# Developing a San Francisco Bay Fish Consumption Survey Questionnaire: <br> Workshop \#2 

February 15, 2024
Virtual Meeting


We acknowledge the San Francisco Bay is the ancestral homeland of many indigenous people, including the Ohlone, Patwin, Coast Miwok, and Bay Miwok.

## Item 1: Introductions and Review Goals for the Meeting

Led by Sami Harper, Water Board
Desired outcomes of this item:

- Understanding of meeting goals
- Agreement on guidance for inclusive conversation
- Introductions


## Zoom Guidelines

- Update your name and add your affiliation
- Raise your hand if you have a comment or question
- Unmute yourself and turn on video when you are speaking
- You can use the chat function if you have a comment, question, or technical issue, but it's better to verbally provide your input if you're comfortable with that
- We will record the meeting for note-taking purposes only


## Guidelines for Inclusive Conversation

1. Release judgement
2. Actively listen to understand, not defend
3. Disagree with the idea not the person
4. Make space and take space
5. Avoid jargon
6. Take care of yourself

## Project Big Picture Outline



## Meeting Goals

1. Reach consensus on content of the questionnaire
2. Inform the group on next steps

## Introductions

- Name
- Affiliation


## Item 2: Revised Draft Questionnaire

## Led by Gerardo Martinez, Water Board

Desired outcomes of this item:

- Obtain input from the community representatives and the technical advisors


## Revised Timeline



## Work Since Workshop \#1

- Incorporated CBO and agency feedback from our first workshop
- Updated draft with SFEI, Water Board, and advisors
- Water Board provided feedback
- Advisors gave technical advice
- General comments from the Water Board
- General comments from the technical advisors


## Feedback Framework

Review one section at a time


# Draft Questionnaire 

By Section

## Section 1: Introduction

Hello, my name is $\qquad$ . I am from [CBO Name] and we are doing a survey to understand how much fish and shellfish are caught and consumed by people fishing in the Bay. The survey will support efforts to promote safe consumption of Bay fish.

There are no right or wrong answers to any of these questions. I am not checking fishing licenses or checking your catch.

You can skip any question you don't want to answer. You can also stop the interview at any time. Your responses will be kept anonymous. The survey will only take about 15-20 minutes. Are you willing to take the survey?

## Section 1: Introduction

Question 1) Our study is called the San Francisco Bay Seafood Consumption Study. Have you been interviewed before for this study?

Question 2) Not including today, in the last 4 weeks, how many days have you gone fishing in the Bay? (show map)

Question 3) What do you usually do with your catch? Check all that applyEat Myself $\square$ Share with those I live withUse for bait Give to community/othersTrade or Sell $\square$Catch and ReleaseOther: Question 4a) Do you consume any of the fish you or others catch from the Bay? $\square$ Yes $\square$ No If no, end survey Question 4b) (if yes) - Why do you fish/eat fish from the Bay? Check the top three reasons.Cultural HeritageHealth/NutritionShare with those I live withTo Have Fun/RelaxBarter/Sell
Family TraditionTo be with friends/familyOther: $\qquad$ Question 4d) If your fishing relates to cultural/traditional/familial practices, please explain how: [PRIORITY QUESTION FOR WORKGROUP DISCUSSION]

Question 4e) If you couldn't eat fish from the Bay, how hard would it be for you to replace that food with food bought from stores, restaurants, or other commercial sources? (on a scale from 1 to 5 : 1 being easy and 5 being very hard) $\qquad$

## Section 2: Consumption

(next slide)

Question 5) How many years have you been eating fish that you or someone you know has caught from the Bay?< 1 Year1-5 Years6-10 Years11-20 Years21-29 Years> 30 Years

Question 6) In the last 4 weeks, how many times did you eat fish that you or someone you know caught from the Bay?>once a day $\square$ About every day $\square$3-4 times a week1-2 times a week2-3 times a month< once a month or never

