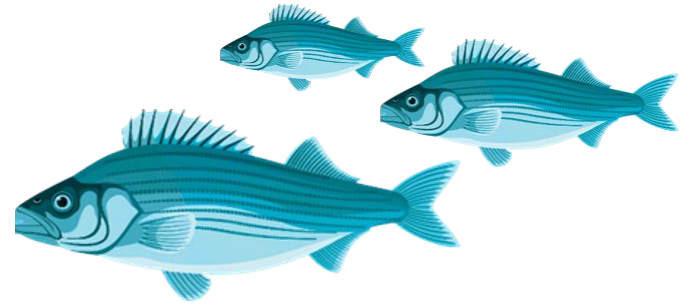


San Francisco Bay Fish Consumption Survey Questionnaire: Workshop Three

May 13, 2024

Virtual Meeting



Introductions

Community Organizations and Representatives
Science Advisors
Water Board Staff
SFEI Staff
Guests

Goals of this Meeting

1. Present the final questionnaire report
2. Discuss survey implementation
3. Inform the group on next steps

Item 2) Final Report on the Questionnaire

Desired Outcome:

Inform the community representatives and the technical advisors

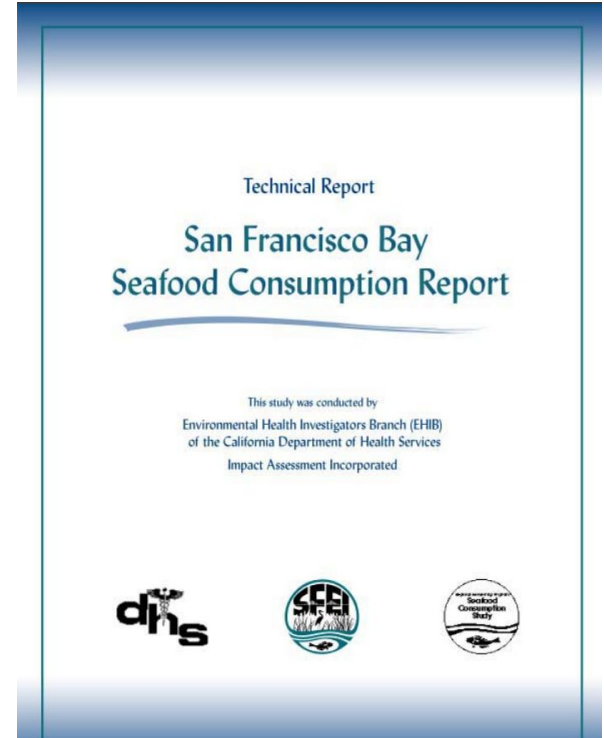
Questionnaire Report Development

- Review of past surveys
 - 2000 SFEI Survey
 - 2015 San Diego Consumption Survey
 - 2007 Santa Cruz Wharf Survey
 - 1997 APEN Laotian Survey
 - 2016 & 2017 ACE Surveys
 - CIEA Consumption Surveys
- Feedback from two workshops
- CBO and agency feedback
- Technical peer review
 - Dr. Carrie Pomeroy
 - Dr. Camille Antinori
 - Dr. Shelly Moore
 - Dr. Nicole Smith



Notes on Specific Questionnaire Elements

- Generally follow process of 2000 San Francisco Bay survey
- Increased focus on seasonality
- Include question on Income
- No precise, generally accepted definition of “subsistence fishing”
- Partially closed-end question format, with opportunities for some open-ended responses
- Primarily intercept survey with opportunities for other modes



Steps Since Workshop #2

- Draft Questionnaire completed with feedback from workshops and Water Board
- SFEI drafted a report on March 8 and received comments from the group
- Two Meetings with Technical Advisors focused on report and implementation
- The report is now almost completed sans section on Implementation Guidance which will be finalized after this workshop



