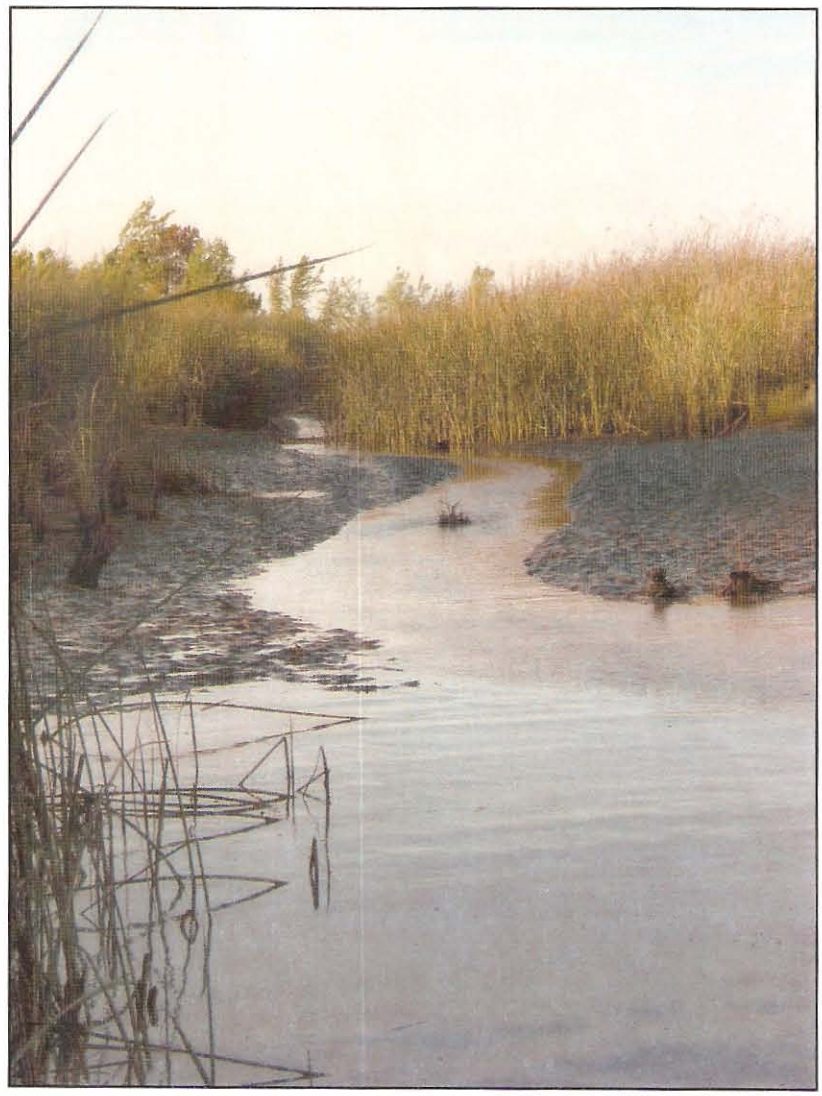
BRIEFING SUMMARY

Delta Methylmercury Total Maximum Daily Load

STAKEHOLDER PROCESS ASSESSMENT

Prepared For:

Central Valley Regional Water Quality Control Board



December 2008

Prepared By:

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BACKGROUND - Slide 2

Introduction

This document presents the findings, analysis, conclusions and recommendations from the Delta Methylmercury (MeHg) Total Maximum Daily Load (TMDL) Stakeholder Assessment (Assessment) conducted by the Center for Collaborative Policy (CCP), a neutral program of California State University, Sacramento (CSUS).

The purpose of the Assessment was to identify issues, determine if conditions are favorable to support a stakeholder process and if so, what the most appropriate process should be; both in the context of stakeholders' sentiments and in the context of what is feasible and appropriate for a TMDL process. The proposed goal of a stakeholder group would be to discuss mutually acceptable solutions, and make recommendations to the Central Valley Regional Water Quality Control Board (Water Board) on the Delta MeHg TMDL and Basin Plan Amendment.