## Question 7) In the last 12 months, how many times did you eat fish that you or someone you know caught from the Bay?

>once a day $\square$ About every day $\square$ 3-4 times a week1-2 times a week2-3 times a month< once a month or never
## Question 8) Please indicate how often you catch and eat fish in certain seasons

|  | July - Sept (Summer) | Oct - Dec (Fall) | Jan - March (Winter) | April - June (Spring) |
| :---: | :--- | :--- | :--- | :--- |
| More than once a week |  |  |  |  |
| Once a week |  |  |  |  |
| Once a month |  |  |  |  |
| Less than once a month |  |  |  |  |
| Don't know |  |  |  |  |

Question 8a) Please specify reasons for each season ie. Fish Availability, cultural practice, etc. $\qquad$

## Section 2: Consumption

Question 9) This is a model of 8 ounces (half pound) of raw fish fillet [SHOW MODEL]. When you eat a meal that includes fish from the Bay, is the amount that you eat:


OR
1.5 oz6 oz3 ozLess/By how much

## Section 3: Species

Question 12a) I have some pictures of fish that can be caught from the Bay. Looking at these pictures, please show me which fish you have eaten in the past year. Again, these are the fish you ate in the past year which you caught or someone you know caught from the Bay. The fish could have been fresh, frozen, dried, canned or smoked. Start with the fish that you eat the most.

Question 12b) How many times have you eaten this fish in the last four weeks?
$\square$ >once a day About every day 3-4 times a week1-2 times a week2-3 times a month $\square$ < once a month or never

Question 12c) What is the approximate length in inches of this kind of fish that you eat?
$\square$
6-12 in12-18 in18 in+

Question 12d Which parts of this fish do you eat?The whole fish $\square$ Fillet $\square$ Skin $\square$ Eyes $\square$ Cheeks $\square$ Guts $\square$ Eggs $\square$ Other: $\qquad$

Question 12e) What do you do with the parts of this fish that you do not eat?Discard
Stew
Give to othersOther: $\qquad$

Question 12f) How do you prepare and cook this species?Raw $\square$ Baked $\qquad$ Grilled $\square$ Smoked $\square$ Tinned $\square$ Boiled $\square$ Fried $\square$ Jerky $\qquad$ Paste $\square$ Other: $\qquad$

## Section 4: Location

Question 13) How often do you fish at this location? (skip if this is not a shoreline intercept survey)>once a dayAbout every day $\square$ 3-4 times a week $\square$ $\square$ 1-2 times a week $\square$ 2-3 times a month $\square$ < once a month or never

Question 14a) At what Bay location do you fish the most? $\qquad$ How often do you fish there?>once a day $\square$ About every day $\square$ 3-4 times a week1-2 times a week $\square$ 2-3 times a month < once a month or never Question 14b) Why this specific location, ask for top two reasonsClose to home/workConvenient ParkingSpecific Fish AvailableOther:Don't need licenseLots of Fish AvailableOther things for others to do

Question 15a) Do you fish at other locations? $\square$ Yes (continue with 15b) $\square$ No (got to section 5)
Question 15b) If yes, Where? $\qquad$ Question 15c) How often?>once a day About every day $\square$ 3-4 times a week1-2 times a week $\square$ 2-3 times a month $\square$ < once a month or never
}

## Question 15d) Why those specific locations, ask for top two reasons

Close to home/workConvenient ParkingSpecific Fish AvailableOther:Don't need licenseLots of Fish AvailableOther things for others to do
## Section 5: Sharing and Eating Catch

Question 16) How many people altogether, including yourself, do you live with?

Question 17) Of those you live with, who eats the fish that you or someone you know catches from the Bay? Please list those you live with including age, gender, and how often they eat Bay fish:

| Relationship to Respondent | Sex (M/F) | Age | How often they have eaten Bay fish in the last 4 weeks |
| :--- | :--- | :--- | :--- |
| Self (Interviewee) |  |  | $\square>0 n c e$ a day $\square$ About every day $\square$ 3-4 times a week <br> $\square$ <br> $\square$ |
|  |  |  |  |
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|  |  |  |  |
|  |  |  |  |

## Section 5: Sharing and Eating Catch

Question 18a) Do you share the fish you/others catch with others? $\square \mathrm{Yes} \square$ No
18b) Who outside of your household eats the fish that you or someone you know catches or consumes from the Bay? Please list those you know about including age and genderFamily
$\square$ Community Members
$\square$ Other: $\qquad$

| Relationship to Respondent | Sex (M/F) | Age |
| :--- | :--- | :--- |
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|  |  |  |