Item 3) Guidance on Implementing the Consumption Survey

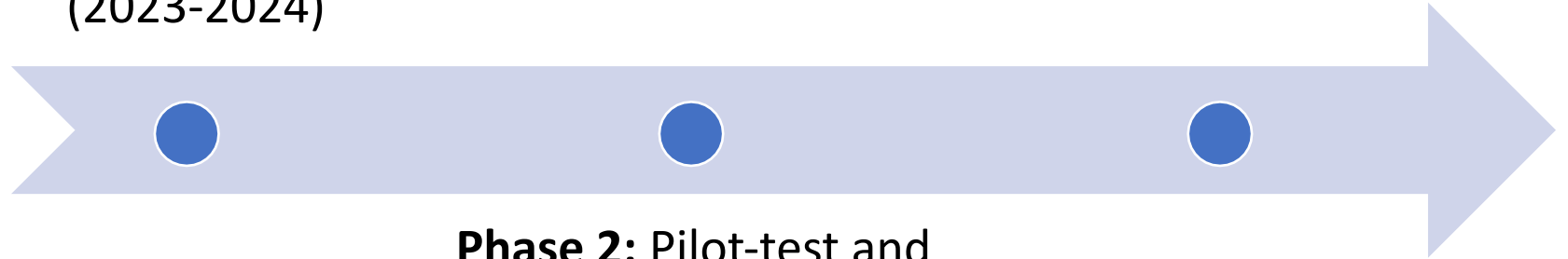
Desired Outcome:

Obtain input from community representatives and technical advisors on survey implementation

Project Timeline

Phase 1:
Develop draft
survey
(2023-2024)

Phase 3: Potential
region-wide effort
(2025-X)



Phase 2: Pilot-test and
ground-truth survey at specific
sites, design sampling strategy
(2024-2025)

Draft Compilation of Implementation Guidance

Coordination

- A contractor should be hired to coordinate the project (Coordinator)
 - Preferably an entity with experience in conducting fish consumption surveys
 - Ideally beginning with Phase 2
 - Convene meetings to perform additional planning and review progress
 - Train the community interviewers
 - Compile data from multiple communities
 - QA/QC at multiple points along the way
 - A multi-lingual team will be needed



General



- Continue to include science advisors
- Continue to include CBO members
- Follow but adapt the approach used in the 2000 study

Working with CBOs

- Training should consist of
 - Background and context of survey
 - Guidance to ensure ethical engagement
Collecting data from them (if they agree to participate)
 - Handling those data
 - Entering data
 - Conveying data to data entry person(s)
 - Safety in the field, etc.



Working with CBOs

- Selecting/prioritizing communities for Phase 2 pilot testing
 - Within the limits of funding, a small number of community groups should pilot the survey to X number of community members
- Training
 - Community interviewers should be selected by their organizations and trained by the Coordinator to administer the survey and enter data
 - Coordinator should develop training and train the interviewers
 - Interviewers should practice administering the questionnaire initially with Coordinator and in the field



Photo taken by Kelly Moran (SFEI)

Study Design

- The study should primarily use shoreline intercept surveys
- Selecting intercept locations
 - Communities are the most knowledgeable about important fishing locations
 - Start with a plan of interviewing community members through planned or specially convened events for this purpose to make initial list of locations where people fish
 - Overlay map of CDFW/CRFS locations, as that is usually where the fish are
- Opportunistically include off-site surveys
 - Arrange a plan ahead of time to pilot surveys at “tabling” events
 - Adapt questionnaire accordingly



Photo taken by Kelly Moran (SFEI)