Using a standardized set of questions (Attachment 1), CCP interviewed 60 stakeholders (Attachment 2) between November and December 2008. A significant number of interviews included more than one participant. Some interviews were held in person; others were conducted over the phone. All interviews were confidential and the interview summaries are proprietary to CCP. Interviews were conducted by CCP staff members Dave Ceppos, Managing Senior Mediator, or Jodie Monaghan, Lead Mediator/Facilitator. The findings are summarized in the next section of this Briefing Summary. Information gathered has been qualitatively evaluated to identify key assessment *themes and trends* and are summarized in the Analysis section. Recommendations are provided in final section.

The findings, analysis, conclusions and recommendations in this Assessment represent the neutral, professional perspectives and interpretations of CCP only and are based on discussions with numerous related stakeholders and the results of associated project research. CCP's perspectives and interpretations represent an aggregate balance of the information derived from the Assessment process and do not necessarily represent, nor are intended to represent the perspectives or affirmation of individual stakeholders. CCP has maintained full editorial control over the interview results and this assessment summary / report. No other entity has been granted editorial oversight.

FINDINGS – Slide 3

- General agreement that Methylmercury (MeHg) can pose human and ecological health risks. However, stakeholders disagree about the extent of the risk.
- Unanimous recognition of the Water Board's authority to regulate Hg and MeHg but variable understanding about the Water Board's rationale to prepare this TMDL
- Many stakeholders question the Water Board's decision to target just MeHg, given the other known contaminants in the Delta.
- Many stakeholders are unclear about the purpose of this TMDL: (e.g. to protect human and/or ecological health? To control a contaminant? To improve Water Quality?)
- Major agreement that the TMDL must address the upstream sources of total Hg.
- General agreement that MeHg production, mobilization, and transport in the Delta are a complex problem replete with many unknowns and a great deal of uncertainty that scientists are just starting to understand.
- Significant disagreement on who should be regulated and what those regulations should look like.
- Significant disagreement on the ability of dischargers to control and contain the production and mobilization of MeHg given their inability to control the source and other inputs such as atmospheric deposition, and limits to their current state of knowledge and technology.
- Significant disagreement on whose responsibility it is to control, contain, and remove Hg and MeHg from the Delta and upstream conditions.
- Significant concern from regulated stakeholders that best management practices will be required and and monitoring requirements should be "reasonable." They fear that modifications to operations and monitoring costs could exceed production benefits – and potentially force their activities out of business.
- Some regulated stakeholders seek consistent regulatory interpretation to ensure assurances for any future discharger actions to control loads.
- Some regulated stakeholders also seek regulatory steps that are flexible to accommodate the diversity of stakeholders.

FINDINGS – Slide 4

- Many stakeholders are concerned with the uncertainty that accompanies the TMDL.
- Non-regulated stakeholders want immediate steps implemented to reduce MeHg production and transport. They support future studies but not at the expense of simultaneous remediation.
- General concern that other Water Board programs will impose additional and potentially duplicative monitoring requirements (e.g. the Irrigated Lands Regulatory Program, the Pesticide Program).
- A small minority of stakeholders report a lack of understanding about the TMDL.
- General agreement that an overarching Delta-wide TMDL is not appropriate to regulate the variability of geography in the Delta.
- General agreement that fish tissue is a good metric. Several stakeholders believe the proposed concentrations are too high and insufficient to protect human health from consumption
- General agreement that subsidence anglers need to be protected. General disagreement on how.
- A few stakeholders report that anglers in the Delta are interested in the information about MeHg
- General agreement that more studies should be done, but that they should be done in a coordinated effort instead of isolated studies that may not contribute appreciably and consistently to the body of knowledge.
- Broad disagreement on who should pay for proposed studies.
- Most stakeholders report frustration with the TMDL process to date. They do not believe that communication between stakeholders and the Water Board is adequate or effective.
- Significant concern by some regulators that the TMDL has taken too long and has already provided extensive opportunities for public input.
- General agreement that it is possible to balance competing interests, but the Water Board should allow the stakeholders to collaboratively figure out how to achieve load allocations and implement the TMDL.
- General agreement that the TMDL needs to address and reconcile competing values of wetland preservation and restoration, flood control, water supply and conveyance, agricultural production, and regional economies.

