

Targeted Approach to Reducing PCBs in San Mateo County (TARP Project)

Work Plan

June 4, 2026

Project Summary

Funding Opportunity: San Francisco Bay Geographic Program, Region 9 Program Fiscal Year 2025 Funds (EPA-R9-SFBay-26-01).

Grant Applicant: City/County Association of Governments of San Mateo County (C/CAG) on behalf of San Mateo County public agencies subject to the NPDES Phase I permit for municipal stormwater discharges within the San Francisco Bay Regional Water Quality Control Board region (Region 2).

Project Partners: The San Francisco Bay Regional Water Quality Control Board; San Mateo County Health; and selected member agencies of the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) including the Cities of Brisbane, Burlingame, East Palo Alto, Menlo Park, Redwood City, San Bruno, San Carlos, San Mateo, South San Francisco, and San Mateo County.

Project Budget: \$5,075,000 (75% grant-funded; 25% match via Project Partners in-kind services).

Anticipated Project Term: Aug 2026 – June 2031 (five years).

Fish tissue monitoring in San Francisco Bay has revealed the bioaccumulation of polychlorinated biphenyls (PCBs) in Bay sportfish at levels that pose a human health risk, leading to an interim consumption advisory and the Bay's designation as an impaired water body under the Clean Water Act. The San Francisco Bay Regional Water Quality Control Board (Regional Water Board) developed a Total Maximum Daily Load (TMDL) targeting PCBs, with an urban stormwater runoff wasteload allocation (WLA) of 2 kg/yr to be achieved by March 2030. This WLA is implemented through Provision C.12 of the Municipal Regional Permit (MRP).

The **Targeted Approach to Reducing PCBs in San Mateo County (TARP Project)** is designed to make focused and measurable progress toward Bay restoration by supporting and expanding implementation of the SMCWPPP Pollutant Control Measure Plan (CMP) in San Mateo County. San Mateo County is unique in containing one of just three designated Priority Margin Units (PMUs) in the Bay Area – the Steinberger Slough/Redwood Creek PMU – where PCBs concentrations in sediment and fish tissue are among the highest recorded across the Bay Area. The TARP Project will conduct strategic monitoring, control measure feasibility and efficacy studies, targeted implementation of PCBs controls, and enhanced Fish Smart public health outreach, contributing an estimated 100–200 grams per year (g/yr) reduction in PCBs loading to the Bay from San Mateo County – up to 20% of the remaining load reduction needed to achieve the County's stormwater WLA.

The TARP Project builds upon and expands the efforts of the Regional PCBs Special Studies and Implementation Project and will generate new tools and resources of value across the Bay Area. The project will be overseen by C/CAG's Stormwater Program Director, Reid Bogert, as TARP Project Manager, supported by a Consultant/Contractor team procured through an EPA-compliant Request for Proposals process and supported by a Project Management Team (PMT) representing all Project Partners.

Project Goals / Objectives

The six TARP Project objectives are:

- Support critical MRP monitoring and TMDL implementation requirements within San Mateo County during the current (MRP 3.0) and next permit cycle (MRP 4.0; expected July 2027).
- Target monitoring to identify sources of PCBs in Bay Margin Areas within San Mateo County, focusing on catchments draining to the Steinberger Slough/Redwood Creek PMU and other sensitive Bay margin areas.

- Conduct feasibility analyses, planning, and implementation of new actions to reduce PCBs loading to sensitive Bay Margin Areas through focused implementation of control measures that will improve the trajectory and timing of Bay recovery.
- Communicate and disseminate findings to key stakeholders to assist other Bay Area Countywide Stormwater Programs and municipal agencies with more effective implementation of PCBs controls throughout the region, including through an online PCBs BMP Selection Tool.
- Provide targeted enhancement of Fish Smart outreach to expand and improve subsistence and sport fishing engagement in partnership with San Mateo County Health and community NGO partners at priority Bay margin fishing locations.
- Make significant and measurable contributions towards achieving urban runoff TMDL WLAs by reducing PCBs loading from San Mateo County watersheds to sensitive Bay Margin Areas by an estimated 100–200 g/yr.

The TARP Project objectives directly align with the EPA Powering the Great American Comeback Initiative (Pillars 1 and 3), the EPA Region 9 San Francisco Bay Program Annual Priority List, and the 2022 San Francisco Estuary Blueprint (Goals 2 and 3, including Actions 12, 19, 21, and 22).

