

Delta Mercury Exposure Reduction Program Workplan

October 2013

The Sacramento-San Joaquin River Delta (Delta) has been identified under the federal Clean Water Act section 303(d) as impaired due elevated concentrations of methylmercury in fish, which pose a human health threat. In October 2011, the U.S. Environmental Protection Agency approved the Delta Mercury Control Program, which was developed to address the mercury impairment. The Delta Mercury Control Program was incorporated in the Water Quality Control Plan for the Sacramento and San Joaquin River Basins (Basin Plan).

Because reducing fish methylmercury levels in the Delta will take a long time, activities are needed in the interim to address the mercury-related health risks to consumers of Delta fish. State Water Resources Control Board Resolution 2005-0060 directed the Central Valley Water Board to “investigate ways, consistent with their regulatory authority, to address public health impacts of mercury in San Francisco Bay/Delta fish.” To comply with Resolution 2005-0060, the Delta Mercury Control Program required the formation of a Delta-specific mercury exposure reduction program (MERP) addressed at human consumers of contaminated Delta fish.

The Delta Mercury Control Program requires entities identified in the Basin Plan, either individually or collectively, to develop and implement a MERP. In 2012 Board staff worked with interested stakeholders to develop a strategy to form and fund a collaborative exposure reduction program. The November 2012 MERP Strategy outlined a plan to develop an exposure reduction workplan and a funding strategy.

The Delta MERP Workplan (Workplan) represents the collective workplan for the agencies and other entities who have indicated they plan to participate in the collective program. The Board has received letters of intent to participate in the group effort from each of the entities listed in Appendix A.

This Workplan was developed with input from a 2013 MERP Workplan Workgroup (Workgroup) comprised of Central Valley Water Board staff, MERP participants, and other state/federal agency stakeholders. Appendix B includes a short summary of Workgroup decisions and agreements that influenced this Workplan.

This Workplan is based on the elements and funding requirements described in the MERP Strategy. This Workplan is being funded by monetary contributions from individual agencies and other entities participating in the program and from the State Water Board’s Cleanup and Abatement Account. In addition, several agencies are providing in-kind services.

1. Goals and Objectives

The goal of the Delta MERP is to reduce human exposure to mercury from consumption of contaminated Delta fish.

Objectives of the Program are to:

- a. Collaborate with affected communities, agencies, and others to plan and implement outreach and educational activities to reduce health risks to people who consume contaminated fish

- b. Identify at-risk populations and ways to reach these populations
- c. Identify exposure reduction activities
- d. Prioritize activities based on available funds and stakeholder input
- e. Implement activities
- f. Evaluate the effectiveness of activities
- g. Report program scope and effectiveness

2. Entities Involved in Delta MERP

- a. Delta MERP Participants. The Delta Mercury Control Program requires the entities identified in the Basin Plan to develop and implement a mercury exposure reduction program. The Delta MERP Participants are those entities and agencies that have formally submitted a letter describing their intent to participate in the collective exposure reduction program (Appendix A). Participation can include financial contributions and in-kind services that directly support exposure reduction activities.
- b. Fish Consumers, Tribes, and Other Stakeholders. Community-based organizations, fish consumers, federally and non-federally recognized Tribes, anglers, angler organizations and other community representatives with an interest in reducing risk of exposure to pollutants in fish in the Delta and Yolo Bypass are invited to join the Stakeholder Group and to be involved in design and implementation of Delta MERP activities.
- c. California Department of Public Health (CDPH). The CDPH Environmental Health Investigations Branch has performed similar work in the Delta and San Francisco Bay and will contribute technical assistance and training for the MERP. CDPH will work with the health educator who will be dedicated to the MERP to carry out the tasks below. Depending on CDPH staffing and internal resources, CDPH assistance may include training and evaluation activities, consultation on educational materials development, oversight and training of the health educator, with more involvement on Tasks 4a, 4b, 4e, and 4f.
- d. Delta Conservancy. The Delta Conservancy is a State agency charged with leading efforts in protecting, enhancing, and restoring the Delta ecosystem in coordination with other governmental and non-governmental entities and citizens in the Delta. The Delta Conservancy is also charged with facilitating delivery of services to disadvantaged communities in the Delta. The Delta Conservancy will work jointly with Central Valley Water Board staff to manage the Delta MERP. In addition, the Delta Conservancy will provide staff to be involved in implementation, with emphasis on Tasks 2, 3, 4c, and 4d.
- e. Delta MERP Steering Committee. A Delta MERP Steering Committee will be formed that is comprised of staff from the Central Valley Water Board, CDPH, the Delta Conservancy, Office of Environmental Health Hazard Assessment, staff hired for MERP, and all interested Delta MERP Participants. The duties of the Steering Committee are to provide broad oversight of the tasks and review and approve MERP annual reports (Task 1f) and Activity Plans (Task 4). Members of the Steering Committee may also participate in the Stakeholder Group (Task2).
- f. Stakeholder Group. The Stakeholder Group is comprised of community organizations and leaders, Tribes, Program Managers, CDPH, health educator, and other entities that want to be involved in the MERP activities.