## Section 6: Describing Bay Fishers

Question 19) What is your racial background?African American/Black $\square$ American Indian/Native American Latino White/Caucasian Asian Don't Know $\square$ No Response

Question 20) What language do you primarily speak in your home? $\qquad$

Question 21) What year were you born? $\qquad$

Question 22) Gender of Respondent $\qquad$ or Prefer Not to Answer

Question 23) If you are comfortable, please indicate your household incomeLess than \$20,000\$20,000-\$45,000 $\square$ \$45,001-\$65,000\$65,001-\$100,000More than $\$ 100,000$Don't KnowNo Response

Question 24) What is your zipcode? $\qquad$Don't KnowNo Response

## Section 7: Closing

That's all the questions I have. Thank you for your input! As a thank you for your participation, we would like to offer you a small gift (OFFER GIFT). We can also send you information about the results of this survey when they become available. I'd also like to give you some information about the current advisory for the Bay (OFFER COPY OF ADVISORY PAMPHLET)

Q24. Are there other places you'd recommend for us to do this survey?
Q25. Do you have any comments or questions for me?
Q26. Would you like us to send you information about the results of our survey when they become available? (Have card with contact details available)

Q27. Is there anything else you want me to know about fishing and the seafood you catch in the Bay?

## Post Survey Reflection

## Interviewer Initials

Interviewer's impression of quality of consumption information:
If negative, why so?
Language Interview was conducted in:

## Risk Communication Section

29a) Have you heard or seen any information or the advisory about the pros and cons of eating fish from the Bay? $\square$ Yes $\square$No 29b) What did the information say about fish from the Bay? $\qquad$
29c) Where did you get this information?FamilyFriendsSignsFishing RegulationSocial MediaOther: $\qquad$
30a) Has the information you have heard or seen about eating fish from the Bay caused you to change your fish-eating habits?No

30b) What is the best way for you to get information about catching and eating fish from the Bay? (check all that apply)FamilyFriendsSigns
$\square$ Fishing RegulationSocial MediaOther: $\qquad$

## Item 3: Next Steps

Jay Davis, SFEI

Desired outcomes of this item:

- Informed group


## Deliverables for this Project

| Task \# | Deliverables | Due Date | Status |
| :--- | :--- | :--- | :--- |
| 11.1(a) | Survey questionnaire <br> development workshop | November 10, 2023 | Complete |
| 11.1 (b) | Draft survey questionnaire <br> report | March 8, 2024 |  |
| 11.1 (c) | Public outreach meeting | May 31, 2024 |  |
| 11.1 (d) | Final report | May 31, 2024 |  |

## Next Steps...

- Pay honoraria (\$300)
- Send out meeting summary
- Send out draft report on the questionnaire (March 8)


## Next Steps...

## Workshop \#3

- Final survey presentation
- Focused on implementation guidance (e.g., pre-survey, timing, locations, \# of surveys, etc.)
- Connections to funding for pilot project to BACWA
- Larger plan for a region-wide effort with partners
- Early May 2024


## Timeline

Phase 1:
Develop draft
survey
(2023-2024)

Phase 3: Potential regionwide effort (2025-X)

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

## Item 4: Feedback on Today's Workshop

Sami Harper, Water Board

Desired outcomes of this item:

- Obtain feedback on the Workshop from Workshop participants

Extra slides

## Task 11

- Develop a survey questionnaire to characterize consumption of Baycaught fish by subsistence fishers.
- Survey questions should help us identify who is a subsistence fisher.
- Data to be collected:
- Number of servings per week for fisher and family (especially pregnant women and children);
- Species consumed;
- Preparation method for the fish and size of fish consumed;
- Reason for fishing;
- Location of fishing, etc.


## Section 1

1) May I talk to you for a few minutes?
2) Have you been interviewed before for this study?
3) Not including today, in the last 4 weeks, what is the total number of times you have (alternative: how many days have you) gone fishing in the Bay?
4) Why do you go fishing on the Bay? (open-ended with post-hoc categorization)
5) Do you or others consume the fish you catch?

Question 1) Have you been interviewed before for this study?
Question 2) Not including today, in the last 4 weeks, how many days have you gone fishing in the Bay (show map)?

