



Safe to Eat Workgroup (STEW) Meeting Agenda



**Wednesday, July 19, 2023
9:30 AM - 11:20 AM (Pacific)**

[Link to Meeting Slides](#) | [Link to Meeting Recording](#)

Agenda Overview

| Item | Topic | Lead | Time |
|------|--|---------------|----------------------|
| 1. | Roll Call, Agenda Review, Goals of the Meeting | Jay Davis | 9:30 AM (10 min) |
| 2. | Information: Quick Updates Desired Outcome: Inform and update the STEW | Jay Davis | 9:40 AM (20 min) |
| 3. | Information: AB 762 - Fish and Shellfish Health Advisory Postings Desired Outcome: Inform and update the STEW | Angie Noorda | 10:00 AM (20 min) |
| 4. | Discussion: Sampling Plan for 2024 Desired Outcome: Inform, get feedback from the STEW | Jay Davis | 10:20 AM (20 min) |
| 5. | Information: San Francisco Bay Regional Monitoring Program 2019 PFAS Study Desired Outcome: Inform and update the STEW | Miguel Mendez | 10:40 AM (30 min) |
| 6. | Wrap-up and Adjourn | Anna Holder | 11:10 AM (10 min) |

Agenda Details

Item 1. Roll Call, Agenda Review, Goals of the Meeting

Discussion

- See slides (5-6) and [recording](#) for full discussion

Program/STEW Leads

Anna Holder (SWAMP)
Jay Davis (SFEI)

Peer Review Panel

Harry Ohlendorf (Independent)

OEHHA

Loren Chumney
Huyen Tran (Tran) Pham
Wesley (Wes) Smith

MLML/MPSL

Autumn Bonnema

Regional Boards

R1: Rich Fadness, Mike Thomas
R2: Gerardo Martinez, Kristina Yoshida
R3:
R4: Emily Duncan
R5: Lauren Leles
R6: Kelly Huck, Alanna Misico, Laurie
Scribe
R7:
R8: Jason Freshwater
R9: Jeremy Haas, Carey Kowalski, Chad
Loflen

State Board

OIMA/SWAMP

Devan Burke
Chad Fearing
Sydney Rilum
Jennifer Salisbury

DFA

Angie Noorda

DWQ

Amanda Blackwell

Water Quality Monitoring Council

Nick Martorano (OIMA/SWAMP)
Peter Vroom (City of San Diego's Public
Utilities Department)

Other

Kelly Chen (Biomonitoring California)
Nicole Greenwood (City of Riverside)
Owen Guarienti (Vacaville Utilities)
Bobby Gustafson (City of Riverside)
Cam Irvine (Robertson-Bryan, Inc.)
Duyen Kauffman (Biomonitoring California)
Miguel Mendez (San Francisco Estuary
Institute)
SueAnn N
Grace Windler (US Bureau of Reclamation)
L. Williams
Mina Ziaei (San Diego County Water
Authority)
+ 1 unidentified participant

Item 2. Quick Updates

- See slides (7-12) and [recording](#) for full discussion
- 2020 Coast data and report
 - Data status: all data have been processed; except 3 PCBs samples sent to SGS-Axys for analysis in Mar 2022.
 - Report status: The [Cruise Report](#) is complete. We will be pushing the data report to 2025 after the remainder of the coast has been sampled (2024) and data processed (2025).