- g. Central Valley Water Board. Central Valley Water Board staff will participate in the Steering Committee, providing joint oversight with the Delta Conservancy of the Delta MERP, and reporting to the Central Valley Water Board as required in the Basin Plan. The Central Valley Water Board is contributing staff time to assist with coordination and implementation of Delta MERP.
- h. Health Educator. The health educator will have a primary role in working with the Stakeholder Group and CDPH to plan, design, implement, evaluate, and report on community-based activities. The health educator will also work with Delta Conservancy staff to convene the Stakeholder Group and coordinate with Delta agencies and programs.

3. Program Management and Reporting

Program Management of the Delta MERP involves two main functions: a) oversight of Program activities and other actions to ensure that the Delta MERP is fully implemented and b) financial administration. It is expected that the Delta Conservancy and the Central Valley Water Board will work jointly to manage the program, provide oversight, and ensure that the Delta MERP is implemented. Most of the Project Administration duties, including handling financial transactions, are expected to be provided by the Aquatic Science Center (Richmond, CA). The Central Valley Water Board will enter into contracts or equivalent agreements with both the Delta Conservancy and the Aquatic Science Center that formalize the requirements and responsibilities.

The Delta Conservancy will ensure that Delta MERP Annual and Final reports are prepared for the Steering Committee and the members of the Central Valley Water Board. The Delta Conservancy will solicit financial and program activity elements for the report from the financial administrator, CDPH, and the health educator.

4. Tasks

Task 1. Project Administration

Project administration involves providing all administrative services needed to successfully complete the MERP within budget and on schedule. Duties include budgeting, invoicing, hiring, and providing financial and activity information for annual and final reports.

- a. Subcontract as needed to ensure that qualified staff is available to implement Tasks 2-4 and write and manage subcontracts as needed according to the annual budget.
- b. Hire a health educator or equivalent. Delta MERP funds will be used to hire a health educator or health program specialist to coordinate with CDPH and the Delta Conservancy for Tasks 2-4 activities.
- c. Establish a process to receive funds from the list of Delta MERP Participants that plan to contribute financial resources. The Central Valley Water Board staff will provide this list. The process shall include providing invoices and receipts and tracking the contributions.
- d. Distribute funds according to the annual budget and pay for purchase orders for the tasks within the annual budget that is approved by the Steering Committee.
- e. Yearly, provide the Delta MERP Steering Committee and Delta MERP Participants with components of the annual and final MERP Reports that describe budget, activities

completed, results of evaluations, income and expense report, and activities under consideration for inclusion in the next year's annual Activity Plan.

Deliverables:

- Annual budgets
- Annual reports consisting of income and expense report, annual and total budgets and report by health educator of activities.

Task 2. Create and Convene Stakeholder Group

The purpose of a Stakeholder Group is to provide a forum for a broad range of stakeholders, particularly leaders of community-based organizations, Tribes, and fishing communities, to keep informed and provide input to the MERP, particularly in the area of risk communication with the affected populations. Stakeholder Group members will provide assistance with the development, translation, and dissemination of outreach, education, and training materials. The Stakeholder Group will also develop an annual Activity Plan and schedule that identifies and prioritizes exposure reduction activities for the coming year(s). The Stakeholder Group participants may include or overlap with the MERP Steering Committee and other MERP Members. Meetings should be convened as needed. It is anticipated that in the first two years of the program, Stakeholder Group meetings will occur quarterly.

