

Subtidal eelgrass and oyster reef restoration

Wetlands Regional Monitoring Program Beneficial Reuse of Dredged Material Support

In-Bay Monitoring of Pollutants, including trash, and algal species under the Regional Monitoring Program

> Nutrient Management Strategy

EPA Region 9
San Francisco Bay Program Office
FY24 Draft Annual Priority List

Large scale shoreline resilience, multi-benefit projects including horizontal levees and wastewater treatment/reuse

Special studies/projects for addressing PFAS in SF Bay

Large scale tidal wetlands restoration

Special studies/projects for addressing PCBs under TMDL implementation plan Large scale implementation of urban green stormwater infrastructure

BRRIT
(Bay Restoration
Regulatory
Integration Team)

PFAS Sources to Solutions:

Identifying and Preventing PFAS Pollution in San Francisco Bay

PROPOSAL TO THE EPA WATER QUALITY IMPROVEMENT FUND 2023
SUBMITTED BY THE SAN FRANCISCO ESTUARY INSTITUTE with

Regional Monitoring Program for Water Quality in San Francisco Bay (RMP)

Department of Toxic Substances Control (DTSC)

Bay Area Clean Water Agencies (BACWA)

Bay Area Municipal Stormwater Collaborative (BAMSC) Member Programs

Indiana University Bloomington

University of Toronto









\$6.2 Million Project

50% grant funds

50% partner match (activities and funds)

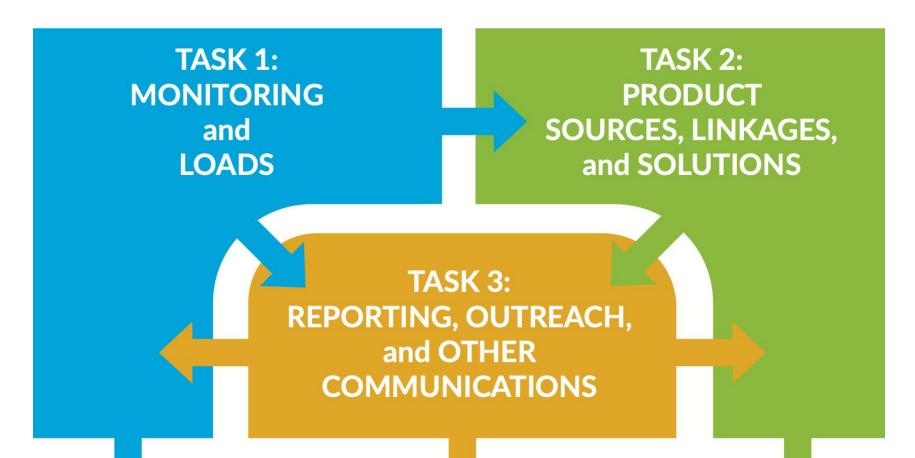
Thank you partners!

Thank you EPA SF Bay Program Office!

Project Goals

- Inform PFAS water pollution management actions
- Identify priority PFAS product categories for management action
- With the help of partners and supporters, increase community, manufacturer and regulator awareness of linkage between products and PFAS water pollution
- Further develop cooperation between water quality managers and California Safer Consumer Products Program
- Inform future scientific work addressing PFAS water pollution

Project overview



Project Partners

Monitoring & Loads (Task 1)

- Regional Monitoring Program for Water Quality in San Francisco Bay
- Bay Area Municipal Stormwater Collaborative
- Bay Area Clean Water Agencies

Product Sources, Linkages & Solutions (Task 2)

- California Department of Toxic Substances Control (DTSC)
- Indiana University Bloomington (Marta Venier)
- University of Toronto (Miriam Diamond)

Communications (Task 3)

- California DTSC
- Community outreach partner TBD

Project overview



- Urban runoff monitoring
- Wastewater monitoring
- Bay and biota monitoring
- Load estimates

- Outreach
- Scientific collaboration / engagement

- Product research
- Conceptual model
- Product testing
- Idenify information gaps

Project Focus - Urban pathways

Municipal Wastewater





Urban Stormwater Runoff

Project Focus - PFAS products

Conceptual models

- Link products to pathways
- Identify product categories for testing
- Results to inform management actions

Consumer Products



Estimated Schedule

Start - August 2024

- Monitoring 2024-2027
- Product research 2024-2025
- Conceptual model 2024-2026
- Product testing 2025-2027
- Data analysis & linkage assessment 2027-2028
- PFAS loads estimates (urban pathways) 2028
- Communications 2024-2028

Complete - June 2028

Useful Outputs

- List of PFAS-containing product categories
- Summary of available product PFAS content data
- Conceptual model
 - Map PFAS transport from products to Bay via runoff and wastewater
- Product categories most likely to be major contributors to PFAS in wastewater and urban stormwater runoff
- List of management actions already underway & likely to affect California products
- Product testing data to fill priority data gaps (Marta Venier)
- PFAS product categories prioritized for management action
- List of remaining key information gaps
- Recommendations for future work

Useful Outputs

Reports

- 1. PFAS Synthesis and Strategy (RMP match \$)
- 2. Urban PFAS Loads Estimates (municipal wastewater, urban runoff)
- 3. Product-Pollution Linkage Assessment

Communications (supported by community outreach partner)

- Presentations and outreach
- Project website
- Fact sheets for diverse audiences

