeting estimated needs. This section discusses in general the various issues related to TMDL implementation plans, including funding, the process related to developing the implementation plan and the content of implementation plans.

B. Effectiveness of Existing TMDL Implementation Efforts

Due to the relatively new focus on TMDLs and TMDL implementation efforts, it is difficult to assess the effectiveness of the State and Regional Boards' actions. Over the last two years, funding for the TMDL program has been substantially increased, yet resources still fall short of what is required to meet estimated needs. Moreover, it has recently come to light that the financial resources recently provided by the Legislature for the TMDL program cannot be efficiently utilized due to a lack of SWRCB and RWQCB personnel trained in this area. For this reason, the PAG believes that the Legislature and/or State Board should explore avenues by which to more expeditiously utilize these funds in appropriate TMDL-related activities. One example that was discussed with some interest at PAG meetings was the possibility of outsourcing some of the monitoring and TMDL development work to qualified private contractors.

C. TMDL Implementation Considerations and Recommendations

The PAG believes that the critical issues related to TMDL implementation are:

- Importance of Implementation Plans
- Implementation Plans as Written Documents

- Time Frames
- Stakeholder Involvement
- Consideration of Economics
- Interim Permit Limits
- Offsets
- Implementation Compliance Monitoring
- Adaptive Management of the Implementation Plan
- Cross Jurisdictional Issues

Importance of Implementation Plans

- *The Implementation Plan is an essential part of the TMDL process.*
- *The Implementation Plan is the blueprint which governs actions by all contributing sources to meet TMDL targets.*
- *The PAG finds there are inadequate resources for the state to fulfill its obligations under the TMDL program. Therefore, the PAG recommends adequate resources for development and implementation of effective TMDLs statewide. Further, the PAG recommends Regional Boards assess and request resource needs for an adequate 303(d) listing process and TMDL development/ implementation, through the SWRCB from the Legislature.*

The PAG agrees that without implementation, a TMDL would be merely a numerical evaluation and therefore has only limited value. In the first consensus point, all members of the PAG recognize the importance of implementation plans as part of the overall TMDL process. However, there are significant differences of opinion regarding what should be included in an implementation plan, US EPA's role in implementation, and approval of implementation plans.

The Regulated Caucus believes that while US EPA may have the authority to require implementation of TMDL allocations with regard to point sources through NPDES permits, the issue is more complicated when dealing with nonpoint sources of pollutants. Nonpoint source members of the Regulated Caucus believe strongly that US EPA does not have implementation authority for nonpoint sources of pollution since nonpoint source controls are subject to state authority. This view has recently been upheld in a federal district court case in California. The Regulated Caucus believes strongly that implementation should include, but not be limited to: (1) issuance of waste discharge requirements; (2) compliance with the State's Nonpoint Source Management Plan, which includes the three-tiered process of nonregulatory implementation of best management practices, regulatory encouraged implementation of best management practices and the adoption and enforcement of waste discharge requirements that will require the implementation of best management practices; (3) requiring or encouraging, as

appropriate, Best Management Practices for municipal storm water in accordance with State Board Orders, and for industrial and construction activities in accordance with SWRCB Orders.

On the other hand, the Environmental Caucus believes strongly that through its nonpoint source management, NPDES responsibilities, and more general Clean Water Act powers, the US EPA does have the ability to ensure that TMDLs are implemented. These means include requiring an implementation plan be submitted to the US EPA as part of the actual TMDL. Final federal regulations adopted in 2000 amend EPA's TMDL regulations to require that states such as California submit implementation plans for EPA approval with each TMDL. Because of the major pollution contributions attributable to nonpoint sources, the Environmental Caucus further believes that implementation plans must include load allocations in enforceable permits.

The second consensus point clearly illustrates the PAG's view that a state approved implementation plan is the blueprint governing actions needed to achieve TMDL targets.

The third consensus point highlights the need for adequate resources when developing and implementing TMDLs. The PAG agrees that adequate resources are essential to the ability of the SWRCB and the Regional Boards to effectively implement TMDLs.

