

**Proportional MeHg Loads and MERP Annual Funding Levels
(MERP Strategy Appendix B, Revised March 2013)**

The November Delta MERP Strategy provided examples of the general activities, timeline, overall estimated costs of the program, and individual discharger contributions (MERP Strategy Appendices A and B, respectively). The annual costs were based on a similar exposure reduction program for the San Francisco Bay area. The Central Valley Water Board's Executive Officer reviewed the final November 2012 MERP Strategy and agreed that it provides a reasonable approach to funding and implementing the Delta MERP. The cost estimates in the Strategy are the expected funding levels from individual entities that elect to be part of the collective effort. The table below lists the individual funding levels. The table has been slightly modified from the November Strategy Appendix B Table 1 to provide more clarity regarding the program's initial activities (startup costs), maintenance, wrap-up and review, and to provide corrected (lower) values for year 3.

Funding goals are based on the annual funding totals needed to support the Delta MERP program that is described in the 15 November MERP Strategy Appendix A.

	MeHg load/yr (grams)	% of Total MeHg Load	MERP Years 1 & 2 Annual Funding Level	MERP Year 3 Funding Level	MERP Years 4-6 Annual Funding Level
Agricultural Drainage					
Sacramento Valley Coalition	53.3	2.44%	\$ 6,000	\$ 2,800	\$ 1,350
SJ County & Delta Coalition	68.0	3.11%	\$ 7,600	\$ 3,600	\$ 1,700
Rice Commission	1.7	0.08%	\$ 1,000	\$ 750	\$ 500
Open Water, Flood Plain					
DWR (7)	170	7.80%	\$ 19,100	\$ 8,950	\$ 4,300
CVFPB	170	7.80%	\$ 19,100	\$ 8,950	\$ 4,300
SLC	170	7.80%	\$ 19,100	\$ 8,950	\$ 4,300
USBR	170	7.80%	\$ 19,100	\$ 8,950	\$ 4,300
USACOE	170	7.80%	\$ 19,100	\$ 8,950	\$ 4,300
Wetland Habitats					
USFWS/USBLM	59.2	2.71%	\$ 6,650	\$ 3,100	\$ 1,500
DFW	320	14.64%	\$ 35,850	\$ 16,850	\$ 8,050
DWR	160	7.32%	\$ 17,950	\$ 8,400	\$ 4,000
SLC	53.3	2.44%	\$ 6,000	\$ 2,800	\$ 1,350
Local	49.4	2.26%	\$ 5,550	\$ 2,600	\$ 1,250
Conservancy	19.7	0.90%	\$ 2,200	\$ 1,050	\$ 500
Private	326	14.91%	\$ 36,500	\$ 17,150	\$ 8,200
Brentwood WWTP	0.086	0.00%	\$ 1,000	\$ 750	\$ 500
Contra Costa (County of)	5.15	0.24%	\$ 1,000	\$ 750	\$ 500
Davis WWTP	0.78	0.04%	\$ 1,000	\$ 750	\$ 500
Deuel Vocational Institute WWTP	0.013	<0.01%	\$ 1,000	\$ 750	\$ 500
Discovery Bay WWTP	0.37	0.02%	\$ 1,000	\$ 750	\$ 500
Ironhouse Sanitation District	0.03	<0.01%	\$ 1,000	\$ 750	\$ 500
Lathrop (City of)	0.27	0.01%	\$ 1,000	\$ 750	\$ 500

	MeHg load/yr (grams)	% of Total MeHg Load	MERP Years 1 & 2 Annual Funding Goal	MERP Year 3 Funding Goal	MERP Years 4-6 Annual Funding Goal
Lincoln Center Groundwater Treatment	0.01	<0.01%	\$ 1,000	\$ 750	\$ 500
Lodi (City of)	0.053	<0.01%	\$ 1,000	\$ 750	\$ 500
Lodi White Slough WWTP	0.94	0.04%	\$ 1,000	\$ 750	\$ 500
Manteca WWTP	1.4	0.06%	\$ 1,000	\$ 750	\$ 500
Mountain House CSD WWTP	0.37	0.02%	\$ 1,000	\$ 750	\$ 500
Port of Stockton MS4	0.4	0.02%	\$ 1,000	\$ 750	\$ 500
Rio Vista (City of)	0.014	<0.01%	\$ 1,000	\$ 750	\$ 500
Rio Vista Beach and Northwest WWTPs	0.104	<0.01%	\$ 1,000	\$ 750	\$ 500
Sacramento Area MS4	1.8	0.08%	\$ 1,000	\$ 750	\$ 500
Sacramento Combined WWTP	0.95	0.04%	\$ 1,000	\$ 750	\$ 500
San Joaquin (County of)	3.0	0.14%	\$ 1,000	\$ 750	\$ 500
Solano (County of)	0.158	0.01%	\$ 1,000	\$ 750	\$ 500
SRCSA Sacramento River WWTP	161	7.37%	\$ 18,050	\$ 8,450	\$ 4,050
Stockton Area MS4	4.1	0.19%	\$ 1,000	\$ 750	\$ 500
Stockton WWTP	36	1.65%	\$ 4,050	\$ 1,900	\$ 900
Tracy (City of)	1.8	0.08%	\$ 1,000	\$ 750	\$ 500
Tracy WWTP	1.8	0.08%	\$ 1,000	\$ 750	\$ 500
West Sacramento (City of)	1.75	0.08%	\$ 1,000	\$ 750	\$ 500
Woodland WWTP	0.25	0.01%	\$ 1,000	\$ 750	\$ 500
Yolo (County of)	0.403	0.02%	\$ 1,000	\$ 750	\$ 500
Totals	2186	100.00%	\$ 267,900	\$ 132,950	\$ 67,400

