



## Bay RMP Steering Committee Meeting

November 3, 2023

San Francisco Estuary Institute

### Meeting Summary

Attendees	Affiliation	Representing
Keta Price	Hood Planning Group	Community Organizer
Janet Johnson	Richmond Shoreline Alliance	CBO
Francis Ranstead	Sogorea Te Land Trust	CBO
Rosa Nelson	Nuestra Casa	CBO
Skylar Sacoolas	Greenaction for Health and Environmental Justice	CBO
Lauren Weston	Acterra: Action for a Healthy Planet	CBO
Michelle Rivera	California Indian Environmental Alliance	NGO
Sherri Nelson	California Indian Environmental Alliance	NGO
Andria Ventura	Clean Water Action/ Clean Water Fund	NGO
Kelly Chen	Biomonitoring CA/CA Department of Public Health	Agency
Duyen Kauffman	Biomonitoring CA/CA Department of Public Health	Agency
Tran Pham	California EPA OEHHA	Agency
Wesley Smith	California EPA OEHHA	Agency
Loren Chumney	California EPA OEHHA	Agency
Shannon Murphy	California EPA OEHHA	Agency
Nichola Fowlks	California State Parks - Candlestick Point SRA	Agency
Mary Cousins	Bay Area Clean Water Agencies	Agency
Carrie Pomeroy	University of Santa Cruz	Science Advisor
Camille Antinori	San Francisco State University	Science Advisor
Shelly Moore	Moore Institute for Plastic Pollution Research	Science Advisor

**Staff and Others:**

- Samantha Harper, SFBRWQCB
- Kevin Lunde, SFBRWQCB
- Gerardo Martinez, SFBRWQCB
- Jenalyn Guzman, SWQCB
- Anna Holder, SWQCB
- Jay Davis, SFEI
- Martin Trinh, SFEI

## 1. Introductions and Review Goals for the Meeting

Jenalyn Guzman, a facilitator from the State Water Quality Control Board (Water Board), opened the meeting by sharing a land acknowledgement prepared by SFEI and meeting guidelines for inclusive conversation for both in person participants and Zoom attendees. A round of introductions was held to help acquaint the various community members, agency representatives, and science advisors. Everyone shared their favorite method of preparing and eating fish, with smoked salmon as the most popular and spicy fish tacos/tostadas a close second. Jenalyn closed the item by reviewing the goals for the meeting:

- Becoming acquainted with each other
- Informing the group on background and overall plan for the project
- Building consensus on basic content of the questionnaire
- Preliminary discussion of survey implementation
- Informing the group on next steps

## 2. Project Background (28:00-54:00)

Sami Harper of the San Francisco Regional Water Board's (Water Board) Planning Division, discussed the critical mission to improve and safeguard water quality in San Francisco Bay and its tributaries. Emphasizing the importance of environmental justice, she highlighted the necessity of protecting the Bay's ecosystems and ensuring that the community has access to safe, affordable, and culturally appropriate food. Specifically, Sami focused on the significance of subsistence fishing and the potential risks associated with consuming fish from the Bay.

Sami outlined the Water Board's responsibility to regulate water quality, preserve water resources, and ensure public health and environmental protection. She described the Board's process of identifying pollutants, assessing water bodies, developing plans to improve water quality (for example, TMDLs), and controlling discharges and cleanups. The primary goal was to ensure that fishers, particularly those engaging in subsistence fishing, could safely consume fish from the Bay.

Sami introduced the project's central objective, the development of a survey questionnaire to understand the subsistence fishing population's practices and behaviors. This data will be used to inform policy decisions and potentially update guidelines for safe fish consumption. The discussion delved into the complexities of pollutants such as mercury, methylated mercury, PCBs, PFAS, and dioxins, all of which pose significant health risks to consumers.

Sami acknowledged the challenges in accurately capturing subsistence fishing data, given that many fishers might not have fishing licenses, operate off the grid, or be unwilling to disclose their fishing activities due to financial constraints. Andria Ventura of Clean Water Action voiced concerns about using the EPA's definition of subsistence fishing, which might not be entirely applicable in the context of San Francisco Bay and not stringent enough to protect human health.

Sami concluded the item by touching upon the ongoing efforts to monitor pollutants and clean up contaminated sites in the Bay, emphasizing the complexities involved in these processes. Sami clarified that this subsistence fishing definition will not include tribes as there is a separate process for the tribal subsistence fishing and tribal cultural uses. The Water Board aims to collaborate with community experts and other agencies to gather comprehensive data on fish consumption practices, preferred fish species, locations, and preparation methods. This information will be critical in determining appropriate guidelines and regulatory measures to protect the community's health and the Bay's ecosystem. Sami encouraged collaboration and emphasized the significance of community-based organizations in collecting accurate data to inform future policy decisions.