Resources exist for building the Stakeholder Group. In early 2013, CDPH contacted eight organizations serving Delta fish consumers, including community-based organizations, Tribes, and an angler group, to assess their interest in participating in the Delta MERP Stakeholder Group.¹ Also, CDPH previously worked with county health agencies, community-based organizations, a low-income clinic, and other stakeholders in the Delta. If needed to assemble an effective Stakeholder Group, additional outreach will be conducted to community groups and other organizations to increase the number and diversity of stakeholders. In addition, funds should be set aside in annual budgets to provide small honoraria to encourage participation among and obtain program consultation services from non-governmental groups. The Program Manager will propose criteria for funding distribution for concurrence by the Steering Committee.

Deliverables:

- Agendas and summaries of Stakeholder Group meetings made available to the Stakeholder Group in a timely fashion after meetings and provided to Steering Committee as appendix to Annual and Final Reports.
- Annual Activity Plans

¹ Delta Community Needs Assessment Final Report prepared by CDPH is available on the Central Valley Water Board's Delta MERP website:
http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/hg_exposure_reduction/index.shtml

Task 3. Outreach to Community Leaders

Identify and inform community leaders (e.g., local elected officials, civic leaders, and clergy) in the Delta counties about the Delta MERP. Community leaders not already informed through the Needs Assessment or Stakeholder Group (Task 2), should be provided (via a letter or direct communication) information about the program and contact names for additional information. Additional outreach activities, such as follow-up meetings or discussions, may be conducted, as needed. This communication will ensure that community leaders are aware of the Delta MERP, its purpose, and activities in case they are contacted by their constituents or the media. It also presents an opportunity for their input and involvement in the program.

Deliverable: Informational letter and list of community leaders who received the letter or other contact provided to Steering Committee as appendices to the first Annual Report.

Task 4. Develop and Implement Exposure Reduction Activities

The Program Manager is responsible for ensuring tasks identified in the Activity Plans are completed and will work with CDPH and MERP staff to coordinate and ensure completion. In addition, the Program Manager will ensure the recommendations from CDPH's needs assessment and the Stakeholder Group are considered in implementing these tasks. Activities may include:

- a. **Develop Messages and Materials.** Educational messages and materials will be developed in coordination with CDPH, OEHHA, community based organizations, local governmental agencies, and other stakeholders. Materials may include: brochures, training materials, posters, signs, audiovisual material, and postings on appropriate websites. The materials will be based on consumption guidance and materials previously produced by agencies including OEHHA, CDPH, and the Department of Fish and Wildlife. The materials will also focus on presenting a balanced message including health risks associated with exposure to mercury in fish, ways to reduce exposure, the health benefits of fish, and low-mercury fish species and areas. Low-literacy and translated formats of materials will be produced as needed.
- b. **Provide Trainings and Technical Assistance.** In partnership with CDPH, conduct trainings and provide materials to entities involved in Delta MERP including county agencies, Tribal organizations, community-based organizations, and health care providers. The aim of the trainings will be to build capacity at the local level to address fish contamination-related issues. A major focus of the trainings will be on risk communication, emphasizing the dissemination of accurate and appropriate information to the public, especially highly exposed and sensitive populations. Technical assistance includes providing guidance for incorporating fish contamination messages into the ongoing work of organizations, agencies, and health care providers. Trainings may also be provided to agency staff and volunteers as part of subtask 4d.

- c. Coordinate with agencies contributing in-kind resources to produce signs and install them at fishing locations and water access points. Work with stakeholders and landowners including State Lands Commission, to identify locations for posting. Signs will be produced on weather-resistant material and include appropriate translations.
- d. Coordinate with other agency activities and programs currently in the Delta to incorporate fish contamination messages into the ongoing activities. Such activities include environmental education, boater outreach, information delivery at parks and visitor centers, and programs promoting fishing. Outcomes may include audiovisual messages and printed materials made available at Delta visitor locations and training for staff and volunteers involved in other Delta activities.
- e. Develop a procedure to enable community-based organizations, local agencies, and/or other organizations to propose and implement exposure reduction activities that are supported with funding from the Delta MERP. CDPH, the Central Valley Water Board and the Steering Committee will identify clearly defined outcomes and criteria for providing funding. Projects that receive funding will be given capacity-building training on fish contamination, advisories, and evaluation.
- f. Evaluate extent of outreach and effectiveness of MERP activities. Measures to evaluate processes and impacts shall be developed with guidance from CDPH. Evaluation should include assessment of whether the message is reaching at risk consumers; whether the message is understood; and whether consumers would consider changing behavior based on knowledge acquired. Outreach, education, and training activities and materials will be evaluated on a continuing basis to ensure achievement of the MERP's objectives, but may be limited by available resources and applicable methods. Changes to MERP activities may occur, based on evaluation findings. Evaluation findings shall be detailed in the annual and final reports.