Statement on Matching Funds Source

The match-funded total of \$1,270,000—representing 25% of the total project costs—will be provided primarily through in-kind contributions committed by C/CAG and the SMCWPPP. C/CAG is committed to providing in-kind match of approximately \$870,000 over the course of the project. Additional in-kind match contributions of approximately \$400,000 will be committed through cash or in-kind contributions provided by C/CAG partner agencies focused on control measure planning and implementation under Task 4 of the Work Plan.

Latitude and Longitude of Main Facility

37.48888, –122.22988 (C/CAG, 555 County Center, Redwood City, CA)

Deliverables / Work Products and Associated Timeline for Completion

Sub-Task	Grant Program Work Products / Deliverables	2027				2028				2029				2030				2031	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Task 1 – Targeted Monitoring to Identify PCBs Sources to Bay Margins																			
1.1. Monitoring Plan and QAPP	Monitoring Plan; QAPP (submitted to EPA for approval before field work)	P	D	D	D														
1.2. Sediment and Stormwater Monitoring	Sediment and stormwater samples (public ROW and private properties in old industrial areas adjacent to Bay margins); data submitted to SMCWPPP					F	F	F	F	F	F	F	F	F	F	F	F	F	F
1.3. Identify PCBs Sources; Develop Next Steps	Annual technical reports assessing monitoring data; technical report(s) identifying PCBs source properties and source areas in ROW; updated maps/databases; next-steps recommendations								R				R				R		
Task 2 – PCBs Control Measure Effectiveness Evaluations and BMP Selection Tool																			
2.1. Identify PCBs Controls for Evaluation	Literature review and Summary Report on existing PCBs control options; recommended controls for evaluation	P	D																
2.2. Conduct Effectiveness Evaluations	Study Plan; updated QAPP; field monitoring studies (storm drain cleanouts, high-flow media filters, etc.); Technical Report(s) presenting effectiveness evaluation results			F	F	F	F	F	F	D	D	D	D						
2.3. Develop Online PCBs Control Measure Selection Tool	Online PCBs BMP Selection Tool (hosted on SMCWPPP website and BAMSC website); includes cost-effectiveness ratings (\$/unit mass PCBs removed)											D	R						

Task 3 – Stormwater Treatment Project Planning and Feasibility Analysis

3.1. Outreach to Municipalities for Project Ideas	Working meetings with Project Partners (up to 2); compiled list of candidate projects for feasibility analysis	P	D																
3.2. Conduct Feasibility Analyses	Feasibility analyses of candidate projects (locations, technical effectiveness, O&M, constraints, economic feasibility); conceptual designs for selected controls			F	F	F	F	F	F	F	F								
3.3. Develop Recommendations for Projects to Fund	Ranked project list; short-list of recommended projects for Task 4 funding; feasibility results shared with sponsoring Project Partners										R	F	F	F	F	F	F	F	F

Task 4 – Implementation of PCBs Controls, BMPs, and Stormwater Treatment

[illegible]

Task 5 – Targeted Enhancement of Fish Smart Outreach in Priority Bay Margin Areas

[illegible]

	Final Grant Report documenting all project outputs, outcomes, and environmental benefits achieved (project closeout)																		
Task 7 – Project Administration and Management																			
7.1. Project Management	Project Management Team (PMT) formed; Consultant/Contractor RFP and procurement; ongoing PMT coordination meetings; oversight of all project tasks	M	MR	M	MR	M	MR	M	MR	M	MR	M	MR	M	MR	M	MR	M	MR
7.2. Invoicing, Match Tracking, and Progress Reports	Semi-annual project progress reports and invoices (2/grant year); annual federal financial reports; match tracking documentation; final grant documentation at project closeout	M	MR	M	MR	M	MR	M	MR	M	MR	M	MR	M	MR	M	MR	M	MR

Task Implementation Key: P = planning F = field work / study implementation R = report / deliverable D = desktop analysis / design / developing tools
C = construction or BMP implementation M = meeting MR = meeting + quarterly report/invoice -- = not applicable in this period

Project Schedule with Tasks, Work Products / Deliverables, Timeframe, and Cost Breakdown