### 3. General Plan for this Project

Jay Davis of SFEI provided a detailed background of SFEI's involvement in various monitoring and survey projects related to fish consumption in the Bay. Jay mentioned his extensive experience in leading the regional monitoring program (RMP) since 1993 and their participation in several similar initiatives, such as the fish mercury project and the development of the 2000 survey questionnaire.

In the initial part of the discussion, Jay addressed the primary reason for their current project, acknowledging that SFEI are not experts in conducting consumption surveys but do specialize in monitoring water quality. He referenced SFEI's contributions to the 2000 survey and discussed the significant investment made in the survey, highlighting a budget of over half a million dollars, with contributions from various organizations like the RMP and the California Department of Health Services (now called the California Department of Public Health, CDPH).

Jay emphasized the collaboration between their organization and the San Francisco Bay Conservation and Development Commission (BCDC), focusing on the importance of developing a comprehensive questionnaire that can facilitate data collection on fish consumption in the region. He highlighted the significance of their partnerships with

different entities, including CDPH, underscoring the importance of their role in supporting the technical aspects of the survey.

Furthermore, he discussed the importance of engaging with communities and gathering input from various stakeholders, stressing the need to ensure that the survey is comprehensive and informative. Jay also touched on the significant increase in funding from the Environmental Protection Agency (EPA) for water quality studies, indicating the relevance of their current project in addressing key water quality issues such as PCBs, mercury, and PFAS.

Throughout the conversation, Jay and other participants discussed the cost of the survey, highlighting the expenses associated with community participation and the time and effort required to plan and conduct the workshops and meetings. Keta Price addressed the importance of recognizing the expertise of community representatives and ensuring that their contributions are adequately compensated, a sentiment echoed by Janet Johnson and the group.

As the meeting progressed, Jay outlined the timeline for the project, indicating the deadlines for the draft survey questionnaire report and the final report. The contract stipulates a draft should be produced by March 2024 with final report and another public outreach meeting by May 2024. He emphasized the need for effective utilization of the funds and the importance of developing a robust survey tool that can support the regional assessment of consumption. He also discussed the importance of considering additional data points beyond consumption rates to address the Water Board's information needs comprehensively.

The discussion concludes with the acknowledgment of the significance of equitable compensation for expertise and the need to recognize the value of community input and participation in such projects. The participants expressed their commitment to ensuring that the survey provides valuable insights into fish consumption in the bay and supports the ongoing water quality regulatory efforts in the region.

#### **4. Previous Consumption Surveys and Fish Monitoring**

Jay expanded on the background explanation of the previous survey, conducted over a period of four years, beginning in 1998. A detailed technical report was released in 2000, followed by a shorter public summary in 2001. The study involved over 150 fishing site businesses and 1,700 anglers, with ten interviewers working on the project.

The survey underwent a rigorous review process involving technical experts, making it a highly reputable study. Its influence extended to regional and statewide water quality objectives, particularly impacting California. The meticulous design of the survey questionnaire was emphasized.

Jay reiterated the primary objective of the meeting, emphasizing the need to compile a list of questions for the upcoming survey, rather than delving into detailed responses. He noted that the study did not focus on subsistence fishing, mainly targeting the general fishing population. While the survey captured data from various groups fishing on piers, party boats, beaches, embankments, and private boats, it may have missed those scattered along the shoreline and harder-to-reach areas.

The survey data, although not comprehensive for all groups, provided a solid foundation for future analysis. However, it was acknowledged that the questionnaire needed modifications to suit the specific objectives of the subsistence fishing-focused survey. Several other related studies were mentioned, including those conducted by different organizations and research groups, contributing valuable insights to the field.

The discussion later shifted to the regional monitoring program's efforts and the upcoming monitoring cycle scheduled for 2024. Planning for this cycle will begin in early December, leveraging the previous survey data for comparison. Jay highlighted the limitations of their coverage, mentioning specific gaps and the ongoing efforts to expand their sampling regions, particularly in historically contaminated areas.

Jay then delved into the extensive data set obtained from the last survey, emphasizing the varying levels of contaminants like mercury and PCBs in different species. The analysis underlined the complexity of factors influencing contaminant levels, including fish size, location, and the presence in fats and skin. He also discussed the persistent issue of mercury contamination, linked to historical industrial activities and mining operations in the area.