- Questions
 - Regarding the PCB and organics samples in 2021 and 2022 - is the delay in receiving results an ongoing lab issue?
 - The samples have already been analyzed, but the lab has been unable to submit the data to SWAMP using the appropriate templates. The SWAMP IQ Team has been working with the lab to get the data in the correct formats.
- 2021 Bass lakes (Panel 4) data and report
 - Data status: Metals/Other/Age data are processed; waiting on organics data from SGS-Axys.
 - Report status: The [Cruise Report](#) is complete; draft data report will be distributed and ready to discuss during the Oct. 2023 STEW Meeting (pending receipt of organics data).
 - Questions
 - Will a draft report be distributed before the Oct meeting?
 - Yes - assuming we receive the organics data in time.
- 2022 Monitoring data
 - Realignment (Project code: SWB_Realign_RWB9_2022):
 - Waiting for organics data.
 - Report status: The [Cruise Report](#) is complete
 - Rivers (Project code: SWB_FishRiv_2022):
 - Awaiting Crustacean As/Se results.
 - Waiting for organics data.
 - Report status: The [Cruise Report](#) is complete.
 - Central Coast Region (RWB3) Monitoring (Project code: RWB3_SS_BOG (2022)):
 - Waiting for organics data.
- 2023 Monitoring Updates
 - Monitoring continues! 70% of target sites have been sampled.
 - See the [Monitoring Plan](#) for more details or the regular "2023 Lakes - Fish Collection Summary" updates sent via [STEW email list](#).
- 2024 Long-term Monitoring Priorities Assessment Templates
 - [Water Boards Template](#) (for CA Water Board Regions, Divisions, and Offices)
 - [Generalized Partner Template](#) (for Tribes, Agencies, and NGOs)
- Updates on TMDLs
 - [Delta Methylmercury TMDL](#): Central Valley Regional Board staff are preparing to submit the TMDL for scientific peer review in the next couple of months, during which time the TMDL will be made publicly available.
 - Rivers TMDL: Central Valley Regional Board staff are working on the TMDL along with a broader Central Valley mercury strategy.
 - [Statewide Mercury TMDL for Reservoirs](#): The State Board will be releasing a public announcement on the priority of the TMDL in the near future.
- Monitoring Council Updates

- Sep 7 meeting has been canceled
- Next meeting will be in Dec 14 - Hybrid, In person location Southern CA
- New fish consumption advisories
 - [Sunbeam Lake \(Imperial County, May 2023\)](#)
 - [Gwen Moore Lake \(Los Angeles County, May 2023\)](#)
 - [Lake Cuyamaca \(San Diego County, Jul 2023\)](#)
 - New resource: [OEHHA Water Body Prioritization Process for Developing or Updating Fish Advisory](#) (2023)
 - *Shared in the chat:* [Related OPC-funded report: Evaluating the Effectiveness of Marine Protected Area \(MPA\) Signage in California](#) (2023)
- Other updates from the group
 - Recent publication with San Diego Region co-author, **Chad Loflen!**
 - Talley TS, **Loflen C**, Venuti N, Pedersen D, Gossett R, Baker MD. [Contaminant Risk and Social Vulnerability Associated with Crustacean Shellfish Harvest in the Highly Urbanized San Diego Bay, USA](#). *Environments*. 2023; 10(6):91.
 - Note: a link to the above article and other bioaccumulation related publications are available on the [Safe to Eat Workgroup Relevant Literature webpage!](#)
 - [California Lakes Management Society \(CALMS\) Fall Conference](#); Oct. 11-13, 2023, Lake Arrowhead, CA
 - [California Aquatic Bioassessment Workgroup \(CABW\)](#) and the California Chapter of the Society of Freshwater Science (Cal-SFS) Annual Meeting; Nov. 6-7, 2023, Costa Mesa, CA
 - All Positives Possible's Carquinez Strait monitoring study - funded by US EPA, fish monitoring for mercury, PCBs and PFAS at four locations in Sep. Monitoring methods will include San Francisco Bay RMP methods and collection by community members.
 - San Francisco Bay RMP sport fish monitoring in 2024 - planning process starting soon
 - San Francisco Bay consumption survey questionnaire development - funded by San Francisco Region, workshop with Community-Based Organization in early Sep.; project will wrap around May 2024.

Action Items

- Jay/Anna: Distribute draft 2021 Bass lakes (Panel 4) data and report to STEW email list when ready (after we receive organics data)

Item 3. AB 762 - Fish and Shellfish Health Advisory Postings

[Assembly Bill 762](#) (AB 762, 2019) requires Local Health Officers to post fish advisories that have been issued by the Office of Environmental Health Hazard Assessment (OEHHA) for approximately 131 site-specific water bodies in California upon appropriation of state funds. The Fish and Shellfish Consumption Advisories Program Grant Project is between the State Water Board and the California Conference of Directors of Environmental Health (CCDEH) and will provide reimbursement to Local Health Offices for eligible work undertaken. This agenda item

will include an overview of the status of the grant agreement.