ANALYSIS – Slide 5

Regulation and Enforcement

- Regulators are not expected to be co-equal to stakeholders. It is accepted that they have statutory obligations to achieve. Regulatory and enforcement decisions are not expected to be "popularity contests" or negotiations.

- Stakeholders are not asking to become Regulators. They want the opportunity to: inform each other and the regulatory process, clarify objectives of the TMDL, and identify solutions for methylmercury control and reduction.

- Several regulated stakeholders have conflicting goals. They simultaneously seek a stable, predictable regulatory environment that offers consistent interpretation and enforcement while also seeking a flexible, non-prescriptive regulatory environment that accommodates variability and innovation. These are difficult to achieve together.

- Regulators have been ineffective communicating their desire to create a flexible and adaptive regulatory approach. This has exacerbated a sense of risk and loss of trust (see Uncertainty and Trust below for related analysis).

- There appears to be a disconnect between stakeholder understanding about the rationale for the TMDL (protect beneficial uses of the Delta and protect human and ecological health), and stakeholder understanding of the Water Board's regulatory responsibilities (Enforce the Federal Clean Water Act and State Water Code). An absence of existing human and ecological impact does not absolve the Water Board from developing / enforcing TMDLs.

Shared Understanding

- The high degree of awareness that most stakeholders have about other stakeholder's interests is encouraging. People genuinely understand and empathize with the concerns of / impacts to other stakeholders. No one is cavalier about such impacts and almost all stakeholders want to create solutions that can be socially, environmentally, and financially equitable.

- Similarly, there is a common acceptance that no stakeholder will get everything they want in the proposed TMDL. All parties understand that there will be "gives and takes" and impacts to their respective interests. This awareness can similarly allow for adaptive, flexible solutions

Process

- There is an unsustainable and potentially unnecessary tension between completing the technical TMDL, and completing the TMDL implementation plan. They are prepared and submitted for approval at the same time, however the technical TMDL is prescriptive and the implementation plan can be adaptive.
- There is a high likelihood of mutual gain if stakeholders can create and the Water Board and other regulators can approve an adaptive implementation framework.

ANALYSIS – Slide 6

Public Participation

- The Water Board's historical approach to public participation is legally adequate. However, it is ineffective to address complex, competing interests, and is detrimental to the Water Board's and EPA's goals of timely completion and implementation of this TMDL.

- The Water Board's ineffectiveness to respond to stakeholder input in a substantive and timely manner has significantly minimized stakeholder trust and confidence towards the Board and their recommendations. This lack of trust exacerbates the heightened level of uncertainty.

- Because of the traditional methods the Water Board has used to interact with the public, and the duration of time between such interactions, the Board has inadvertently limited most opportunities for discussion among a range of stakeholders. While fully appropriate as a regulatory approach and consistent with the Board's ministerial responsibilities, the Board has created a dynamic where they have become the "focal point" for, and arbiter of conflict between affected stakeholders. While the Board (and EPA and State Board) must be decision-makers, separate from stakeholders, this dynamic has allowed stakeholders to hold the Board singularly responsible to solve the complexities of this situation, rather than attempting to have stakeholders try to resolve conflicts between their interests before a ministerial action by the Board.

Long-Range Impacts

- The potential of the TMDL to impede habitat creation / restoration / enhancement projects has extremely significant implications to the State Water Project and Central Valley Project. Any TMDL implementation plan that is not adaptive, and/or makes such projects prohibitive (due to initial and/or long-range costs, legal risks to landowners, etc) will likely be challenged.

- The potential of the TMDL to impede habitat creation / restoration / enhancement projects related to and supporting achievement of CALFED Ecosystem Restoration Program goals and objectives have serious implications and will raise the possibility for inter, and intra-agency negotiations / conflicts.