Jay discussed PCBs and PFOS, with the team highlighting the growing concern and continued monitoring efforts. The RMP is committed to studying the trends and improving their understanding of the contaminants' impact. The team referenced their collaboration with OEHHA to create and disseminate advisory posters aimed at educating the public on safe fish consumption practices.

The meeting concluded with the team discussing future plans to introduce the advisory posters during the survey process to familiarize participants with the various fish species and associated consumption guidelines. The importance of considering

sensitive populations (children and people who could bear children) due to potential neurological impacts caused by contaminants was also emphasized.

## 5. Draft Questionnaire (Part 1)

In this item, Martin Trinh of SFEI reintroduced the draft survey, emphasizing its purpose to generate data for the Water Board regarding local fish consumption. He outlined the specific information the survey aims to collect, including data on the types of fish caught, the locations, and the demographics of the fishers. Martin discussed strategies for implementing the survey, mentioning the use of oral, written, and online surveys.

Participants then engaged in a discussion about the best approach to surveying various communities, considering the sensitivity of some communities about fishing regulations and the importance of ensuring their safety during the survey process. Martin suggested using a combination of approaches, including intercept surveys, community events, and involving local community organizations for maximum outreach.

There is a discussion about the introductory section of the survey, with suggestions to make it more conversational and engaging, ensuring that respondents understand the purpose and importance of the survey. The participants also considered incorporating open-ended questions to allow respondents to express their reasons for fishing and consuming fish, as this information could be valuable in understanding the community's relationship with fishing beyond just subsistence needs. The group emphasized the need for flexibility and sensitivity while conducting the survey, particularly in terms of approaching different communities and understanding their cultural practices and reasons for fishing. Participants stressed the importance of creating a comfortable environment for respondents to share their experiences and perspectives freely.

Carrie expressed concerns regarding the practicality of a written survey. Instead, she proposed the idea of conducting surveys directly at the sites of fishing activities, utilizing either paper or digital data collection. A suggestion was made to organize a tabling event, potentially considering the possibility of carrying out surveys at the Oakland fishing fair.

Several suggestions were put forward for the content of the survey, including the need to inquire about prior experiences with fish consumption interviews, emphasizing the importance of capturing data on a seasonal basis due to the variation in fish consumption patterns among different cultures and communities. It was suggested that

survey questions should account for both fish and shellfish, with the script explicitly clarifying that the term "fish" encompasses both categories.

During the discussion, the necessity of including question 5 was deliberated upon, with Shelly proposing a broader focus on individuals who consume fish rather than specifically targeting subsistence fishers. Rosa advocated for providing compensation to survey participants.

The group emphasized the importance of sharing the survey results with the community following the data collection process. Additionally, it was noted that questions 6 and 8 appeared to be repetitive, leading to the decision to eliminate question 6 from the questionnaire. The concept of using a model of an 8-ounce fish during the survey was raised, prompting discussions about the financial responsibility associated with this approach ie. Who would provide the models?

Further suggestions were made to exclude the mention of the OEHHA advisory in question 10a, with the intention of preventing any potential fear among respondents. It was recommended to use the term "fish type" instead of "species" in the questionnaire. Lastly, the group proposed adding question 10g to ensure the comprehensive coverage of all relevant fish types.

The participants deliberated on the wording and structure of the survey questions, with a focus on making the questions conversational and engaging for respondents, particularly regarding the introduction of the survey. They also discussed the importance of understanding the cultural and seasonal aspects of fish consumption, suggesting adding questions related to the frequency of fish consumption over specific time periods to capture seasonal trends accurately. Sherri Norris of California Indian Environmental Alliance (CIEA) stressed the need to be flexible with the definition of subsistence fishing, noting that some communities only heavily consume fish during some portions of the year.

The participants shared their experiences and challenges encountered during the survey process. They discussed the significance of wearing identifiable t-shirts and providing clear identification for surveyors. This measure was suggested to improve participant engagement and trust during the survey process.

There was a query about the possibility of repeat interviews, and it was suggested that follow-up questions could be beneficial in certain cases. The conversation then shifted to the challenges faced by overburdened communities, highlighting the necessity of fair compensation for their participation. Community based organizers, Keta Price



and Sherri Norris, shared their experiences with similar survey projects and the impact of compensating survey participants, discussing the intricacies of providing incentives while adhering to financial regulations.

The group then explored the nuances of survey design, including the need for concise introductions and the importance of managing the survey length to ensure participant engagement. They discussed the relevance of certain questions, including inquiries about the cleanliness of the water and the consumption of fish caught by others.