Implementation Plans as Written Documents

- *The Implementation Plan should be a formal written document that should be adopted by a Regional Board when they adopt the corresponding TMDL.*

- *Implementation plans should identify specific control and/or management actions for all sources or categories of sources of pollutants consistent with the Clean Water Act, and where applicable, the Porter-Cologne Water Quality Control Act.*

All members of the PAG support the concept that when a Regional Board adopts a TMDL, a corresponding implementation plan should also be adopted. However, this consensus point should not be interpreted to mean that all members of the PAG believe that the implementation plan is part of the TMDL.

The Environmental Caucus notes that federal TMDL regulations now provide that implementation plans are part of a TMDL and are subject to US EPA approval. Implementation plans must center around enforceable permits. Legally, waste load allocations issued to point sources must be included as discharge limits in federal NPDES permits. Similarly, load allocations to non-point sources should be implemented through mass limits in State discharge permits issued by Regional Boards (*e.g.*, Waste Discharge Requirements, "Tier III" of the State's nonpoint pollution plan) While not precluding additional voluntary or incentive-based approaches, only a mandatory permitting regime can ensure accountability in implementation.

Conversely, the members of the Regulated Caucus believe that the implementation plan is a component of state law and therefore is not part of the TMDL submitted to US EPA for approval. As such, the nonpoint source representatives of the Regulated Caucus believe that load allocations for nonpoint sources should be consistent with the State's US EPA-approved Nonpoint Source Management Plan and the three-tiered approach. Under the three-tiered approach, waste discharge requirements remain an option as the third tier, and therefore, no change in existing law is required. Furthermore, while the implementation plan should be adopted when the TMDL is adopted, it should be recognized that the implementation plan is the result of an established TMDL. The implementation plan must be sufficiently flexible so that continuous revision is not required as the iterative TMDL process unfolds. Finally, the Regulated Caucus acknowledges the pendency of the federal regulations, but notes that the regulations are currently the subject of litigation in federal court.

Time Frames

The Regulated Caucus agrees with the members of the Environmental Caucus that establishing appropriate TMDL implementation plan time frames should not be used as a tactic to avoid implementation of the plan. However, time frames for implementing approved TMDL implementation plans need to be realistic, taking into account the complexity of the plan and the capability of various responsible parties to mitigate the impairment. An unrealistic implementation plan will only result in unmet expectations. For example, strict effluent limitations may not be possible based on currently available technology. As such, strict time limits for implementation will create false expectations regarding the ability to meet water quality standards.

The Environmental Caucus uniformly believes that it is critical to expedite implementation of TMDLs as much as possible and note that allocating loads through permits should be a swift and straightforward process. The Clean Water Act's goals of fishable, swimmable waters still have yet to be met, and TMDLs have not been enforced in California for decades. Lengthy implementation plans simply create further delay. Even the TMDL adoption process itself can slow down implementation. For example, a TMDL for trash on the East Fork of the San Gabriel River presented a relatively uncomplicated implementation scenario, due to the fact that there was one responsible party (the USFS), the source of the problem was understood, and the mechanisms for control were fairly well identified. Even so, this TMDL has taken more than a year merely to move through the State's administrative process.

Stakeholder Involvement

- *The Regional Boards should be open to input during the TMDL process.*
- *The Regional Boards should publish schedules for the start of stakeholder participation process.*
- *The Regional Boards need to carefully lay out schedules to get TMDLs completed and implemented.*
- *Regional Boards should consider education and outreach as part of TMDL development and implementation. Public outreach and education are important aspects in issue resolution and attaining water quality standards.*
- *In certain circumstances, and where deemed appropriate by the Regional Board, the process may be modified to allow for expanded or diminished public participation.*
- *Develop a mechanism, including funding, to encourage and maintain balanced stakeholder representation, and assure that stakeholders are afforded the opportunity to participate meaningfully, in accordance with TMDL deadlines.*

Stakeholder involvement is of particular relevance to implementation plan development. In general, the PAG supports the involvement of stakeholders in the development of the implementation plan. While the PAG does not think that consensus is required for approval of the implementation plan, the PAG believes that stakeholder buy-in and participation are essential for success. The views regarding the level of stakeholder involvement that should be required for each TMDL, however, varies between the caucuses.

