

San Francisco Bay Fish Project: Public Outreach and Education to Reduce Exposure to Mercury and PCBs

Aida Negrón, Ian Walker, Ngozi Erondu, Randy Reyes, Tivo Rojas-Cheatham, Alyce Ujihara • California Department of Public Health
Margy Gassel • Office of Environmental Health Hazard Assessment

The Problem

While fish is an important part of a healthy diet, most fish caught in San Francisco Bay contain elevated levels of harmful chemicals, including mercury and polychlorinated biphenyls (PCBs). The presence of these chemicals in Bay fish is the basis for the current health advisory. This advisory recommends that fish consumers limit the types and amounts of fish they eat as a way to limit their exposure to these chemicals.

The clean-up and management of mercury and PCBs in San Francisco Bay is the long-term goal of state regulatory agencies. However, activities are needed in the interim to address the possible health risks to consumers of Bay fish.


The Approach to Risk Reduction

The San Francisco Bay Fish Project (SFBFP) is a two-year effort to raise awareness and understanding of fish contamination issues and reduce human exposure to chemicals from consumption of San Francisco Bay fish. The project is also part of the Regional Water Quality Control Board's TMDL strategy to address possible health risks from mercury and PCBs contamination in the Bay.

The Collaboration

The California Department of Public Health is implementing the SFBFP in collaboration with community-based groups, state and local agencies, the Office of Environmental Health Hazard Assessment, and the Aquatic Science Center. The project is funded by the Bay Area Clean Water Agencies, the Bay Area Stormwater Management Agencies Association, the Western State Petroleum Association, and the US Environmental Protection Agency.

For more information, visit the project website at <http://www.sfei.org/sfbfp> or contact Aida Negrón at aida.negron@cdph.ca.gov or (510) 620-6262.



Conduct Needs Assessments
Needs assessments are a process for determining and addressing needs, or "gaps" between current conditions and desired conditions. For this project, needs assessment were conducted with community groups, local agencies, and others. The objective was to learn about populations consuming Bay fish and explore approaches to reach affected populations.




Brochure **Kiosk** **Warning Sign (Draft)**

Support and Conduct Risk Communication and Risk Reduction Activities

- Provide funding to community-based groups to conduct outreach and education activities to address fish contamination issues in their communities
- Develop multilingual educational materials and a warning sign that will be posted at Bay fishing locations

Funded Groups

- **APA Family Support Services, San Francisco**
Under this project, APA will collaborate with the Asian and Pacific Islander Family Resource Network, a collaborative of 22 agencies providing family support services to Asian and Pacific Islander immigrant families. The project will conduct a series of bilingual workshops for API families with high fish consumption, including pregnant women and children, and inform them about fish consumption advisories and encourage healthy fish consumption practices.
- **California Indian Environmental Alliance, Berkeley**
Through this project, CIEA will work with the Native American Health Center, Women, Infants, and Children Program (NAHC, WIC) to provide Native American families with an understanding of San Francisco Bay fish consumption advisories and how to avoid fish high in toxins. The project will also build capacity within NAHC, WIC to identify at-risk clients and to offer advice to reduce this risk.

Funded Groups

- **Greenaction for Health and Environmental Justice, San Francisco**
For the San Francisco Bay Fish Environmental Health and Justice Project, Greenaction will conduct education directly with people fishing in Southeast San Francisco. They will also engage in community outreach and education with residents of Bayview Hunters Point by giving presentations to community, parents, health groups, public housing tenants, and churches on fish contamination issues.
- **KIDS for the BAY, Berkeley**
By means of their Safe Bay Food Consumption Project, elementary school students from 6 classes will become environmental health educators in their communities. They will teach their families and people fishing on Bay piers about how to reduce intake of toxins from Bay fish consumption. Also, six teachers will learn to teach the Safe Bay Food Consumption Curriculum to future classes of students. The program will become an integrated component of the target school's curriculum.

Conduct Capacity Building

- Trainings for funded groups and project stakeholder
- Training topics include:
 - Sources of contaminants in Bay fish
 - Fish advisories
 - Health risks related to mercury and PCBs
 - Health benefits related to fish consumption
 - Project evaluation tools and methods (for funded groups)

Project Evaluation

- Evaluation of project by funded groups:
 - Formative evaluation and findings.
 - Process Evaluation – number of participants, number of San Francisco Bay fish consumers reached, and number who are "at-risk".
 - Outcome evaluation—Have activities resulted in changes in knowledge, access to advisory information, or intent to change behavior?
 - Challenges and lessons learned while implementing the project
- SAG evaluation