Task / Subtask	Work Products / Deliverables	Timeframe	Grant-Funded Costs	Match-Funded Costs	Total Project Costs
Task 1 – Targeted Monitoring to Identify PCBs Sources to Bay Margins					
1.1. Develop a Monitoring Plan and QAPP	Monitoring Plan; QAPP (submitted to EPA for approval before field work begins)	Q1 2027 – Q3 2027	\$40,000	\$0	\$40,000
1.2. Conduct Sediment and Stormwater Monitoring	Sediment and stormwater samples (public ROW and private properties in old industrial areas adjacent to Bay margins); data submitted to SMCWPPP	Q4 2027 – Q2 2031	\$400,000	\$160,000	\$560,000
1.3. Identify PCBs Sources; Develop Next Steps	Annual technical reports assessing monitoring data; technical report(s) identifying PCBs source properties and source areas in ROW; updated maps/databases; next-steps recommendations	Q4 2027, Q4 2028, Q4 2029 (annual)	\$45,000	\$60,000	\$105,000
Task 1 Subtotal			\$485,000	\$220,000	\$705,000
Task 2 – PCBs Control Measure Effectiveness Evaluations and BMP Selection Tool					
2.1. Identify PCBs Controls for Evaluation	Literature review and Summary Report on existing PCBs control options; recommended controls for evaluation; Study Plan; updated QAPP	Q1 2027 – Q2 2027	\$40,000	\$10,000	\$50,000
2.2. Conduct Effectiveness Evaluations of Selected PCBs Controls	Field monitoring studies (storm drain cleanouts, high-flow media filters, etc.); Technical Report(s) presenting effectiveness evaluation results	Q3 2027 – Q4 2029	\$160,000	\$20,000	\$180,000
2.3. Develop Online PCBs Control Measure Selection Tool	Online PCBs BMP Selection Tool (hosted on SMCWPPP and BAMSC websites); includes cost-effectiveness ratings (\$/unit mass PCBs removed)	Q3 2029 – Q4 2029	\$70,000	\$10,000	\$80,000
Task 2 Subtotal			\$270,000	\$40,000	\$310,000
Task 3 – Stormwater Treatment Project Planning and Feasibility Analysis					
3.1. Outreach to Municipalities for Project Ideas	Working meetings with Project Partners (up to 2); compiled list of candidate projects for feasibility analysis	Q1 2027 – Q2 2027	\$0	\$40,000	\$40,000
3.2. Conduct Feasibility Analyses	Feasibility analyses of candidate projects (locations, technical effectiveness, operations and maintenance, constraints, economic feasibility); conceptual designs for selected controls	Q3 2027 – Q2 2029	\$130,000	\$10,000	\$140,000
3.3. Develop Recommendations for Projects to Fund	Ranked project list; short-list of recommended projects for Task 4 funding; feasibility results shared with sponsoring Project Partners	Q2 2029 – Q2 2031	\$20,000	\$20,000	\$40,000
Task 3 Subtotal			\$150,000	\$70,000	\$220,000
Task 4 – Implementation of PCBs Controls, BMPs, and Stormwater Treatment					

4.1. Develop Process to Award Funding	Task 4 Workgroup formed; funding award criteria for public and private projects; funding award process documentation	Q1 2027 – Q2 2027	\$0	\$30,000	\$30,000
4.2. Fund Public PCBs Control Projects	Funding awards to municipalities; planning, installation, and/or construction of public PCBs controls in ROW (storm drain cleanouts, capital improvements, green stormwater infrastructure); PCBs load reduction calculations; BABA-compliant procurement	Q3 2027 – Q2 2031	\$2,270,000	\$400,000	\$2,670,000
4.3. Fund Private Property PCBs Controls	Outreach to eligible private property owners; funding awards to private property/business owners; implementation of PCBs controls and BMPs on private properties; load reduction calculations; BABA-compliant procurement	Q3 2027 – Q2 2031	\$165,000	\$10,000	\$175,000
Task 4 Subtotal			\$2,435,000	\$440,000	\$2,875,000
Task 5 – Targeted Enhancement of Fish Smart Outreach in Priority Bay Margin Areas					
5.1. Priority Site Selection and Coordination	Inventory of candidate fishing sites; site-specific implementation plan for 5-7 priority shoreline fishing locations in PCBs PMUs (East Palo Alto, Redwood City, San Bruno, South San Francisco)	Q1 2029	\$55,000	\$0	\$55,000
5.2. Fish Smart Signage Enhancement Pilot	Updated Fish Smart signage designed, fabricated, and installed at priority sites; online geospatial database tracking installed signage	Q2 2029 – Q2 2031	\$45,000	\$0	\$45,000
5.3. NGO/Community-Based Multilingual Engagement and Outreach	In-person outreach at priority fishing sites; distribution of Fish Smart materials and targeted advisory cards	Q2 2030 – Q2 2031	\$35,000	\$0	\$35,000
5.4. Targeted Digital / Out-of-Home Awareness Support	Geofenced mobile advertising campaign; targeted digital media placements; QR code integration linking to Fish Smart resources and SMCWPPP website	Q2 2030 – Q2 2031	\$20,000	\$0	\$20,000
5.5. Evaluation and Integration	Intercept survey at priority fishing sites; outreach tracking metrics report; lessons learned summary report; findings integrated into San Mateo County Health Fish Smart program via recommendations memo	Q2 2031	\$10,000	\$0	\$10,000
Task 5 Subtotal			\$165,000	\$0	\$165,000
Task 6 – Reporting, Tracking, and Measuring Progress					
6.1–6.3. Annual Reports and Final Grant Report	Annual SMCWPPP Urban Creeks Monitoring Reports (March each year); Annual SMCWPPP Reports to Regional Water Board (September each year); semi-annual project progress reports and invoices (2/grant year); annual federal financial reports; Final Project Report at project closeout; all reports posted on flowstobay.org and submitted to EPA	Q2 2027 – Q2 2031 (annual); Final Report Q2 2031	\$0	\$500,000	\$500,000
Task 6 Subtotal			\$0	\$500,000	\$500,000
Task 7 – Project Administration and Management					
7.1–7.2. Project Management; Invoicing, Match Tracking, and Progress Reports	PMT formation and coordination; Consultant/Contractor RFP and procurement; semi-annual project progress reports and invoices (2/grant year); annual federal financial reports; match tracking	Q1 2027 – Q2 2031 (ongoing)	\$300,000	\$0	\$300,000

