

Delta Mercury Exposure Reduction Program (Delta MERP) Activity Plan – FY 16-17

Introduction

Introduction to Delta MERP

The Delta Mercury Exposure Reduction Program (Delta MERP) is a collaborative effort of the Sacramento-San Joaquin Delta Conservancy (Delta Conservancy), the California Department of Public Health (CDPH), and the Central Valley Regional Water Quality Control Board (Water Board) to reduce human exposure to mercury from eating contaminated fish.

Mercury is a toxic metal that has been found in the Sacramento-San Joaquin Delta (Delta) at levels considered harmful to ecological and human health. Delta MERP focuses on reducing impacts of methylmercury (formed from inorganic mercury) to human health. The health effects of methylmercury on humans include neurotoxicity in adults and developmental problems in fetuses and children. The main route of human exposure to mercury is by consumption of fish or shellfish contaminated with high levels of methylmercury through bioaccumulation within food chains. Delta MERP focuses on education to encourage the public to follow safe eating guidelines for Delta fish developed by the California Office of Environmental Health Hazard Assessment (OEHHA). Delta MERP prioritizes reaching the most sensitive and at-risk populations, which are women and children who rely on subsistence fishing.

Regulatory Background

The consumption of fish by humans and wildlife is a beneficial use of Delta waterways. Safe consumption of fish is a goal of the Federal Clean Water Act.

Delta waterways have been identified under the Federal Clean Water Act section 303(d) as impaired due to elevated concentrations of methylmercury in fish. Once a waterbody has been placed on the 303(d) list of impaired waters the state is required to establish limits for discharge of mercury to protect human health, fish and wildlife. This limit is called a Total Maximum Daily Load (TMDL), which defines how much of a pollutant a waterbody can tolerate and still meet water quality standards. In California, state law (Porter-Cologne Water Quality Control Act, California Water Code Section 13000 et. seq.) also requires the Regional Board to formulate and adopt water quality control plans, or Basin Plans, for all areas within its region. Basin Plans describe water quality standards for a region and how they are to be met. TMDLs, with their associated implementation plans, are adopted into the Basin Plans.

The Water Board developed a Delta Methylmercury TMDL which was approved by the US EPA and adopted as a part of the Basin Plan for the Sacramento River and San Joaquin River Basins in 2011.

Managing and reducing mercury and methylmercury in the Delta is a complex issue in a dynamic system and involves focusing on lowering the amount of mercury introduced into the Delta and controlling activities related to methylmercury production and transport once mercury is within the Delta system.

While there are current dischargers of mercury to the Delta, including urban runoff, wastewater treatment and other municipal and industrial discharges, the main source of mercury to the Delta and methylmercury in fish is related to California's mining history as well as atmospheric deposition. Because reducing fish methylmercury levels in the Delta will take a long time, and impacts to human health are immediate, the Delta TMDL included the MERP to address the mercury-related health risks to consumers of Delta fish.

As described in the Basin Plan, the MERP must include elements directed toward:

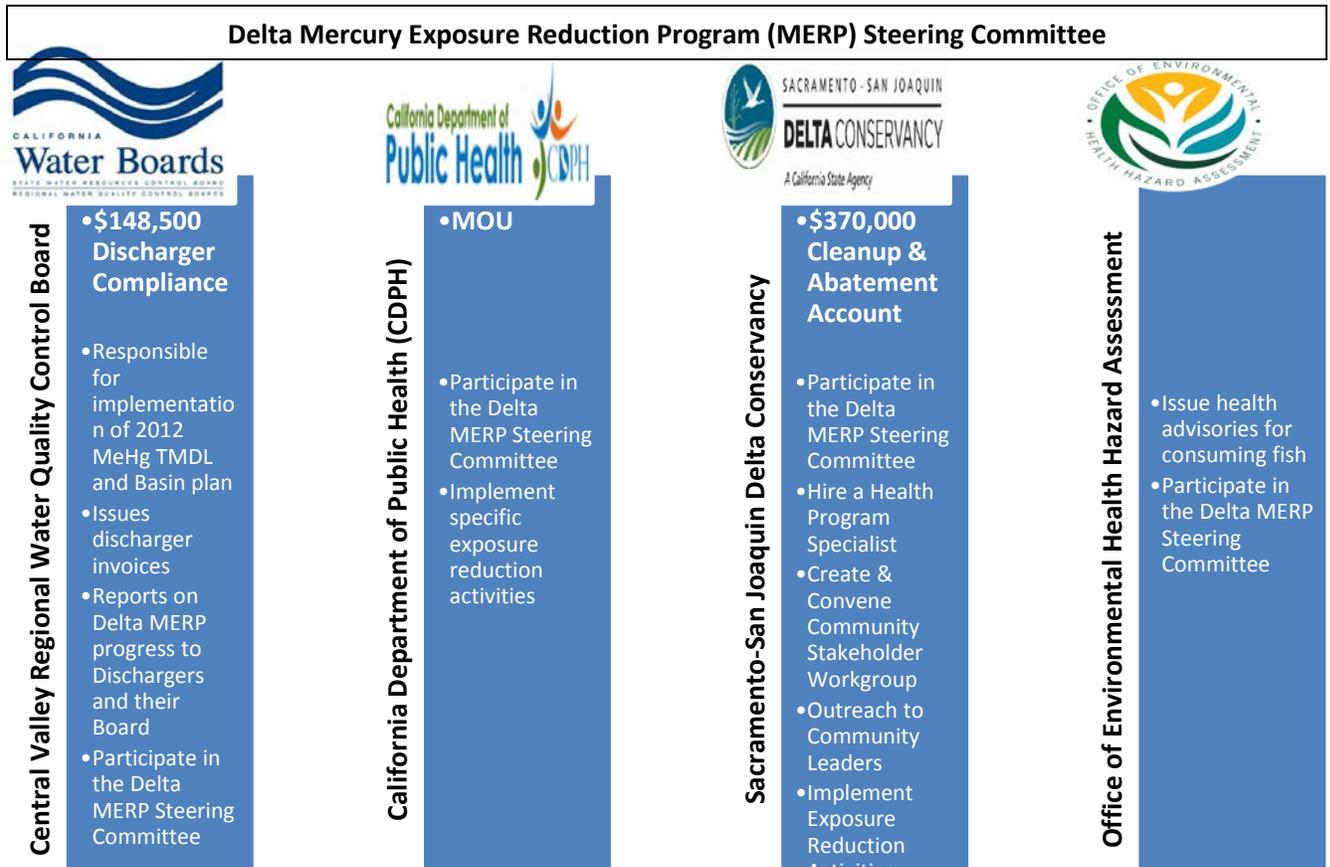
- Developing and implementing community-driven activities to reduce mercury exposure;
- Raising awareness of fish contamination issues among people and communities most likely affected by mercury in Delta-caught fish such as subsistence fishers and their families;
- Integrating community-based organizations that serve Delta fish consumers, tribes, and public health agencies in the design and implementation of an exposure reduction program;
- Identifying resources, as needed, for community-based organizations and tribes to participate in the Program;
- Utilizing and expanding upon existing programs and materials or activities in place to reduce mercury, and as needed, create new materials or activities; and
- Developing measures for program effectiveness.

Framework for Implementing Delta MERP & Use of this Document

In 2012, Water Board staff worked with stakeholders to develop the 2012 MERP Strategy which outlined a plan for forming and funding Delta MERP. The 2012 Strategy called for a Delta MERP Workplan, which was completed as a part of a stakeholder-involved process in 2013. The 2013 Workplan laid out the expectations for Delta MERP goals and objectives, entities involved and their roles, program management and reporting, and main tasks. The Delta MERP Workplan is an umbrella document that refers to all activities that could be conducted during the program, whereas the FY16-17 Annual Activity plan is focused on activities conducted during FY16-17.