Question 3) What|do you usually do with your catch?
$\square$ Eat myself
$\square$ Share with my
$\square$ Use for bait
$\square$ Give to
Catch and
Share with
household
community/Friend
$\square$ Trade or Sell
Question 4a) Do you consume any of the fish you or others catch from the Bay? If no, direct them to health advisory section and end survey $\square$ Yes $\square$ No

Question 4b) (if yes) - Why do you fish/eat fish from the Bay? Check the top three reasons.
$\square$ Cultural heritage
$\square$ Health/nutrition
$\square$ To be with friends/family
$\square$ Inexpensive
$\square$ To have fun/relax
$\square$ Family tradition food source
$\square$ Barter/Sell
$\square$ Other $\qquad$

Question 4d) If your fishing relates to cultural/traditional/familial practices, please explain how: [PRIORITY QUESTION FOR WORKGROUP DISCUSSION]

Question 4e) If you couldn't eat fish from the Bay, how hard would it be for you to replace that food with food bought from stores, restaurants, or other commercial sources? (on a scale from 1 to 5: 1 being easy and 5 being very hard)

## Section 2 Questions

## 6) Do you eat fish that you or someone you know catches from the Bay?

- 7)How many years have you been eating fish that you or someone you know has caught from the Bay?
- 8)In the last 4 weeks, how many times did you eat fish that you or someone you know caught from the Bay?

2) Consumption

Question 5) How many years have you been eating fish that you or someone you know has caught from the Bay?
$\square<1$ Year
$\square 1-5$ Years
$\square$ 6-10 Years
$\square$ 11-20 Years
$\square$ 21-29 Years
$\square>30$ Years

Question 6) In the last 4 weeks, how many times did you eat fish that you or someone you know caught from the Bay?
$\square>$ once a day
$\square$ About every day
$\square$ 2-3 times a month
$\square$ 3-4 times a week
$\square$ < once a month or neveR

Question 7) In the last 12 months, how many times did you eat fish that you or someone you know caught from the Bay?

$$
\begin{array}{lll}
\square>\text { once a day } & \square \text { 2-3 times a month } & \square \text { 1-6 times per year } \\
\square \text { 1-2 times a week } & \square \text { 3-4 times a week } & \square \text { 6-12 times per } \\
\square \text { About every day } & \square \text { < once a month } & \text { yeaR }
\end{array}
$$

Question 8) Please indicate how often you catch and eat fish in certain seasons

|  | July - Sept <br> (Summer) | Oct - Dec <br> (Fall) | Jan - March <br> (Winter) | April - June <br> (Spring) |
| :--- | :---: | :---: | :---: | :---: |
| More than <br> once a week |  |  |  |  |
| Once a week |  |  |  |  |
| Once a month |  |  |  |  |
| Less than once <br> a month |  |  |  |  |
| Don't know |  |  |  |  |

## Section 2 Questions

- 9)This is a model of 8 ounces (half pound) of raw fish fillet [SHOW MODEL]. When you eat a meal that includes fish from the Bay, is the amount that you eat: about this size, more, less

Question 9) This is a model of 8 ounces (half pound) of raw fish fillet [SHOW MODEL]. When you eat a meal that includes fish from the Bay, is the amount that you eat:

$\square$ About the same Or $\square 1.5 \mathrm{oz}$
$\square 3 \mathrm{oz}$
$\square$ More/by how much
$\square 4.5 \mathrm{oz}$
$\square 6 \mathrm{oz}$
$\square$ Less/by how muct
$\square 7.5 \mathrm{oz}$
$\square$ Other

Question 10) Have you changed the way or the amount you eat fish over the past 5 years? $\square$ Increase $\square$ Decrease $\square$ stayed the same

Question 11) Do you also eat fish that you purchased from a store or restaurant? This includes any fish fillet burgers or canned tuna also $\square$ Yes $\square$ No

## Question 11a) If yes to the previous question, how often?

$\square$ A few times a
week
$\square$ A few times a month

## Section 3

- 10b) How many times have you eaten this fish in the last 4 weeks?
- 10c) What do you call this?
- 10d) What is the approximate length in inches of the fish of this species that you eat? 10e) Which parts of this species do you eat?
- 10f) How do you prepare and cook this species?