While the Environmental Caucus agrees with the need for a stakeholder process for the reasons outlined above, the Environmental Caucus urges that the Regional Boards must discern what type of public involvement is warranted. Moreover, the Environmental Caucus recommends that wherever possible the Regional Boards should establish an efficient and focused stakeholder review process. There is a legitimate concern that stakeholder involvement can be an excuse for unwarranted delay. This concern is bolstered by the fact that in California alone, almost all TMDLs to date have been developed as a result of environmental community lawsuits brought to enforce the Clean Water Act. In addition to concerns about delay, a lengthy stakeholder process has the unintended consequence of favoring stakeholders with greater resources and corresponding ability to devote large amounts of time. The Environmental Caucus suggests that a potential source of funding could be SWRCB funds from Regional ACL actions. These funds could be administered in a truncated grant process to allow representatives from 501(c)(3)s or comparable organizations demonstrating financial need to participate in the stakeholder process.)

The Regulated Caucus is concerned with assuring that there is adequate public and stakeholder involvement in any water quality planning and regulatory tool that may have a "shelf life" of 30 years or more. "Buy-in" from responsible parties will help to facilitate the quick and effective implementation of TMDLs. To obtain the necessary buy-in, the Regulated Caucus recommends that the Regional Boards carefully consider convening a watershed or waterbody-specific advisory group(s) of stakeholders and technical experts for input on issues related to implementation. Where a stakeholder-based watershed management program or project is in existence, the Regional Board may designate that group as the TMDL Advisory Group.

Consideration of Economics

There is considerable disagreement between the Environmental and Regulated Caucuses concerning the role of economic considerations in the development of individual TMDLs and TMDL implementation plans.

As previously stated in the TMDL development discussion, the Environmental Caucus believes that the law mandates that economics are to be considered at a different stage, outside the implementation of the TMDL (*i.e.*, both through the designation of beneficial uses of the receiving water and when drafting water quality objectives). Although equity amongst dischargers can be considered when allocating individual loads, no such consideration is appropriate in calculating the TMDL and implementation plans themselves should not require a cost-benefit analysis.

The costs of implementing the TMDL and the effectiveness of the actions proposed are important issues to the Regulated Caucus, which includes public agencies as well as private industries. The Regulated Caucus believes the implementation plan prepared by the Regional Board should include a discussion of the cost and feasibility of the implementation measures proposed. Without such information, the implementation plan will be incomplete and will not portray the likelihood of success. The Regional Board cannot logically provide reasonable assurances that water quality standards can or will be met without first determining if the implementation measures are feasible and not cost prohibitive.

Interim Permit Limits

In the view of the Environmental Caucus, before TMDLs are complete, the Clean Water Act, and simple common sense, dictate that discharges causing or contributing to the impairment of a waterway must be reduced. Accordingly, so-called "interim" limits are merely sound (and legally required) steps to prevent additional degradation to the State's already impaired waters. The Environmental Caucus opposes the use of any "interim" permits that do not comply with the Clean Water Act. While dischargers have argued that relaxed "interim" permit limits are appropriate until a TMDL is completed, this argument appears to be premised on the flawed assumption that the TMDL process obviates basic components of the Clean Water Act (such as NPDES permits and anti-degradation requirements). The TMDL

requirements are but one of the Act's tools, and they do not excuse compliance with other requirements, especially those needed to maintain and protect water quality.

The point source dischargers within the Regulated Caucus are gravely concerned with the imposition of interim mass-based permit limits before completion of TMDLs. This concern is well founded, in light of the US EPA Region IX draft Guidance that was released in early January 2000 and current permit renewals by the Regional Boards. Under the auspices of this Guidance, the Regional Boards are arbitrarily establishing *de facto* waste load allocations for point sources before TMDLs are completed that, in essence, render TMDLs irrelevant. These requirements may seriously impact the ability of communities to accommodate growth and economic development, and do little to achieve water quality standards. In some circumstances, the Regulated Caucus supports interim permit conditions that include performance-based effluent limitations expressed in terms of concentration, and recommends that permittees be allowed to conduct source control and pollution prevention programs in the interim to reduce the levels of pollutants entering treatment facilities instead of being given de facto waste load allocations before the TMDL is completed.