Deliverables: Copies of educational and training materials, tracking spreadsheet of sign locations, record of trainings and other activities with stakeholders, description of coordination activities, and description of evaluation methods and results shall be included in the annual and final reports.

5. Schedule

The Basin Plan requires that implementation of the Delta MERP begin within six months after the Central Valley Water Board’s Executive Officer approves the overall Delta MERP Workplan. Implementation is anticipated to begin no later than July 2014. Central Valley Water Board staff will work to put agreements in place for the Program Manager to begin tasks before July 2014. Communication with community leaders and the initial meeting of the schedule dates may need to be adjusted according to changes in the contract or overall MERP schedule.

Note: The schedule and budget shown are for a six-year period. However, the program is only fully funded for the first three to four years. Staff will continue to pursue additional resources to fully fund the program. In the interim, the focus will be to maintain the time base of the health educator for the first three years and conduct activities during this period that more effectively use the time of the health educator and stakeholders.

Item	Date
Task 1 Program Administration	
Deliverable: annual income and expense reports, budget for following year(s), and summary of activities, accomplishments and evaluations	Annually after start of MERP
Deliverable: Financial and activity report components for Draft and Final MER Report	April 2019
Task 2 Create and Convene Stakeholder Group	
Convene Stakeholder Group meetings	Begin no later than September 2014
Deliverable: Agendas and summaries of Stakeholder Group meetings	Submit annually after start of MERP
Task 3 Communicate with Community Leaders	
Develop a list of community leaders	No later than August 2014
Develop and distribute an informational letter	No later than August 2014
Deliverable: Record of community leaders contacted and informational letter	Submit with first Annual Report
Task 4 Develop and Implement Exposure Reduction Activities	Begin no later than September 2014. Complete subtasks in accord with Activity Plans approved by Steering Committee
Deliverable: Copies of materials and reports of activities and evaluations.	Submitted with Annual and Final Reports.

Budget notes: Regional Board staff prepared a budget based on funding commitments received by 1 October 2013.

Staff is pursuing additional commitments. Regional Board staff and the Steering Committee will revise the budget upon receipt of additional funding commitments. Priorities for additional funding are:

- a) increase direct support to community-based and local organizations and Tribes.
- b) increase time base for health educator in years 1-4
- c) increase funds for all activities and health educator time during years 5 and 6.

B. In-kind Contributions

In addition to cash contributions, in-kind contributions will provide direct support for MERP activities.

In-kind contributions include staff hours that directly benefit MERP activities and materials.

Item	Estimated dollar equivalent	Tasks
Department of Water Resources: Design and production of materials including professional graphic support and production of signs, brochures, and posters	Up to \$20,000 per year	Task 4 (note that much of the design and production of materials is expected to occur in early years of the program)
USFWS Stone Lakes National Wildlife Refuge and USBLM Cosumnes River Preserve: Design, posting, and distribution of educational materials and messages at wildlife reserve and refuge	\$14,000	Task 4
State Land Commission: Identification of sites and installation of signs at marinas and piers under lease from the Commission	(not yet estimated)	Task 4
Delta Conservancy: Oversight and management of program implementation	(not yet estimated)	All Tasks
California Department of Public Health: Technical support and training for exposure reduction activities	(not yet estimated)	Task 4

APPENDIX A: MERP PARTICIPANTS

Delta MERP Participants (letters of commitment received as of 30 August 2013)

California Rice Commission
City of Brentwood (WWTP)
City of Davis WWTP
City of Lathrop (stormwater system)
City of Lodi (Stormwater system and White Slough WWTP)
City of Manteca (WWTP)
City of Rio Vista (Main WWTP and Trilogy/ Northwest WWTP)
City of Rio Vista (stormwater system)
City of Sacramento Combined Storm Sewer System
City of Stockton (Stormwater system and WWTP)
City of Tracy (MS4)
City of Tracy WWTP
City of West Sacramento (stormwater system)
City of Woodland (WWTP)
Contra Costa Clean Water Program (stormwater system)
County of San Joaquin (MS4)
Department of Public Health
Department of Water Resources
Deuel Vocational Institution (WWTP)
Ironhouse Sanitary District (WWTP)
Lincoln Center Environmental Remediation Trust (groundwater treatment)
Port of Stockton (WWTP)
Sacramento Regional County Sanitation District (WWTP)
Sacramento Stormwater Quality Partnership
San Joaquin County and Delta Water Quality Coalition (*level of financial contribution pending*)
State Lands Commission
The Nature Conservancy
US Bureau of Land Management - Cosumnes Preserve
US Fish and Wildlife Service - Stone Lakes Preserve
Westervelt Ecological Services, Inc.
Yolo County (stormwater system)