The group shared their perspectives on the various factors affecting fish consumption and the need to consider individual circumstances, such as income levels and living costs. They also emphasized the importance of capturing the respondents' viewpoints regarding the cleanliness of the water and the impact on their fish consumption habits.

The discussion further delved into the survey guidelines, with the participants emphasizing the importance of a clear and concise questionnaire that captures essential data without overwhelming the participants. They discussed the significance of employing a structured approach that allows for flexibility in engaging with the community while adhering to the survey objectives.

The participants also underscored the importance of accommodating diverse perspectives and experiences in the survey, ensuring that the survey adequately reflects the community's varied fish consumption practices. They discussed the challenges of standardizing serving size measurements and the need for comprehensive survey guidelines to ensure accurate data collection. Wes Smith clarified OEHHA advisories are based on an 8-ounce serving size of uncooked fish/shellfish which is roughly equivalent to a 6-ounce cooked meal.

The participants emphasized the significance of refining the survey based on the insights gained during the discussion and the importance of implementing a well-structured approach to engage the community effectively. Martin encouraged participants to provide any additional feedback they might have, underscoring the importance of creating a survey that is both informative and respectful of the communities' needs and perspectives.

## **6. Break**

## 7. Draft Questionnaire (Part 2)

The agenda item began with a suggestion to avoid pinpointing specific fishing locations in Question 12. There was a proposal to incorporate a map in Questions 11-14, allowing participants to mark their fishing locations. The group considered consolidating the references to individuals, families, and households to streamline the questionnaire's structure, with Carrie recommending the replacement of the household question with an inquiry about the individuals with whom respondents share their catch.

Duyen emphasized the importance of highlighting specific age groups at greater risk, prompting discussions about potentially introducing the 18-45/49 age range. Question 19 was scrutinized for its effectiveness, leading to a proposal to inquire about the specific elements of the fish considered safe for consumption, which would be included as Question 10k. Kevin proposed an optional risk communication component for questions 19-21.

Sami suggested a conditional flow for participants who do not consume fish from the bay, followed by questions 19-21, ensuring continued focus on risk communication. The significance of race, age, and gender in relation to exposure was stressed, while educational and income levels were considered less crucial. Camille brought attention to the possibility of people traveling from distant locations to fish in the bay, prompting a need for information on the location of subsistence fishing to be allocated within the SF Bay.

Further deliberations ensued about the relevance of income and education levels in the survey, with a consensus forming that zip codes might serve as a more pertinent data point for environmental justice purposes. Carrie proposed the inclusion of questions regarding the sources from which participants obtain information about the safest fish to consume, with a decision made to eliminate questions 24 and 25 and instead inquire directly about participants' information sources and their knowledge acquisition related to bay fishing.

Considering the potential comparability of the collected data with national census data, Kelly suggested retaining some elements of questions 25a and 25b for analytical purposes, emphasizing the value of aligning the data with the broader census framework while streamlining unnecessary aspects of the survey, particularly emphasizing the removal of question 24. The item concluded with a consensus to integrate the proposed revisions and reconvene for the finalization of the comprehensive fish consumption survey questionnaire.

Jay noted the advisors had identified the need for pilot testing of a survey to ensure it works effectively across various communities. The group initially planned two workshops but now needs to incorporate focus group work. The discussion revolved around how to conduct the pilot testing, either as a group or through different communities independently testing the questionnaires. The conversation emphasizes the importance of pre-testing and flexibility in the survey process to ensure its accuracy and adaptability.

The group expressed the need to gather feedback from various community-based organizations and individuals involved in the pre-test. They discussed the possibility of limited pre-testing involving 3-5 people per community and the importance of funding for the pre-test process.

As the meeting progressed, the conversation shifted to the challenges of defining the target population due to the diverse nature of the communities involved. They discussed the need for specialized training for survey conductors and data handlers, as well as the potential use of a Google form for data collection. The group deliberated the complexity of assessing multiple sources of exposure to contaminants and the importance of thorough data entry and management.

The group expressed the need to determine the appropriate sample size for the survey and consider the financial implications of the entire process. They discussed the possibility of engaging additional community groups and the importance of translation services for non-English-speaking communities.

Attendees also deliberated on the idea of providing optional survey closure statements or contact details for follow-up, discussing the potential benefits of maintaining communication with the respondents post-survey. Overall, the conversation was centered on the nuanced construction of survey questions to obtain meaningful data while ensuring sensitivity to respondents' backgrounds and circumstances.