Offsets

- *Legal and liability issues; Specification of the manner in which a load allocation (load reduction) would be credited to a specific offset; Site-specific characteristics of waterbodies; Specific characteristics of pollutants; Accountability issues (e.g., how will a load reduction be measured?)Environmental justice implications; Location of the source; Timing of the reduction; Mandatory vs. voluntary reductions; Ongoing responsibility and maintenance of the reductions; Appropriate offset ratio(s); Agency management, including funding for an offset program; Type of source (nonpoint vs. point source); Definition of required pollutant reductions; Whether pollutant reductions that are otherwise required or would otherwise occur should be the subject of offsets.*

The concept of "offsets" has attracted much attention in the context of TMDL load and wasteload allocations. In essence, offsets refer to pollutant "trading" among dischargers, or (in the rubric of the TMDL) recipients of load and wasteload allocations. There are different models for pollutant offsets, including a market-based system or a mitigation banking approach. Under a market-based system, one discharger could "buy" another discharger's allocation of a particular pollutant, allowing the purchasing discharger to increase the mass of its own discharge in return for offsetting mass reductions of the pollutant from other sources.

While there was no consensus regarding the use of offsets, the PAG identified the above list of issues that would need to be considered when discussing an offset program. There were a range of views on the PAG about offsets, spanning cautiously optimistic to fundamentally opposed. On one side of the balance, some argue that offsets can be a practical way to allow regulated parties to conduct business and assist in achieving water quality standards. On the other, others note that offsets may be impossible to administer and, in any event, could lead to serious environmental justice and other problems.

The Regulated Caucus supports the use of offsets as a tool, provided they are optional to the participants and not imposed in advance of TMDLs as part of interim permit requirements. The Regulated Caucus believes offsets should be one implementation option available for permittees and nonpoint source contributors to meet existing or future waste load and load allocations respectively. Offsets must also be cost-effective and reasonable in order to be viable.

The Environmental Caucus feels that allowing discharge of a pollutant to a waterbody already impaired for that pollutant is environmentally destructive and contrary to law. Furthermore, the Environmental Caucus opposes allowing offsets for waste streams that already are, or should be, regulated through the permitting process. In addition, while the Environmental Caucus does not have a uniform view on the overall issue, it is clear to the entire Caucus that there remain serious structural and administrative hurdles to any offset or "trading" program. These include the reality that the State and Regional Boards are not adequately funded to accomplish current mandates let alone oversee an entirely new and technically challenging program such as would be posed by the offset concept.

Implementation Compliance Monitoring

The Environmental Caucus believes it is important to have enforcement mechanisms in implementation plans. The Environmental Caucus believes enforcement should take forms traditional to the Clean Water Act, including those available to regulatory agencies and to citizens.

The Regulated Caucus supports monitoring to determine the effectiveness of adopted implementation plans. Businesses and public agencies operating in good faith and following the implementation plans should be shielded from liability, even if significant water quality improvements are not determined. Since much of the implementation will be based on experimental control methods, dischargers should not be held liable if they are complying with the approved implementation plan in good faith. Entities that fail to comply with implementation requirements should be subject to enforcement action. Lastly, the Regulated caucus does not support third party actions or citizen lawsuits for enforcement. Porter-Cologne does not allow third party lawsuits against private parties. Therefore, implementation plans prepared and adopted under Porter-Cologne are not subject to third party lawsuits.

"Adaptive Management" of the Implementation Plan

- *The implementation plan may include interim milestones for load reductions.*

The implementation plan should provide for "feedback loops" that assure the effectiveness of the TMDL implementation plan. Note that while the PAG recognizes that a Regional Board may opt for a phased implementation approach for a particular TMDL, if allowable by law, and that interim milestones and load reductions may be necessary in certain circumstances, such interim milestones are not equivalent to "interim TMDLs."

Cross Jurisdictional Issues

- *The Regional Boards shall seek collaboration with other government agencies with applicable authorities as needed or required to ensure the efficient implementation of the TMDL.*

- *TMDLs may, in some instances, involve cross-media sources of pollution, which will need to be controlled in order to implement the TMDL. CalEPA should design and implement a specific mechanism that assures that any TMDL allocation to a source outside the jurisdiction of the Regional Board are adequately enforced and implemented.*

The PAG also recognizes that there are cross-jurisdictional issues inherent in TMDL implementation, and therefore strongly encourages inter-agency coordination to ensure effective compliance and enforcement of TMDLs.