APPENDIX B: MERP Agreements to Date

In January 2013, Central Valley Water Board staff convened the MERP Workgroup (Workgroup) to assist in the development of the Workplan. The Workgroup met (five) times to discuss specific components of the Workplan including (but not limited to) financial obligations of MERP participants, future staff/stakeholder roles, and the role of the Program Manager. The MERP Workgroup consists of stakeholders from local municipal agencies, private land managers, and state and federal agencies. Central Valley Water Board staff provided guidance, with assistance from CDPH and OEHHA.

The following is a brief overview of decisions made by the group, specific to the scope of work discussed in the Workplan above. Each number represents a corresponding section in the Workplan.

1. The background and Goals and Objectives are taken primarily from the existing Basin Plan. These items were not subject to change based on stakeholder comments.
2. Delta MERP Participants: Participants were identified in the Basin Plan, MERP Strategy, and through conversations with stakeholders. Although the Program Manager and MERP participants were specifically identified in the Basin Plan, stakeholders and Central Valley Water Board staff worked to define the other participants and associated roles. The specific role of the Program Manager as both the financial/administrative entity responsible for collecting funds *and* as the primary facilitator of all MERP activities was developed by Workgroup stakeholders.
3. Scope of Work: The Basin Plan, staff, and Workgroup all provided some direction on specific tasks that must be carried out by each of the entities listed below according to the layout of the Workplan:
 - a. Program Administrator
 - i. Subcontracting responsibilities were identified by the Workgroup during its June meeting.
 - ii. The process for receiving funds was identified by the Basin Plan, but defined by staff and stakeholders throughout the workgroup process.
 - iii. The mechanism for distribution of MERP funds was developed by staff.
 - iv. The process for subcontracting was identified by stakeholders at the June Workgroup meeting.
 - v. The annual reporting process was developed by staff and discussed by stakeholders at the June Workgroup meeting.
 - vi. The final reporting process was created by staff.
 - b. Create and Convene Stakeholder Group
 - i. Although the process for convening a MERP stakeholder group was identified by staff, the Basin Plan requires that a broad array of stakeholders be involved in the MERP process.
 - c. Outreach to Community Leaders
 - i. Staff, with assistance from CDPH, identified the process for reaching out to affected community leaders in the Delta.
 - d. Develop and Implement Exposure Reduction Activities

- i. The process for developing MERP messaging and outreach materials was developed with input from staff and stakeholders at all Workgroup meetings.
 - ii. Workgroup stakeholders agreed that only qualified public health professionals should provide trainings and technical assistance for MERP activities. As such, CDPH was discussed as the primary candidate for this task from the outset of Workgroup discussions.
 - iii. The process for coordinating in-kind contributions was discussed by the Workgroup at its February and April meetings. In particular, the Department of Water Resources (DWR) provided significant input on ways to incorporate in-kind contributions into the overall funding amounts for MERP participants.
 - iv. Coordination with other programs to reduce fish contamination was discussed by the Workgroup at its January meeting. Staff developed the proposal for inter-agency coordination based in part on that discussion.
 - v. The suggestion for allowing community-based organizations to receive MERP funding for their own exposure reduction activities was developed by staff, and generally supported by Workgroup members.
 - vi. The issue of MERP evaluation and effectiveness monitoring was discussed at all Workgroup meetings.
4. Schedule: The overall schedule included in the Workplan is largely dictated by Basin Plan requirements and was not subject to Workgroup discussion.
5. Budget: Specific contribution amounts in the Workplan are largely dictated by the “proportional responsibility” identified in the Basin Plan. Workgroup members discussed the budget at length in every Workgroup meeting, and staff developed dollar amounts based on these conversations, the amounts provided in the MERP Strategy (Oct 2012), Basin Plan Requirements, and professional judgment on the amount needed to run a successful MERP. The San Francisco Bay Region was also consulted, as it recently concluded its own exposure reduction program. Discussions about budget prioritization and the specific structure for in-kind contributions are ongoing with stakeholders.