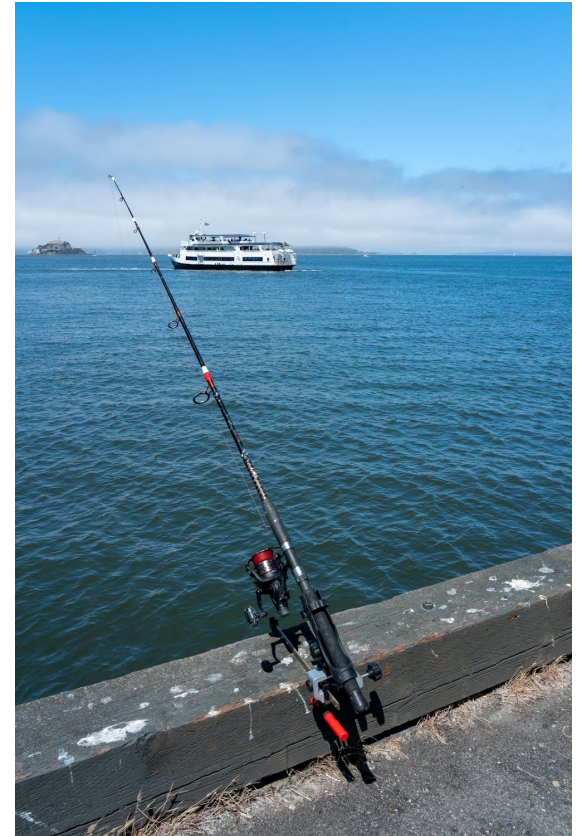
Sampling Sites from 2000 SF Bay Seafood Consumption Study

Study Design

- Criteria for location selection
 - High known or suspected rate of subsistence fishing
 - Other locations of importance to the community
 - Locations of interest to the Water Board or other agencies
 - Look at locations indicated by CDFW and CRFS

Sampling Design

- Primary design is same as in 2000 - targeting fishers at selected intercept locations - but obtaining clearer information on fishers and subsistence
- Focus on shore-based (versus boating) fishers
- CBO input is important to guide survey mode (intercept versus off-site)
 - Conversation with CBOs on subsistence fishing - best ways of reaching them
- Schedule surveys across time (seasons/weekends/weekdays)
- Random sampling?
 - Idea for discussion: doing random sampling in communities akin to the APEN survey



Sample Size

- Overarching Bay-wide goal is to survey at least 100-200 subsistence fishers
- Within each community: sample size sufficient to characterize community subsistence consumption rates
 - Sample sizes could be estimated using the means and variance data from the 2000 study (as the 2000 study did based on the Santa Monica Bay study)
 - Determine what is feasible in the pilot testing



Capturing Metadata



- Items listed at the end of the questionnaire in the “Post Survey Reflection” section
- Note any problems encountered
- Census of all anglers with fishing poles or other fishing equipment present at the beginning of the survey shift
 - Numbers of anglers who appeared over 18 years of age and less than 18 years of age
- Site summary
 - Site name
 - Start and end time for each site
 - Total number of interview attempts per site on this form for each sampling day.
- Site photos and notes of relevant conditions (weather, etc.)

Conducting the Survey

- The introduction approach can be flexible
- The participant should be assured that participation is voluntary and their responses are anonymous
- All relevant questions are to be asked and answers clearly recorded on hand-written or tablet forms
 - Capturing responses using tablets would be preferred
 - Will need to figure out how to record open-ended responses
- Will need a portable, laminated poster of fish photos
- Will use multiple fish models (San Diego survey)
- Maps of the Bay and local fishing locations will be presented to enhance accuracy of responses with regard to locations (either in print or shown on tablet)
- Survey will be kept to 15-20 minutes

Some of the Survey Tools Used by Field Interviewers



Key Chain with Tape Measure, Hat, and Vest with Survey Logo



Plastic Model of an 8-ounce Portion of Raw Fish Fillet



Binder with Map of SF Bay and Color Photographs of 13 species of Fish, 3 Species of Shellfish

Conducting the Survey (continued)