Studies and TMDL Implementation

- There is a general belief that the State and/or Federal government(s) should have a large responsibility to fund the assessment, control and remediation of MeHg and Total Hg based on historical conditions that lead to the presence of Hg, and the size of the challenge. These perspectives are shared by public and private stakeholders. There is uncertainty as to what entity(ies) should shoulder that burden. This situation is ripe for a focused stakeholder discussion and potential coalition of parties advocating for such funding support through grants, legislation, and other means

ANALYSIS – Slide 7

Studies and TMDL Implementation – Cont.

- There is significant, shared support for a flexible, coordinated study program that can be jointly designed by regulators and stakeholders. Such a program can ensure shared ownership of methods, quality control, funding requirements, timing and location of studies, and similar topics.

- There is a fundamental disconnect between Regulators' need to pursue enforcement that is not dependant on the economic constraints of affected parties, and stakeholders' need to have enforcement be sensitive to political and social realities about their ability to pay for TMDL-related actions and still stay economically viable. There is no easy solution to this dilemma other than expanded, multi-party discussion.

Uncertainty and Trust

- Historic interactions, and competing organizational values have considerably minimized trust and confidence between various stakeholders, and between stakeholders and regulators.

- The lack of trust and confidence among various parties is exacerbating real and perceived uncertainties (*e.g., Are proposed TMDL decisions based on "good" science?; Will implementation and enforcement methods by the Board be equitable? Will non-point source stakeholders legitimately try to minimize production and discharge of meHg?*)

- General uncertainty is creating a sense of risk and fear among stakeholders and regulators (*"I won't be treated equally", "My constiuents won't be protected", My enforcement responsibilities will be weakened".*

- Fear among stakeholders and regulators is diverting their focus from each other and to protecting themselves / their interests. This inhibits their collective ability and willingness to "hear" each other, care about each other's perspective, and believe each other is acting in good faith.

- All of the above are creating heightened reactivity between parties, and an inclination to treat each other in "shorthand" (*"I already know what they're thinking, why should I listen?").*

- This "shorthand" assessment of people is being used to justify stakeholder's and Board staff's 'cursory review each other's ideas / proposals.

- There are several conflicting perspectives between stakeholders that largely do not include the Water Board. These perspectives have the potential to be resolved if stakeholders have the opportunity to discuss them without focusing on the Water Board (see Shared Understanding above).

RECOMMENDATIONS – Slide 8

- Convene a representative, equitable stakeholder group to focus on the Delta MeHg TMDL

- Create a "bifurcated" MeHg facilitated discussion process that seeks, but is not dependant on consensus.
  1. Focus first on identifying shared opportunities for improved implementation methods (1 month)
  2. Focus next on rapidly completing allocation recommendations on the "technical TMDL" (2 months)
  3. Return focus to expanding recommendations for a very flexible, adaptive implementation plan (2 months)
  4. Deliver a "package" of the technical TMDL and adaptive Implementation Plan to the Board to support the Basin Plan amendment process (within 5 months).

- Convene a subsequent stakeholder process, with joint funding and/or in-kind support from all participants to engage in a longer term, consensus-seeking approach to design more specific, iterative aspects of an adaptive implementation approach that meets the spirit of the amended Basin Plan and does not require re-amending in the near term. Aspects of the adaptive implementation plan could include but not be limited to:

  - Developing a coordinated program to conduct, approve, review, report, and learn from studies conducted under the proposed Phase I.
  - Developing flexible methods to create (or integrate with existing) water quality coalitions such that various stakeholder types and geographic regions can establish most suitable monitoring and enforcement methods
  - Immediate, near-term, and long-term remediation methods and BMPs so that direct physical actions to minimize production and transport are being created and tested. Incentives should be developed to encourage immediate actions.
  - Focused partnerships to expand regional education to at-risk cultural groups.

- Conduct immediate educational meetings to bring all stakeholders up to a shared minimum level of understanding of the TMDL regulatory process.