	documentation; final grant documentation at project closeout				
Task 7 Subtotal			\$300,000	\$0	\$300,000
GRAND TOTAL			\$3,805,000	\$1,270,000	\$5,075,000

Environmental Outcomes from the Targeted Approach to Reducing PCBs (TARP) Project

Task 1 – Targeted Monitoring to Identify PCBs Sources to Bay Margins

Near-term Environmental Outcomes (during project period)

- Identification and control of sources of PCBs to the MS4 and Bay margin areas from private properties.
- Identification and control of PCBs source areas in the public ROW.
- Improved understanding of the sources and pathways of PCBs in stormwater to Bay margin areas, including the Steinberger Slough/Redwood Creek PMU.

Long-term Environmental Outcomes (beyond project period)

- Enhanced design, oversight, and effectiveness of PCBs monitoring programs across the Bay Area.
- Decreased discharges of PCBs in stormwater to the SF Bay through abatement of PCBs source properties and implementation of controls in the public ROW.
- Improved trajectory toward achievement of the stormwater PCBs TMDL WLA.

Task 2 – PCBs Control Measure Effectiveness Evaluations and BMP Selection Tool

Near-term Environmental Outcomes (during project period)

- Improved understanding of the relative effectiveness and cost-efficiency of a range of PCBs control measure options.
- Access to an online PCBs BMP Selection Tool enabling key stakeholders across San Mateo County and the broader Bay Area to implement cost-effective controls.

Long-term Environmental Outcomes (beyond project period)

- PCBs loadings to the Bay reduced through wider adoption of evaluated control measures.
- Enhanced efficiency and/or timelines for achieving the PCBs TMDL stormwater WLAs regionwide.

Task 3 – Stormwater Treatment Project Planning and Feasibility Analysis

Near-term Environmental Outcomes (during project period)

- Identification of potential Green Stormwater Infrastructure (GSI) and other PCBs controls in the Steinberger Slough PMU and other catchments draining to Bay margin areas.
- Increased engagement and collaboration with municipal stormwater programs working on PCBs reduction strategies.

Long-term Environmental Outcomes (beyond project period)

- Enhanced implementation of GSI and other PCBs controls in the Steinberger Slough PMU and other key management areas.
- Quantifiable reductions of PCBs to the Bay in urban sediments and stormwater through enhanced control of sources in priority areas.

Task 4 – Implementation of PCBs Controls, BMPs, and Stormwater Treatment

Near-term Environmental Outcomes (during project period)

- Enhanced implementation of PCBs controls in public MS4 systems, resulting in reduced PCBs loads from current and historical MS4 pollution into the Bay.
- Enhanced implementation of PCBs controls on private property, with lower cost burdens to private property owners, resulting in reduced PCBs loads from private properties into the MS4 and the Bay.