- Survey administrators will wear identifiable outerwear with appropriate insignia
- Survey administrators will clearly state that they are not looking for fishing licenses
- In order to minimize barriers to participation of those who are more comfortable speaking a language other than English, the questionnaire will be translated to multiple languages.
- Other survey materials
 - Interviewer ID card/name tag
 - Physical card w/ QR code for Coordinator contact & further info (website)

Follow Up

- Engaging with survey respondents after the survey
 - Collect email or phone (i.e., preferred contact) to notify respondents when results are released
 - Provide link/QR to project page
- The Advisory section is optional (up to the communities)
 - Provide physical copies/links to current advisories
 - Advisory poster would be handy
- Compensation/Gifts
 - CBOs overwhelmingly indicated monetary compensation/gift cards should be standard

Consumption Survey Questionnaire for San Francisco Bay Subsistence Fishers

Home



Developing a Consumption Survey Questionnaire for San Francisco Bay Subsistence Fishers

The San Francisco Estuary Institute (SFEI) and San Francisco Bay Regional Water Quality Control Board (Water Board) are working with representatives of local fishing communities, agency representatives, and scientists to develop a questionnaire to better understand consumption of fish by San Francisco Bay subsistence fishers Area. Subsistence fishers are people who fish to feed themselves and their families and friends on a regular basis, rather than sport fishers who fish as a recreational activity. Developing this questionnaire is phase 1 of a three-phase project. Pilot testing of the questionnaire by communities will be conducted in phase 2.

In phase 3, community organizations will use the questionnaire and survey protocol to conduct surveys of subsistence fishers in their communities.

A series of workshops are being held to obtain input from the groups involved.

The first workshop was held at SFEI on November 3, 2023 from 12PM - 5PM PST. The goal of the first Workshop was to begin the process of developing a questionnaire that communities can use to gather information on consumption by subsistence fishers. The discussion focused on what questions to include in the survey. The agenda is posted [here](#). Presentation slides are posted [here](#). A meeting summary is available [here](#).

Quality Assurance

- Follow measures listed for the 2000 survey

C. Quality Assurance (QA) and Quality Control (QC) Measures

A variety of QA/QC measures were incorporated in order to minimize measurement errors or other biases.

QA procedures put into place prior to data collection included:

- Obtaining review and input on all study materials and protocols by Seafood Consumption Study Advisory Task Force members
- Field testing of survey instrument
- Thorough training of interviewers in all aspects of survey administration
- Incorporating visual cues and tools to maximize recall during the interview

QC measures undertaken throughout the data collection phase included:

- Self-review of all forms completed by interviewer at end of shift
- On-site field audits of interviewing activities by the field coordinator or other project staff on 49 sampling days (31% of all sampling days).
- Manual review of all completed survey questionnaires by field coordinator for completeness and correct coding
- Regular verbal and written feedback to interviewers individually as needed
- Scheduled group meetings to provide periodic updates and to review procedures
- Phone calls to 5% of all respondents to verify that the interviews did take place
- Data review and editing to detect inadmissible and out-of-range values
- Inclusion of redundant questions worded differently to check consistency of answers

Data Analysis

- Conducted by a knowledgeable practitioner
- Include variable for mode of survey to allow comparisons of data from multiple approaches
- May need to find a statistical approach to combine data from intercept surveys and off-site surveys from community events