The Water Board entered into an agreement with the Delta Conservancy to implement the Delta MERP in June 2014. The Delta Conservancy subsequently entered into a Memorandum of Understanding with CDPH to specific tasks and roles for implementing Delta MERP. As a part of implementing Delta MERP, the Delta Conservancy is tasked with writing an Annual Activity Plan for Steering Committee Approval. The Delta MERP Steering Committee is comprised of staff from the Water Board, CDPH, Delta Conservancy and OEHHA with an open invitation for all interested MERP participants. The first Activity Plan was completed by the Delta Conservancy in 2015.

Figure 1: Relationships Between Collaborating Delta MERP Agencies, Roles, and Funding Sources.



In-Kind Resources (printing and advisory sign posting)

- Dept of Water Resources
- State Lands Commission
- The Nature Conservancy
- Bureau of Land Management
- Bureau of Reclamation
- US Fish & Wildlife Service
- Stone Lakes National Wildlife Refuge

Stakeholders

- Community Based Organizations
- 5 Delta Counties
- Dischargers
- CA Dept of Fish & Wildlife
- Tribes
- Other collaborating entities
- In-Kind Contribution from Discharge Compliance

The purpose of this document is to set priorities, deliverables and timelines for the next year's activities which have been agreed upon by the Delta MERP Steering Committee. This document is structured according to major tasks outlined in Agreement 14-025-150 and activities identified in the 2013 Workplan.

Task 1 – Project Management and Administration

Project administration involves providing all administrative services needed to successfully complete the MERP within budget and on schedule. Duties include coordinating budgeting and scheduling, subcontracting as needed, hiring a health specialist, annual activity planning, invoicing, providing financial and activity information for annual and final reports and convening the Delta MERP Steering Committee.

Deliverables

- Progress Reports submitted quarterly
- Annual Activity Plans
- Annual Reports
- Delta MERP Final Report

Task 2 – Create and Convene a Community Stakeholder Group

The purpose of the Community Stakeholder Group is to provide a forum for a broad range of stakeholders, particularly leaders of community-based organizations, Tribes, fishing communities, and local agencies to keep informed and provide input regarding implementation of Delta MERP, particularly in the area of communication with affected populations. This forum supports collaboration between the Delta MERP Steering Committee with entities providing community service, environmental education, and health education to integrate messages about fish contamination. Stakeholder Group members provide assistance with the development, translation, and dissemination of outreach, education and training materials. The Delta MERP Budget provides stipends to encourage participation of community-based organizations not currently funded by the small grants program.

The Delta Conservancy's website hosts webpages dedicated to Delta MERP, which are maintained as a communication point with community-based community organizations and the public. Meeting dates and materials, advisory information, program announcements, links to resources and references, small grant program information, educational materials and other items are posted on the website. In addition to maintaining the Delta MERP webpages, Conservancy staff sends regular emails to stakeholders to update them on Community Stakeholder Group meetings and other project activities.

Priorities for FY 16-17

- Convene three Community Stakeholder Group Meetings at rotating locations in the Delta.
- Focus on sustainability of Delta MERP goals and objectives beyond the expenditure of funds under Agreement 14-025-150 (between the Water Board and the Delta Conservancy).

Deliverables

- Agendas, summaries and evaluations of Community Stakeholder Group Meetings
- Meeting materials made available on the Delta Conservancy's Delta MERP webpages

Task 3 – Outreach to Communities

The purpose of this task is to identify and inform community leaders in the Delta counties about Delta MERP to promote involvement and awareness in Delta communities. Outreach is provided via direct communication such as letters and informational packets, phone calls, in-person meetings, and includes follow-up meetings and discussions. Delta MERP staff will continue to outreach to community organizations, community leaders, Delta counties, health organizations and other relevant organizations.

Priorities for FY 16-17

- Outreach to new and existing contacts to initiate and support collaboration with local agencies and other organizations such as those providing community service, environmental education, and health education to integrate messages about fish contamination into their existing programs or work.

Deliverables

- Outreach meeting matrix
- Educational and outreach packet
- Summary of outreach activities

Task 4 – Develop and Implement Exposure Reduction Activities

Developing and Implementing Exposure Reduction Activities includes developing messages and materials, training and technical assistance, coordinating with agencies contributing in-kind resources, and coordinating with other entities currently in the Delta to incorporate fish contamination messages into ongoing activities.