IV. CONCLUSION & RECOMMENDATIONS

During the course of its discussions on the State TMDL program, the PAG addressed a number of important and complex issues. While the PAG was not able to reach consensus on all of these issues, this Report provides a number of recommendations that the PAG believes will improve the State's TMDL listing, development and implementation process. The PAG urges the Legislature, Governor and the SWRCB to move forward expeditiously to implement these recommendations.

The PAG believes that:

- The Legislature and the Governor should dramatically increase resources available to the SWRCB and the Regional Water Quality Control Boards in order to implement the TMDL Program in California.

- The Governor, working cooperatively with the California Congressional Delegation, should aggressively pursue additional federal funds to assist in the implementation of the TMDL Program in California.

- The SWRCB should commit to the effective and timely implementation of the TMDL Program and, to further that goal, must improve both the pace at which TMDLs are developed as well as the quality of information on which they are based.

- Through implementation of a variety of means recommended by the PAG, the SWRCB should assume greater responsibility for assuring that State and Regional Board staff have sufficient technical expertise at its disposal to efficiently develop high quality TMDLs.

- The PAG's recommendations related to the Surface Water Ambient Monitoring Program for the State of California should be implemented immediately

- Taking advantage of the Internet and other information technology, the SWRCB should assure that information generated from monitoring and TMDL related programs that is subject to the California Public Records Act is readily accessible.

- The SWRCB should better coordinate with other agencies where needed to assure full implementation of TMDLs.

ATTACHMENT A: SUMMARY OF ISSUES AND CONSENSUS POINTS

The PAG believes that the critical issues that must be addressed to maximize the effectiveness of the listing, TMDL development and implementation processes, with consensus points indicted in boxed section below each point, include**:**

Program Funding

- *PAG finds that there are inadequate resources for the state to fulfill its obligation under the TMDL program. Therefore, PAG recommends there be adequate resources for the development and implementation of effective TMDLs statewide. Further, PAG recommends that the Regional Boards assess and request resource needs for an adequate 303(d) listing process and TMDL development/ implementation through the SWRCB from the Legislature.*

Listing of Impaired Waters

Enhanced Consistency Among Regional Boards and Need for SWRCB Listing Policy

More Comprehensive and Effective Statewide Monitoring Program (See SWAMP for listing of points of agreement).

Better Utilization of All Existing Data

- *The State Water Resources Control Board should formally adopt a Policy to maximize the Regional Water Quality Control Boards consideration of existing data during the 303(d) process.*

Amount of information and scientific rigor needed for listing

- *The State Water Resources Control Board should formally adopt a Policy, and a means to implement the Policy, for the Regional Water Quality Control Boards on what constitutes reasonable minimum acceptable credible information. The Policy should also include the methods for determining whether to list or delist water segments on the Section 303(d) list consistent with Federal law.*

TMDL Development

Statewide Process for Developing TMDLs

- *TMDLs should be established and implemented in accordance with the Clean Water Act and where applicable, the Porter-Cologne Water Quality Control Act and other relevant state and federal laws.*
- *Regional Water Quality Control Boards must maintain active oversight over TMDL development sufficient to assure unbiased technical assessment.*

Timeliness of Development

- *The Legislature should provide adequate funding and staffing to allow the State and Regional Boards to immediately initiate the development and implementation of high priority TMDLs.*
- *All TMDLs should be established as soon as possible recognizing varying levels of TMDL complexity.*
- *Ways to assist in completing TMDLs more quickly may include: Training (such as US EPA's Water Quality Academy), Technical Centers (which would allow RWQCBs to share information and approaches, Strike forces or teams of SWRCB staff with specific expertise (e.g., nutrients, metals, sedimentation, etc.) that could address TMDL development in Regions, bring in staff from other agencies to assist in TMDL development (e.g., on pesticide issues), start some difficult TMDLs early as opposed to tackling the easy ones only at first (makes schedules more realistic), group related pollutants to expedite TMDL technical work (e.g. working on multiple pollutants in a waterbody).*