## **8. Preliminary Discussion of Survey Implementation**

During the discussion, the participants explored the concept of subsistence fishing, delving into its various implications beyond just economic considerations. They discussed the challenges of data collection and the importance of sensitivity and understanding while engaging with the communities involved in subsistence fishing. The group noted subsistence is not solely driven by economic factors, with reference to the fishing community and their reliance on the bay for sustenance. There was an agreement to focus on gathering data rather than labeling or categorizing the

participants, emphasizing the importance of approaching the survey with respect and understanding.

The discussion also touched upon the need for effective survey techniques, taking into account the different modes of data collection, including in-person surveys and intercepting individuals during fishing activities.

There was an emphasis on the importance of understanding the target audience for the survey and the necessity of intentional and strategic targeting of specific groups to gather relevant data. Participants discussed the need to define the population under study and the significance of obtaining on-the-ground knowledge before conducting the survey. They stressed the importance of mapping out the fishing areas and understanding the dynamics of different communities to ensure the survey's effectiveness.

Furthermore, the conversation touched upon the importance of community-based organizations in conducting the survey and the need to provide incentives to encourage their participation. The participants highlighted the competing social issues that could potentially hinder community engagement and stressed the importance of recognizing and addressing these concerns. Carrie brought up the data collection methods used by the Department of Fish and Wildlife, including intercept and telephone surveys, emphasizing the importance of combining different data sources to estimate catch rates and overall fishing activity.

Throughout the discussion, the participants emphasized the need for a holistic and empathetic approach to data collection, considering the complexities and sensitivities involved in the context of subsistence fishing. They highlighted the importance of understanding the target population and effectively mapping out the fishing areas to ensure the survey's success. The participants recognized the challenges associated with data collection and emphasized the need for strategic planning and sensitivity when engaging with the communities involved in subsistence fishing.

The team stressed the importance of pretesting the survey to ensure its effectiveness and the flexibility required for smooth implementation during the actual survey. It was suggested that a group of 3 to 4 individuals from various communities should test the survey in real-life settings, followed by an evaluation of what worked and what did not work. Keta proposed the idea of conducting a focus group comprising 9 individuals to thoroughly examine the delivery of the survey and guarantee its replicability. Concerns were raised regarding the funding required for the pretest, leading to deliberations on potential sources for the necessary financial resources.

Andria questioned which specific communities would be involved in the pretest and emphasized the necessity of outlining a clear budget for the pretest and subsequent survey implementation. Kevin stressed the need to gather information on the occurrence of subsistence fishing, proposing the establishment of a metric to measure this practice in terms of the number of meals consumed per day. He also highlighted the importance of determining the appropriate sample size for the survey, considering options such as  $n=200$ , 300, or 500, which would subsequently inform the allocation of the budget for conducting the surveys.

The meeting concluded with an agreement to conduct a thorough analysis of the required budget for the pretest and subsequent survey implementation, ensuring that the necessary resources were allocated to facilitate the comprehensive and efficient execution of the proposed fish consumption survey. Further discussions were planned to outline specific strategies for funding and community involvement in the pretesting and survey implementation processes.

## 9. Next Steps

The discussion surrounding next steps primarily revolved around the need for continued input and feedback, emphasizing the open door for suggestions until the end of the following week. The team highlighted the importance of gathering feedback through different modes and stressed the importance of receiving written feedback.

The meeting also touched upon the plan to mock up the questionnaire for pre-testing, with an aim to ensure efficient and timely completion of the focus group testing. There was a specific mention of seeking additional funding for groups willing to volunteer for the tasks, with an action item to send an email to compile the list of volunteer groups.

Jay laid out a proposed schedule, including an anticipated meeting in early January for the focus group testing, followed by the draft survey questionnaire report at the end of February. The final meeting was slated for May, with the contract's final report due at the end of that month. Jay emphasized the need to quickly move forward with the various steps and deliverables outlined in the contract.

During the discussion, there was a mention of ongoing funding concerns and the need to find additional sources for the survey. The team contemplated the possibility of seeking funding earlier, potentially before the May deadline, considering the completion of the agreed-upon survey. The meeting concluded with an invitation for participants to

provide feedback and evaluations, both in person and online, and with a hopeful note from the organizers about the positive turnout and their excitement for the upcoming project.

Furthermore, it was mentioned that the team would follow up with database organizations within the next week to provide more details about the meeting and the subsequent steps. The participants expressed enthusiasm for the project and conveyed their commitment to work collaboratively on the initiative.

## 10. Feedback on Today's Workshop

SFEI and the Water Board expressed appreciation to the community members, agency representatives, and scientific advisors for the insightful and nuanced discussion. The group expressed the desire to get more community based organizations involved, particularly from Asian organizations. Follow-up will be key throughout the process of developing this survey.