- Enhance existing agency partnerships, and leverage potential stakeholder partnerships to improve angler understanding of MeHg risks.

RECOMMENDATIONS – Slides 9 & 10

There are several topics that stakeholders and Board staff are closer to agreement than they believe. Step 1 of the proposed facilitated discussion should focus on multi-party discussion and potential resolution of these topics. The following presents some of these topics. Ideally, these topics will set the framework for agenda items in the first 2-3 meetings of the proposed stakeholder group in early 2008.

Issue – Adaptability of TMDL Implementation	
Stakeholders	**RWQCB**
Seek flexibility in implementation of TMDL	The TMDL is written similar to LA Trash TMDL – includes an adaptive management plan.. A flexible, adaptive approach is advocated by the Board
Issue – Load Allocations	
Waste load allocations should be equitably assigned to point source dischargers. Ag and Wetlands managers should not be treated like a point source discharger	The TMDL is intended to assign equitable load limits for point source discharges and supports the creation of coalitions (or similar entities) to monitor and address other discharges from ag and wetlands, etc. Staff recognize the abundance of very small independent dischargers that should be treated commensurately. Staff also support broad understanding that many small sources add up to largely total contribution of MeHg
Issue – Wetlands Management and Creation	
Wetland Management is a critical component of CALFED goals and current water deliver deliberations. It can not and should not be impeded	The Board supports the continued creation of wetlands for a variety of ecological and policy reasons. The proposed study period is intended to improve such efforts, not impede them.
Issue – Habitat Regulation	
Stakeholders do not want to be stuck with a certified wetland or related habitat that is in the future deemed to be producing MeHg, leaving a landowner no option but to either violate section 303, or 404 of the Clean Water Act	The Board wants to work cooperatively with stakeholders and create more flexible methods to establish and test habitat types while not being forced to maintain habitat in perpetuity.
Issue – Addressing and Funding Legacy Conditions	
Stakeholders want an equitable investment by State and Federal governments that befitted from a largely unregulated mining industry.	Staff support assigning in-stream load allocations to the State as a general entity and as a means to spark policy level discussions about how the legacy deposition will be addressed. Similarly for atmospheric

	deposition too.
Issue – Develop an Equitable Study Program	
Stakeholders want a coordinated, flexible, logical, timely study program. Some stakeholders want immediate and near-term pilot projects to improve conditions and study the outcomes	The Water Board wants a coordinated, flexible, logical, timely study program. Board staff also to establish an independent science review / peer group to assist the stakeholder studies and to ensure that no studies are unduly influenced by the Board or other stakeholders
Issue – Program Overlap	
Stakeholders want to avoid duplicative requirements from overlapping Water Board programs (ex. MeHg TMDL and Irrigated Lands Program.	Staff fully support an integrated approach to merge these programs, leverage existing monitoring dates and protocols, and increase cost efficiency
Issue – MeHg Versus Total Hg	
Some stakeholders question the legitimacy of the MeHg focus	Staff understand stakeholder frustration but feel strongly that the MeHg approach is the best method.
Issue - Communication	
Stakeholders want focused, persistent communication with Staff.	Staff want focused, persistent communication with stakeholders, as well as assistance to improve staff proposals
Issue - Offset Program	
Some POTWs are prepared to investigate off-set methods to address load allocations	Staff are not opposed to an offset program as long as it is equitable and makes substantive improvements to the load conditions.