Role of Science

- *Encourage, where appropriate, early external peer review.*
- *Science should play a role in the development of TMDLs.*
- *The level of scientific understanding and technical rigor will vary for individual TMDLs.*

Confirmation of Impairment

Statewide Process for Developing TMDLs

- *TMDLs should be established and implemented in accordance with the Clean Water Act and where applicable, the Porter-Cologne Water Quality Control Act and other relevant state and federal laws.*

- *Regional Water Quality Control Boards must maintain active oversight over TMDL development sufficient to assure unbiased technical assessment.*

Funding and Personnel

- *PAG finds that there are inadequate resources for the state to fulfill its obligation under the TMDL program. Therefore, PAG recommends there be adequate resources for the development and implementation of effective TMDLs statewide. Further, PAG recommends that the Regional Boards assess and request resource needs for an adequate 303(d) listing process and TMDL development/ implementation through the SWRCB from the Legislature.*

- *The SWRCB and Regional Boards should allocate adequate resources and staff positions to develop and maintain appropriate TMDL expertise in-house.*

- *The SWRCB and Regional Boards need an efficient process for acquisition and retention of necessary scientific and technical expertise.*

- *The PAG encourages the RWQCBs to consider TMDL development when approving Supplemental Environmental Projects (SEPs) not otherwise legally required of dischargers.*

Economic Considerations

Stakeholder Involvement

- *Regional Board should be open to input during the TMDL process.*
- *TMDLs need not be based on consensus but everyone needs to be heard.*
- *The Regional Board should publish schedules for the start of the stakeholder participation process.*
- *Recommended framework for the TMDL development should include opportunities for public input, for new listing, for scoping of the TMDL, on the draft TMDL and on final adoption.*
- *Develop a mechanism, including funding, to encourage and maintain balanced stakeholder representation, and assure stakeholders are afforded the opportunity to participate meaningfully, in accordance with TMDL deadlines.*
- *Regional Boards should consider education and outreach as part of TMDL development and implementation. Public outreach and education are important aspects in issue resolution and attaining water quality standards.*

Legacy Contribution of Pollutants

- *Consistent with achieving water quality standards, the Regional Boards should establish a waste load or load allocation for sources of legacy pollutants that are currently contributing to the impairment.*
- *The State and Regional Boards should aggressively use existing legal authorities to identify and hold responsible those parties contributing legacy sources of pollutants causing impairments.*

TMDL Implementation

Importance of Implementation Plans

- *The Implementation Plan is an essential part of the TMDL process.*
- *The Implementation Plan is the blueprint which governs actions by all contributing sources to meet TMDL targets.*
- *The PAG finds there are inadequate resources for the state to fulfill its obligations under the TMDL program. Therefore, the PAG recommends adequate resources for development and implementation of effective TMDLs statewide. Further, the PAG recommends Regional Boards assess and request resource needs for an adequate 303(d) listing process and TMDL development/ implementation, through the SWRCB from the Legislature.*

Implementation Plans as Written Documents

- *The Implementation Plan should be a formal written document that should be adopted by a Regional Board when they adopt the corresponding TMDL.*
- *Implementation plans should identify specific control and/or management actions for all sources or categories of sources of pollutants consistent with the Clean Water Act, and where applicable, the Porter-Cologne Water Quality Control Act.*

Stakeholder Involvement

- *The Regional Boards should be open to input during the TMDL process.*
- *The Regional Boards should publish schedules for the start of stakeholder participation process.*
- *The Regional Boards need to carefully lay out schedules to get TMDLs completed and implemented.*
- *Regional Boards should consider education and outreach as part of TMDL development and implementation. Public outreach and education are important aspects in issue resolution and attaining water quality standards.*
- *In certain circumstances, and where deemed appropriate by the Regional Board, the process may be modified to allow for expanded or diminished public participation.*
- *Develop a mechanism, including funding, to encourage and maintain balanced stakeholder representation, and assure that stakeholders are afforded the opportunity to participate meaningfully, in accordance with TMDL deadlines.*