Long-term Environmental Outcomes (beyond project period)

- Quantifiable reductions of PCBs in urban sediments and stormwater and/or receiving water due to enhanced controls on sources in public and private properties.
- Progress towards the stormwater PCBs TMDL WLA (2 kg/yr by March 2030).

Task 5 – Targeted Enhancement of Fish Smart Outreach

Near-term Environmental Outcomes (during project period)

- Reduction in near-term human PCBs exposure among subsistence and sport anglers at priority Bay margin fishing sites in East Palo Alto, Redwood City, San Bruno, and South San Francisco.
- Improved collaboration with local NGOs focusing on public health and environmental justice in priority communities.

Long-term Environmental Outcomes (beyond project period)

- Reduced long-term human PCBs exposure to subsistence and sport anglers through integration of enhanced Fish Smart messaging into San Mateo County Health’s ongoing program.
- Increased adoption of safe eating guidance and behavioral changes among priority fishing populations as structural load reductions advance toward long-term TMDL compliance.

Task 6 – Reporting, Tracking, and Measuring Progress

Near-term Environmental Outcomes (during project period)

- Improved understanding of potential and optimal PCBs controls in catchments draining to Bay margin areas.
- Enhanced communication with the Regional Water Board and EPA on implementation of PCBs TMDL requirements.

Long-term Environmental Outcomes (beyond project period)

- Enhanced achievement of the stormwater PCBs TMDL WLA through adaptive management informed by annual monitoring and reporting data.

Project Photo and Caption for SF Bay Water Quality Improvement Fund Website



[Photo – Pulgas Creek draining to Steinberger Slough, San Carlos, California]

Schedule for Submitting Quarterly Reports, Technical Reports and Final Report

Task	2027 Q2	2027 Q4	2028 Q2	2028 Q4	2029 Q2	2029 Q4	2030 Q2	2030 Q4	2031 Q1	2031 Q2
Submit Semi-Annual Progress Reports and Invoices	x	x	x	x	x	x	x	x	x	
Submit Annual Technical Reports (SMCWPPP Urban Creeks Monitoring Report / Annual Report to Water Board)	x		x		x		x		x	
Submit Annual Federal Financial Report		x		x		x		x		
Submit Final Grant Report										x

Progress Reports and invoices will be submitted per the schedule provided by the EPA Grant Project Manager. Annual technical reports (Urban Creeks Monitoring Report and SMCWPPP Annual Report to Regional Water Board) will be submitted in March and September of each project year, respectively, and made publicly available on <https://flowstobay.org/>. The Final Grant Report and project close-out will be submitted by June 30, 2031 or as directed by the EPA Grant Project Manager.

OPTIONAL FORMAT

BUDGET DETAIL FORMAT

The detail for each object class category must be provided. Formats may vary, but all information below should be included in your application.

a. PERSONNEL

POSITION	NUMBER	SALARY	WORK YEARS	AMOUNT
a. Personnel Total				

b. FRINGE BENEFITS

BASE	
RATE	%
b. FRINGE BENEFITS TOTAL	

c. TRAVEL – List trips planned, destination, dates, and the amounts per trip. Please separate local travel and out-of-state travel.

TRAVEL EXPENSES	AMOUNT
Explain: _____ _____ _____ _____	
c. TRAVEL TOTAL:	

d. EQUIPMENT – Tangible, non-expendable, personal property having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. Applicant's definition of equipment may be used provided the definition at least includes all items previously defined above.

ITEM	NUMBER	COST PER UNIT	TOTAL
d. EQUIPMENT TOTAL			

e. SUPPLIES

ITEM	NUMBER	COST PER UNIT	TOTAL
e. SUPPLIES TOTAL			

f. CONTRACTUAL [List each planned contract separately, type of service to be procured, **proposed procurement method (i.e. small purchase, sealed bids, competitive proposals)** and the estimated cost]

ITEM	PROCUREMENT METHOD	TOTAL
f. CONTRACTUAL TOTAL		

g. CONSTRUCTION (N/A)

h. OTHER

ITEM	NUMBER	COST PER UNIT	TOTAL
h. OTHER TOTAL			

i. TOTAL DIRECT COSTS	\$
j. INDIRECT COSTS	(BASE \$ _____ x RATE ____% = INDIRECT COSTS)
k. TOTAL PROPOSED COSTS	\$
FEDERAL FUNDS REQUESTED	\$
RECIPIENT SHARE (MATCH)	\$
RECIPIENT SHARE OF TOTAL PROPOSED COSTS	%
FEDERAL SHARE OF TOTAL PROPOSED COSTS	%

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