Attachment 1

Survey Questionnaire

Attachment 1

Delta Methylmercury
Proposed Total Maximum Daily Load

Collaborative Process Feasibility Assessment Questionnaire

Thank you for taking the time to participate in the Delta methylmercury Total Maximum Daily Load (TMDL) assessment process. The following questions are being provided to all interview participants. Each interview should take approximately 1½ hours. The questions are wide ranging and detailed. Some of you have participated in discussions on mercury and methylmercury, commented on the Central Valley Regional Water Quality Control Board's (CVRWQCB) current draft TMDL, and testified at public hearings. As such some of these questions have already been addressed through your previous comments. Other stakeholders may not have answers to all the questions – and that is okay. One purpose of the assessment is to identify baseline stakeholder knowledge of the topics. You are welcome to visit the CVRWQCB's website to view reports and other notices at: www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg

All information provided during the interviews will be confidential. A summary report will be prepared at the conclusion of the feasibility assessment. The report will not attribute comments to any specific individuals or organizations. If you have any questions about the assessment process, please contact Jodie Monaghan at the Center for Collaborative Policy at (916) 341-3338 or jmonaghan@ccp.csus.edu, and/or review our website at http://www.csus.edu/ccp/.

Each interview will begin by reviewing a map of the proposed project area. The project is the control of mercury and methylmercury in the legal Delta and the Yolo Bypass. Since much of the mercury and methylmercury entering the Delta and Yolo Bypass comes from the major tributaries (e.g. Sacramento and San Joaquin rivers), the control program likely will need to address tributary sources of mercury and methylmercury downstream of these reservoirs and lakes in the Sacramento Basin: Shasta, Whiskeytown, Oroville, Englebright, Camp Far West, Folsom, Black Butte, Indian Valley, Clear Lake and Lake Berryessa; San Joaquin Basin reservoirs and lakes include Camanche, New Hogan, New Melones/Tulloch, Don Pedro, McClure, Burns, Owens, Eastman, Hensley, Millerton and Marsh Creek.

Background Questions

1) What role do you and/or your organization play in or about the Delta?

2) Describe what you know about methylmercury in the Delta. Do you think methylmercury is a problem in the Delta? Why or why not?

3) What do you know about the regulatory history of the Delta, mercury, and methylmercury?

4) Potential sources that could cause or contribute to methylmercury production are varied (see the attached information sheet). What impact does the regulation of methylmercury have on

you and/or your organization? What other stakeholders do you think would be affected and why?

5) Which methylmercury and/or mercury sources do you think are the most important to control?

6) What do you think is the most critical mercury issue that if addressed, will allow the Delta to be removed as an impaired water body (see attached information sheet for definition of "impaired water body")– and why?

7) Are you and/or your organization familiar with the CVRWQCB's draft methylmercury TMDL and Basin Plan Amendment – and if so, what is your perspective of the Board's approach?

8) What is your understanding of how TMDL decision-making is done? Is the role of the CVRWQCB clear? Is the role of stakeholder input clear? Are these roles appropriate and if not, how would you change them?

9) The CVRWQCB has proposed that fish tissue will be the standard for measuring methylmercury concentrations. Is this metric appropriate? Why or why not? Should other metrics be considered instead of, or in addition to fish tissue - and why?

10) Are there aspects of the draft methylmercury TMDL and Basin Plan Amendment that are feasible for you and/or your organization – and why?

11) Have you participated in any of the public processes related to the draft methylmercury TMDL? If yes, from your perspective, what should be the focus of stakeholder discussions regarding a Delta methylmercury TMDL – and why?

12) Do you and/or your organization believe studies of methylmercury production, mobilization, and transport will provide beneficial data that will inform the TMDL and future TMDL implementation?

13) Have you and/or your organization conducted or reviewed any studies about methylmercury processes that produce an increased and/or decreased load contribution? If so, what conclusions have you arrived at – and why?

14) Are there other studies that should be done – and why?

15) Who should be responsible for the cost of such studies – and why?

16) The CVRWQCB's priority is to complete the methylmercury TMDL as soon as possible. To achieve this goal, their current thinking is for a collaborative stakeholder group to develop additional, acceptable implementation options using the current draft methylmercury TMDL as a baseline. What are your and/or your organization's perspectives about this approach?

Process / Stakeholder Questions

17) What should be the geographic scope of a Delta methylmercury TMDL – and why?

18) Who should be involved in a stakeholder group about the Delta methylmercury TMDL – and why?

19) What is your experience in multi-stakeholder resource management processes?