Item 4) Next Steps

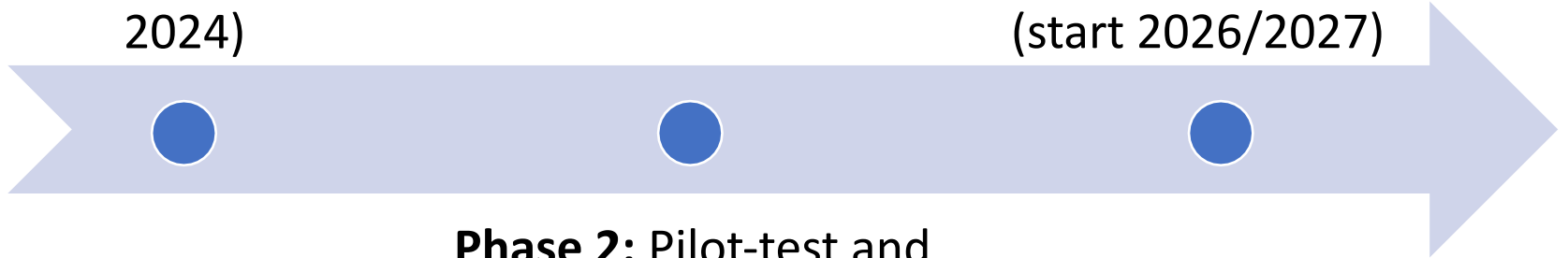
Desired Outcome:
Informed group

Next Steps

Phase 1: Develop draft survey (May 2024)

Phase 3: Potential region-wide effort (start 2026/2027)

Phase 2: Pilot-test and ground-truth survey at specific sites, design sampling strategy (late 2024-2025)



Phase 2: Pilot Test and Ground Truth

BACWA to support a pilot survey

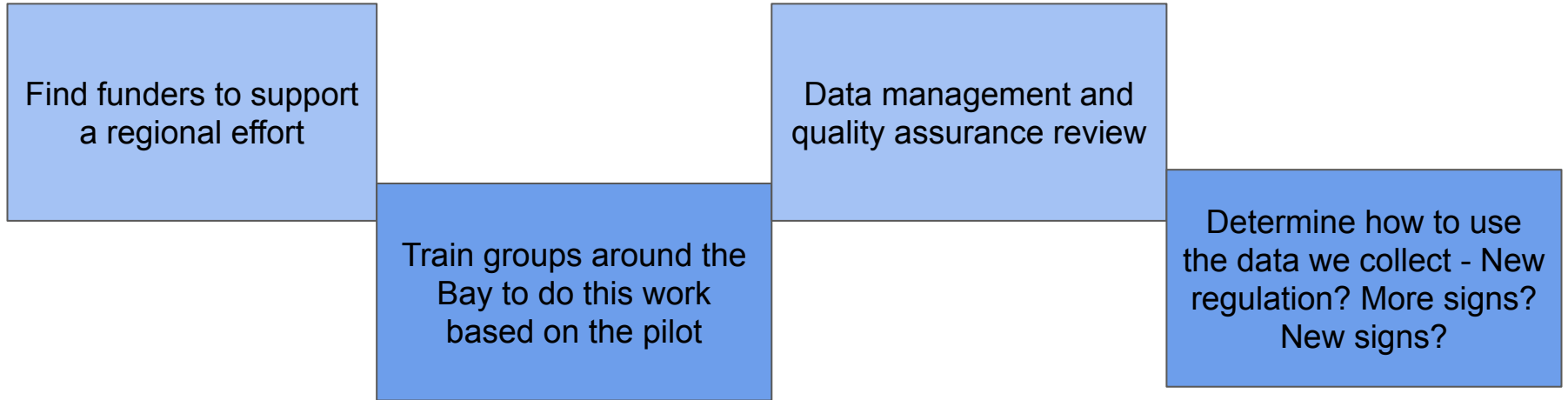
Identify groups and communities that have the capacity to conduct a pilot survey

Test the survey with community members and identify issues

Revise the implementation guidance and test the survey with a larger audience

Develop “final” guidance to train community implementers for phase 3

Phase 3: Region-wide Survey



Item 5) Feedback

Desired Outcome:

Obtain feedback on the Workshop and Project from
Workshop participants

Feedback

We need your feedback on:

- **Today's workshop**
- **This series of workshops**

Some questions to consider:

- **Do you feel like you or your organization had a meaningful impact on this process? If not, is there a way to change that?**
- **How do you feel about working with the Water Board in the future?**
- **How do you feel about working with SFEI in the future?**
- **Any other feedback?**