Question 12b) How many times have you eaten this fish in the last four weeks?

| $\square>$ once a day | $\square$ about every day | $\square$ 3-4 times a week |
| :--- | :--- | :--- |
| $\square$ 1-2 times a week | $\square$ 2-3 times a month | $\square<$ once a month or |
|  |  | never |

Question 12c) What is the approximate length in inches of this kind of fish that you eat?
$\square 6$-12 inches
$\square 2001$ Survey
$\square$ CIEA Survey
Question 12d Which parts of this fish do you eat?
$\square$ The whole fish
$\square$ Eyes

## $\square$ Fille

$\square$ Cheeks
$\square$ Eggs
$\square$ 12-18 inches
$\square$ 18+ inches
$\square$ ACE Survey
$\square$ APEN Survey
$\square$ Skin
$\square$ Guts
Question 12e) What do you do with the parts of this fish that you do not eat?
$\square$ Discard
$\square$ Give to others
specify
$\square$ Stew
$\square$ Other: please

| $\square$ Raw | $\square$ Baked | $\square$ Blended to make a |
| :--- | :--- | :--- |
| $\square$ Smoked | $\square$ Tinned | paste ie. fish cake |
| $\square$ Boiled | $\square$ Grilled | $\square$ Other (Elaborate) |
| $\square$ Fried | $\square$ Jerky |  |

$\square$ Blended to make a paste ie. fish cake $\square$ Other (Elaborate)

## Section 4

4) Location

Have maps available (for local area and Baywide)
Question 13) How often do you fish at this location? (skip if this is not a shoreline intercept survey)
$\square$ About every day
$\square$ 2-3 times a month
$\square$ 3-4 times a week
$\square$ < once a month or
never never
$\square$ 1-2 times a week
$\square$ other $\qquad$

Question 14a) At what Bay location do you fish the most? $\qquad$
How often do you fish there?

| $\square$ About every day | $\square$ 3-4 times a week | $\square$ 1-2 times a week |
| :--- | :--- | :--- |
| $\square$ 2-3 times a month | $\square$ < once a month or | $\square$ other |
|  | never |  |

Question 14b) Why this specific location, ask for top two reasons
$\square$ Close to
$\square$ Don't need license
home/work
$\square$ Convenient parking
$\square$ Specific fish available
$\square$ Lots of fish available
others to do

Question 15a) Do you fish at other locations?
$\square$ Yes (continue with 15b) $\square$ No (got to section 5)

## Question 15b) If yes, Where?

Question 15c) How often?
Question 15d) Why those specific locations, ask for top two reasons
$\square$ Close to home/work
$\square$ Convenient parking
$\square$ Specific fish available
$\square$ Don't need licens
$\square$ Lots of fish available
$\square$ Other things for others to do

## Section 5: Sharing and Eating Catch

15) Who in your household eats the fish that you or someone you know catches from the Bay? (check all that apply: yourself, women age 18-45, etc.)

15a) Do the women aged 18-45 eat similar amounts of Bay fish as you? If not, how is their consumption different?

15b) Do the children aged 1-17 years in your household eat similar amounts of Bay fish as you? If not, how is their consumption different?
16) How many people altogether, including yourself, are in your household?
17) Who in your household usually cooks or prepares the fish you catch and eat from the Bay? (check all that apply: yourself, family member [specify], etc.)
5) Household Consumption and Sharing of Catch

Question 16) How many people altogether, including yourself, are in your household? $\qquad$
Question 17) Who in your household eats the fish that you or someone you know catches from the Bay? Please list those you live with including age, gender, and how often they eat Bay fish:

| Relationship to <br> Respondent | Sex <br> (M/F) | Age | How often they have eaten Bay fish in the last 4 weeks |
| :---: | :---: | :---: | :---: |
| Self (Interviewee) |  |  | $\square$ > once a day <br> $\square 1-2$ times a week <br> $\square$ About every day <br> $\square 2-3$ times a month <br> $\square 3-4$ times a week <br> $\square<$ once a month or less |
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## Section 5: Sharing and Eating Catch

18) Who outside of your household eats the fish that you or someone you know catches from the Bay? (check all that apply: yourself, women age 18-45, etc.)
18a) Do the women aged 18-45 eat similar amounts of Bay fish as you? If not, how is their consumption different?