Develop Messages and materials

Develop Advisory Signs for Posting at Fishing Access Locations

CDPH, in coordination with the Delta MERP Steering Committee and Community Stakeholder Group, developed a sign design for the three Delta fish consumption advisory regions to be posted at fishing access locations in Delta counties. The bases for the advisory sign designs were OEHHA's fish consumption guidelines for the North Delta, South and Central Delta and San Joaquin River.

Deliverables

- Final Sign Design – completed in 2016

Educational Material Development: Produce Printed Educational Materials

Educational messages and materials including brochures are developed in coordination with CDPH, OEHHA, community based organizations, local governmental agencies, and other stakeholders. Materials include: brochures, training materials, posters, 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.

Deliverables

- Translated advisory information (one-page flyer and fold out brochure for three different advisory regions in the Delta) – completed in 2016
- Low literacy brochure

Provide Training and Technical Assistance

Provide Training on Topics Related to Fish Contaminants

In partnership with CDPH, conduct trainings and provide materials to entities involved in Delta MERP including Delta counties, 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 is 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.

Deliverables

- Educational and training materials, record of trainings (number attendees and organizations represented, agendas, evaluation summaries)

Coordinate with agencies contributing in-kind resources to produce signs and install them at fishing access locations.

Post Warning Signs at Fishing Access Locations

In 2006, CDPH, in collaboration with community groups and state and local agencies, posted signs in the Delta. In 2016, Delta MERP partners designed new signs for the three Delta advisory regions (Sacramento River and North Delta, South and Central Delta, and the San Joaquin River) and used the past sign posting locations as a basis for prioritizing sign posting to occur under Delta MERP. Priority posting locations were determined after soliciting feedback from the Delta MERP Steering Committee, Community Stakeholder Group and California Department of Fish

and Wildlife. Priority posting locations include public fishing access locations in the Delta that include shoreline areas, piers, boat launches, and marinas.

The Delta Conservancy is leading sign posting activities, which include: outreach to identify entities (e.g. local environmental health agencies, signage workgroup of Community Stakeholder Group) that will assist with posting, identify sign-posting locations, coordinate sign posting with partners, track locations where signs were posted, check on the status of a subset of signs during an six to twelve month time frame after signs are posted over time, and replace damaged signs as needed.

Priorities for FY 16-17

- Print advisory signs – completed 2016
- Coordinate with stakeholders and community groups for in-kind sign posting activities
- Post signs at various locations in the Delta

Deliverables

- Database and/or tracking list with information about sign posting locations (geospatial location, local contact information, number of signs posted at each location, description by county and location type etc.)

Coordinate with other agency activities and programs in the Delta to incorporate fish contamination messages into ongoing activities.

This is an extension of Task 2, Outreach to Community Leaders. The goal is for a subset of outreach to lead to collaboration to incorporate mercury exposure reduction and safe consumption information into existing programs. Such activities may include environmental education, boater outreach, information delivery at parks and visitor centers, and programs promoting fishing. Outcomes may include printed educational materials made available at Delta visitor locations and training.

Deliverables

- Matrix of organizations and programs that integrated mercury exposure reduction information into their existing programs with information about the program and description of how Delta MERP messages and materials were integrated

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

Administer a Small Grant Program to support community based organizations to conduct projects that fulfill the Delta MERP's goals

The Small Grants program is administered by CDPH in coordination with the Delta Conservancy and Water Board. The intent of the Small Grant Program is to fund community-based organizations or Tribes to conduct projects that increase public awareness and understanding of fish contamination issues and reduce exposure to chemicals from eating fish caught in the Delta.

Deliverables

- Memorandums of Understanding between CDPH and grantees which includes Scopes of Work – completed for FY 15-16 and FY 16-17
- Grantee progress and final reports – completed for the FY 15-16 grantees, ongoing for the FY16-17 grantees.
- Grantee exit interviews – completed for FY 15-16 grantees. Due by December 2017 for the FY 16-17 grantees.