Years 1 and 2: Initial Activities- Example annual \$ based on multiplying % of total load by \$245,000, with a minimum of \$1,000 per discharger. This example amount for the upper end of the cost range based on cash contributions of about \$265,000 to pay for activities and a full-time public health consultant to manage the MERP.

Year 3: Continuation of Activities and Review of Initial Work – Example annual \$ based on multiplying % of total load by \$115,000, with a minimum of \$750 per discharger. This example amount describes a possible “year 3” of MERP to complete program evaluations, review, and plan next steps. Health expert staff would lead the review, meet with stakeholders for evaluations and planning, and prepare final reports.

Years 4 through 6: Continuation and/or Maintenance of Activities - Example annual \$ based on multiplying % of total load by \$55,000, with a minimum of \$500 per discharger. This example amount for the lower end of the cost range assumes that a lower level of activities can maintain effectiveness after an initial, intensive period of activity. Year 6 activities include final reporting.

MERP activities will also be supported by contributions of staff time from CDPH and OEHHA. Estimates of State health agencies' participation are shown in the MERP Strategy Appendix A.

Per the Basin Plan, implementation of the Delta MERP Program must begin within six months after the Central Valley Water Board's Executive Officer approves the MERP Work Plan. The Work Plan is due to the Executive Officer in October 2013. Review and notification of participants of final approval is expected to take no more than four months. Thus, Year 1 of the MERP should begin within the period of May – August 2014. Central Valley Water Board staff is setting July 2014 as the due date for MERP Year 1 funds and July annually thereafter through 2019 for MERP Years 2-6.

Additional Notes and Explanations for Amounts Provided in the Table

1. Methylmercury (MeHg) loads - Existing methylmercury loads as described in 2010 Delta Methylmercury TMDL Staff Report, Tables 8.4a to 8.4g. Available at http://www.waterboards.ca.gov/centralvalley/water_issues/tmdl/central_valley_projects/delta_hg/april_2010_hg_tmdl_hearing/apr2010_tmdl_staffrpt_final.pdf
2. % proportionality - methylmercury load / total methylmercury load
3. Irrigated Ag Coalitions MeHg loads proportioned between 3 coalitions based on % acreage in Delta and Yolo Bypass based on land use data for TMDL period
 - a. Ag runoff: Sacramento Valley WQC, 43%; San Joaquin - Delta WQC 55%; Rice Coalition 1.4%
4. The following sources are not included in % distribution:
 - a. Atmospheric deposition ($22/5220= 0.4\%$)
 - b. Urban runoff from areas not under MS4 permit ($0.8/5220= 0.01\%$)
 - c. Cooling facilities (GWF, water passes through)
 - d. Mirant Delta LLC Contra Costa Power Plant (no longer discharges)
 - e. Oakwood Lake Mining Subdivision permit was rescinded in Feb 2011 (no longer discharges).
 - f. Metropolitan Stevedore (no discharge)
5. When the TMDL was developed, there were no load estimates for Ironhouse and Mountain House, so MeHg load is set equal to allocation.
6. Wetlands are part of the irrigated agriculture coalitions. The table separates agricultural drainage and wetlands.
7. The DWR open water share accounts for the agency's responsibilities for flood control and water supply.
8. Estimated proportions for federal, state and other wetlands based on GIS acreage coverages and estimates from maps: USBLM and USFWS 6%; DFG 33%; DWR 16%; SLC 5%; local 5%; conservancy 2%; private 33%.

9. Open water proportions are divided evenly among the state and federal agencies.
10. Annual dollar amounts are rounded to the nearest \$50.