Consideration of Economics

Interim Permit Limits

Offsets

- *Legal and liability issues; Specification of the manner in which a load allocation (load reduction) would be credited to a specific offset; Site-specific characteristics of waterbodies; Specific characteristics of pollutants; Accountability issues (e.g., how will a load reduction be measured?)Environmental justice implications; Location of the source; Timing of the reduction; Mandatory vs. voluntary reductions; Ongoing responsibility and maintenance of the reductions; Appropriate offset ratio(s); Agency management, including funding for an offset program; Type of source (nonpoint vs. point source); Definition of required pollutant reductions; Whether pollutant reductions that are otherwise required or would otherwise occur should be the subject of offsets.*

Time Frames

Implementation Compliance Monitoring

Adaptive Management of the Implementation Plan

- *The implementation plan may include interim milestones for load reductions.*

Cross Jurisdictional Issues

- *The Regional Boards shall seek collaboration with other government agencies with applicable authorities as needed or required to ensure the efficient implementation of the TMDL.*

- *TMDLs may, in some instances, involve cross-media sources of pollution, which will need to be controlled in order to implement the TMDL. CalEPA should design and implement a specific mechanism that assures that any TMDL allocation to a source outside the jurisdiction of the Regional Board are adequately enforced and implemented.*

ATTACHMENT B: AB 982 PUBLIC ADVISORY GROUP CONTACT INFORMATION

	Member	**Alternate**
Regulated Community (12 members)		
Production Agriculture	Tess Dunham, California Farm Bureau Federation	Brad Luckey, Imperial Irrigation District
Dairies	Paul Martin, Western United Dairymen	David Albers, Milk Producers Council
Rangeland	Bill Thomas, California Cattlemen's Association	Pat Blacklock, California Cattlemen's Association
Forestry	Mark Rentz, California Forestry Association	Mark Pawlicki, Forest Resources Council
Private Construction Stormwater	Cliff Moriyama, California Building Industry Association	Sat Tamaribuchi, The Irvine Company
Municipal Stormwater	Jim Scanlin, Alameda County Stormwater Program	Armand Ruby, Larry Walker and Associates
Industry	Craig Johns, California Resource Strategies*	Dave Arrieta, Western States Petroleum Association
Ports, Waterfront Organizations	Patti Krebs, Industrial Environmental Association	David Ivester, Bay Planning Coalition Randal A. Friedman, U.S. Navy Region Southwest Environmental Department
Municipal Sewage (Publicly Owned Treatment Works)	Roberta Larson, California Association of Sanitation Agencies	Vicki Conway, County Sanitation Districts of Los Angeles County
Counties	Jim Noyes, Los Angeles County Department of Public Works	Allen Campbell, Humboldt County Public Works
Cities	Dave Kiff, City of Newport Beach	David Tucker, City of San Jose
Water Agency	Peter MacLaggan, California Urban Water Agencies	David Bolland, Association of California Water Agencies

	Member	**Alternate**
Environmental Community (12 members)		
	Linda Sheehan, Center for Marine Conservation	Cori Fay Traub, Clean Water Action
	Jonathan Kaplan, Waterkeepers Northern California	Bill Jennings, Deltakeeper
	Bob Caustin, Defend the Bay	Bonnie Ahrens, Defend the Bay
	Donna Meyers, Coastal Watershed Council	Alan Levine, Coast Action Group
	Marco Gonzales, Surfrider Foundation	Emily Roberson, California Native Plant Society
	Leslie Mintz, Heal the Bay	Heather Hoecherl, Heal the Bay
	Bruce Reznik, San Diego Baykeeper	Julie Hamilton, San Diego Baykeeper
	Lynn Barris, Butte Environmental Council	Leah Wills, PlumasCorp
	Barbara Vlamis, Butte Environmental Council	Allen Harthorn, Friends of Butte Creek
	Dave Paradies, Bay Foundation Morro Bay	John Robinson, Heal the Ocean
	David Beckman, Natural Resources Defense Council*	Steve Fleischli, Santa Monica Baykeeper
	Nicole Capretz, Environmental Health Coalition	Laura Hunter, Environmental Health Coalition

* PAG Co-Chair

ATTACHMENT C: ASSEMBLY BILL 982

CHAPTER 495
FILED WITH SECRETARY OF STATE SEPTEMBER 27, 1999
APPROVED BY GOVERNOR SEPTEMBER 27, 1999

An act to add Sections 13191 and 13192 to the Water Code, relating to water.