20) Have there been other Delta methylmercury discussions that you have been involved in? If yes, were those discussions effective – and why?

21) Would you consider participating as a stakeholder in a Delta methylmercury TMDL process?

22) What would need to happen to ensure that appropriate stakeholders become involved and stay involved in this TMDL process?

23) Given your response earlier about who is affected, what are the most effective methods to inform and involve affected stakeholders?

24) What are the best locations to hold stakeholder meetings? Times of day? Day of week?

25) Are there other stakeholders we should interview?

26) Is there anything else you want to add?

Attachment 2

Assessment Interview Participants

Attachment 2

Assessment Interview Participants

First Name	Last Name	Organization
Terry	Macaulay	CALFED Bay Delta Program – Delta Vision Coordinator
Joe	Grindstaff	CALFED Bay Delta Program
Lauren	Hastings	CALFED Bay Delta Science Program
Sam	Harader	CALFED Bay Delta Water Quality Program
Dave	Feliz	California Dept of Fish and Game
Paul	Forsberg	California Dept of Fish and Game
Dean	Kwasny	California Dept of Fish and Game
Alyce	Ujihara	California Dept of Public Health
Tivo	Rojas-Cheatham	California Dept of Public Health
Kari	Fisher	California Farm Bureau Federation
Sherri	Norris	California Indian Environmental Alliance
Paul	Buttner	California Rice Commission
Greg	Yarris	California Waterfowl Association
Christine	Cordero	Center for Environmental Health
Dante	Nomellini	Central Delta Water Agency
Debbie	Webster	Central Valley Clean Water Association (CVWCA)
Charles	Swimley	City of Lodi Public Works Department
Delia	McGrath	City of Sacramento
Jeff	Willett	City of Stockton
Jackie	McCall	City of Vacaville - Public Works - Utilities Department
Travis	Peterson	City of Vacaville - Public Works - Utilities Department
Tony	Pirondini	City of Vacaville Water Quality Laboratory
Andria	Ventura	Clean Water Action
Regina	Cherovsky	Conaway Preservation Group
Mike	Paolucci	CVCWA Water Committee
Linda	Fiack	Delta Protection Commission
Marianne	Kirkland	California Dept of Water Resources
Mark	List	California Dept of Water Resources
Rudy	Rosen	Ducks Unlimited
Steven	McCord	Larry Walker Associates
Tom	Grovhoug	Larry Walker Associates
Jack	Betourne	Napa County Flood Control and Water Conservation District

First Name	Last Name	Organization
Tina	Lunt	Northern California Water Association
Dave	Tamayo	Sacramento County
Terri	Mitchell	Sacramento Regional County Sanitation District
Craig	Johns	Sacramento Regional County Sanitation District
Mike	Wackman	San Joaquin County and Delta Water Quality Coalition
Izzy	Martin	Sierra Fund
Kathy	Barnes-Jones	Solano County
Chris	Lee	Solano County Water Agency
David	Okida	Solano County Water Agency
John	Herrick	South Delta Water Agency
Laura	Leonelli	Southeastern Asian Assistance Center
Gail	Newton	California State Lands Commission
Steve	Mindt	California State Lands Commission
Rik	Rasmussen	State Water Resources Control Board
Becky	Wood	Teichert
Susan	Tatayon	The Nature Conservancy
Carlos	Torres	Todos Unidos
Diane	Fleck	U.S. Environmental Protection Agency
Nancy	Yoshikawa	U.S. Environmental Protection Agency
Carolyn	Yale	U.S. Environmental Protection Agency
Tom	Maurer	U.S. Fish and Wildlife Service
Matt	Gause	Westervelt Ecological Services
Pete	Perrine	Wildlife Conservation Board
Petrea	Marchand	Yolo County
Stefan	Lorenzato	Yolo County Flood Control and Water Conservation District
Tim	O'Halloran	Yolo County Flood Control and Water Conservation District
Patrick	Morris	Central Valley Regional Water Quality Control Board
Jerry	Bruns	Central Valley Regional Water Quality Control Board