18b) Do the children aged 1-17 years in your household eat similar amounts of Bay fish as you? If not, how is their consumption different?

Question 18a) Do you share the fish you/others catch with others? $\quad$ Yes $\square$ No
18b) Who outside of your household eats the fish that you or someone you know catches or consumes from the Bay? Please list those you know about including age and gender
$\square$ Friends
$\square$ Neighbors
$\square$ Other $\qquad$

| Relationship to Respondent | Sex (M/F) | Age |
| :---: | :---: | :---: |
| Self (Interviewee) |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
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|  |  |  |

## Section 6

Q22. What is your racial or ethnic background?

## Q23. What year were you born?

Q24. What is the highest grade in school you have completed?

Q25a. Is your total yearly household income greater than \$xx,000 per year?

Q29b. greater than $\$ x x, 000$ ?

## Q26. Gender of respondent

Q27. Where do you live? What is your zipcode?
6) Describing Bay Fishers - These next few questions will help us describe the people who fish from the Bay. We find this information helpful when we are developing information and materials for people who fish and protecting those who are most vulnerable to the effects of the contaminants that are in the fish. Children and people who can bear children are more vulnerable to mercury, for example. Please remember the information is kept confidential and you don't have to answer if you don't want to.

## Question 19) What is your racial background?

$\square$ African
American/Black
$\square$ American Indian (Native American)

Question 20) What language do you primarily speak in your home?
Question 21) What year were you born?
Question 22) Gender of Respondent $\qquad$ or Prefer Not to Answer

Question 23) If you are comfortable, please indicate your household income
$\square$ Less than $\$ 20,000$
$\square$ \$20,000 - 45,000
$\square$ \$45,001-\$65,000
$\square$ \$65,001-\$100,000
$\square$ more than \$100,000

Question 24) What is your zipcode?

## Section 7: Closing

That's all the questions I have. Im-order to thank you for your participation, we would like to give you a smallgiff (OFFER-GIFT). We'd also like to enter your name into a drawing. You will be cligible to win a \$xx Safeway gift card. If you would like your name entered, we will take down your name, address, and phener. We can also send you information about the results of this survey when they become available. My supervisor may also contact you to check my work or for some further follow-up.

Q28. Would you like to have your name entered into the drawing?
Q29. Would you like us to send you information about the results of our survey when they become available?

Q30. May my supervisor contact you?
Q31. I'd also like to give you some information about the current advisory for the Bay (OFFER COPY OF ADVISORY PAMPHLET)

## 7) Closing

That's all the questions I have. Thank you for your input! As a thank you for your participation, we would like to offer you a small gift (OFFER GIFT). We can also send you information about the results of this survey when they become available. I'd also like to give you some information about the current advisory for the Bay (OFFER COPY OF ADVISORY PAMPHLET)

Q24. Are there other places you'd recommend for us to do this survey?
Q25. Do you have any comments or questions for me?
Q26. Would you like us to send you information about the results of our survey when they become available? (Have card with contact details available)

Q27. Is there anything else you want me to know about fishing and the seafood you catch in the Bay?

## Risk Communication Section

Risk Communication (Suggested to delete or move to end)
Question 29a) Have you heard or seen any information or the advisory about the pros and cons of eating fish from the Bay? Yes $\quad$ No

29b) What did the information say about fish from the Bay? $\qquad$ Notes: The Gold Country (Sierra Nevada) survey left this open ended and asked the interviewer to record the exact response. Should we do the same? I think having options could prime/negatively influence the interviewee.

29c) Where did you get this information?FamilyFriendsSigns Fishing RegulationSocial MediaOther (Elaborate)

Question 30a) Has the information you have heard or seen about eating fish from the Bay caused you to change your fish-eating habits? प Yes
$\square$ No 30a) If yes, how have you changed your fish-eating habits? Increase $\square$ Decrease If no, why not?

Question 30b) What is the best way for you to get information about catching and eating fish from the Bay? (check all that apply)FamilyFriends
Fishing RegulationSocial MediaOther (Elaborate)