LEGISLATIVE COUNSEL'S DIGEST

AB 982, Ducheny. Water quality: total maximum daily loads.

Under the Porter-Cologne Water Quality Control Act, the State Water Resources Control Board and the California regional water quality control boards are the principal state agencies with regulatory authority over water quality. Under the federal Clean Water Act, each state is required to identify those waters for which prescribed effluent limitations are not stringent enough to implement applicable water quality standards and to establish, with regard to those waters, total maximum daily loads, subject to the approval of the United States Environmental Protection Agency, for certain pollutants at a level necessary to implement those water quality standards.

This bill would require the state board to convene an advisory group or groups to assist in the evaluation of program structure and effectiveness as it relates to the implementation of the requirements of a specified provision of the federal Clean Water Act and applicable federal regulations. The bill also would require the state board to report, on or before November 30, 2000, and annually thereafter until November 20, 2002, to the Legislature on the structure and effectiveness of its water quality program as it relates to that provision of the federal Clean Water Act. The bill, in addition, would require the state board, on or before November 30, 2000, to assess and report to the Legislature on the state board's and the regional board's current surface water quality monitoring programs, as specified.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 13191 is added to the Water Code, to read:

13191. (a) The state board shall convene an advisory group or groups to assist in the evaluation of program structure and effectiveness as it relates to the implementation of the requirements of Section 303(d) of the Clean Water Act (33 U.S.C. 1313(d)), and applicable federal regulations and monitoring and assessment programs. The advisory group or groups shall be comprised of persons

concerned with the requirements of Section 303(d) of the Clean Water Act. The state board shall provide public notice on its website of any meetings of the advisory group or groups and, upon the request of any party shall mail notice of the time and location of any meeting of the group or groups. The board shall also ensure that the advisory group or groups meet in a manner that facilitates the effective participation of the public and the stakeholder participants.

(b) Notwithstanding Section 7550.5 of the Government Code, on or before November 30, 2000, and annually thereafter until November 30, 2002, the state board shall report to the Legislature on the structure and effectiveness of its water quality program as it relates to Section 303(d) of the Clean Water Act. The report may include the information required to be submitted by the board to the United States Environmental Protection Agency pursuant to Section 305 (b) of the Clean Water Act, and any information required to be submitted to the Legislature pursuant to the Supplemental Report of the Budget Act of 1999. In formulating its report, the state board shall consider any recommendations of the advisory group or groups.

SEC. 2. Section 13192 is added to the Water Code, to read:

13192. (a) Notwithstanding Section 7550.5 of the Government Code, the state board, on or before November 30, 2000, shall assess and report to the Legislature on the State Water Resources Control Board' s and regional water control board's current surface water quality monitoring programs for the purpose of designing a proposal for a comprehensive surface water quality monitoring program for the state.

The report shall include a proposal for the program, including steps and costs associated with developing the full program, cost of implementation of the program after development, and appropriate funding mechanisms, including any fee structure. The board may include in the report information required to be submitted to the United States Environmental Protection Agency pursuant to Section 305 (b) of the Clean Water Act, information required to be submitted pursuant to paragraph (1) of subdivision (c) of Section 13181, and any information required to be submitted to the Legislature pursuant to the Supplemental Report of the Budget Act of 1999.

(b) In considering and designing the proposal, the state board shall address factors that include, but need not be limited to, all of the following:

(1) Physical, chemical, biological, and other parameters about which the program shall collect and evaluate data and other information and the reasonable means to ensure that the data is accurate in determining ambient water quality.

(2) The use of models and other forms of information not directly measuring water quality.

(3) Reasonable quality assurance and quality control protocols sufficient to allow sound management while allowing and encouraging, where appropriate, data collection by entities including citizens and other stakeholders, such as dischargers.

(4) A strategy to expeditiously develop information about waters concerning which the state presently possesses little or no information.

(5) A strategy for assuring that data collected as part of monitoring programs, and any associated quality assurance elements associated with the data collection, be made readily available to the public.

(6) A strategy for assessing and characterizing discharges from nonpoint sources of pollution and natural background sources.

(7) A strategy to prioritize and allocate resources in order to effectively meet water quality monitoring goals.

(c) Nothing in this section affects the authority of the regional water quality control boards.