Discussion

- See slides (13-25) and [recording](#) for full discussion
- All 24 local agencies that applied were awarded some or all of the funding they requested, totalling \$445,000 in awards
- Timeline
 - Mid-Aug. 2023: Local agencies must install the sign(s) (within 180 days after receiving award)
 - Nov. 2023: Local agencies must submit reimbursement requests, including locations and photos of postings
 - Feb 2024: Project completion date
- Next Steps
 - Report to the Legislature
 - At least one more solicitation for applications will include the \$18,000 not funded in 2023 and will prioritize local agencies that did not yet apply and new OEHHA postings since last application period
 - Development of second agreement to cover three years of funding; \$50,000 annually
 - Site visits
- Questions
 - AB 762 requires that the locations of the signs be determined in conjunction with the Regional Board and CDFW. When is that supposed to happen? The San Diego Regional Board has not yet been consulted.
 - Local Agencies were responsible for coordinating with everyone and certifying that they had done so on their application.
 - Is it possible to get a list of local agencies that did *not* apply for funding so Regional Boards can follow-up to make sure they satisfy posting requirements.
 - Recommend comparing application summary list to full list of local agencies to determine who did not apply.
 - Do you have a general idea of what percentage of the [OEHHA Fish Advisories](#) are getting funding compared to what percentage of local agencies did not apply for funding?
 - There were 24 local agencies that applied for funding - out of 62 local agencies (~40%). Unsure of what percentage of advisories are represented.
 - Is it possible to post resources online instead of emailing to individuals?
 - There currently isn't a webpage dedicated to this program. When the Legislative Report is published a website will be developed and could be used to share the other documents related to the project.
 - Until then, the STEW will publish resources on the [Meetings page](#).
 - Will future funding be provided to support replacement or maintenance of signs?
 - Local health agencies are responsible for maintaining signs.

Action Items

- Angie: Send Anna resources for posting on the STEW website
- Anna: Post AB 762 resources on STEW [Meetings page](#), send email to STEW once complete

Item 4. Sampling Plan for 2024

This group has been discussing the sampling plan for 2024 in some capacity since Jan. 2021. An update on the intended sampling plan will be provided and initial discussion of requests for additions to the monitoring plan will begin. Please email requests to Jay (jay@sfei.org) by Sep. 1. Due to permit constraints additions cannot be made after this date.

Discussion

- See slides (26-36) and [recording](#) for full discussion
- Overview of [Statewide Coastal Screening Survey](#) efforts
 - Round 1 - 2009 - 2010 ([Report](#))
 - Round 2 - planned for 2018-2020 ([Monitoring Plan](#)); actual monitoring in:
 - 2018: Southern California Bight and some Central Coast stations, [Cruise Report, Publication](#)
 - 2019: Humboldt bay and Santa Cruz stations
 - 2020: Central and part of the North Coast, [Cruise Report](#)
 - 2024: North Coast and remainder of Central Coast
- Summary of key elements of the sampling design (Table 12 in Monitoring Plan)

| | | Primary Target Species | | | |
|---------------|-----------------|---|---|--|-----------------------------------|
| Region | Number of Zones | Coast | Bays and Harbors | Analytes | Replicate Composites within Zones |
| North Coast | 15 | Gopher Rockfish Black Rockfish Blue Rockfish Lingcod Cabezon Salmon | Shiner Surfperch White Surfperch Leopard Shark California Halibut | Mercury Selenium PCBs Dioxins | No |
| Central Coast | 20 | Gopher Rockfish Brown Rockfish Blue Rockfish Lingcod Salmon White Croaker Rainbow Surfperch | Brown Rockfish Shiner Surfperch Leopard Shark California Halibut Jacksmelt White Croaker | Mercury Selenium PCBs | No |

- Historically, not many special requests have been provided for the coastal survey

- Questions
 - Are the Selenium composites across all species?
 - No. A single composite does not contain more than one species. Selenium composites include all samples of the same species.
 - How many fish per species per zone are targeted?
 - Composites = five fish per species within a target size range per zone
 - Individuals = 10 fish per species within a target size range per zone
 - Discussion on Salmon
 - Past monitoring of salmon has been logistically challenging and does not necessarily guarantee collection of salmon samples. Additionally, salmon populations have been struggling in recent years and getting state and federal permits for salmon will take more time and may not be granted.
 - OEHHA - it would be nice to know more about salmon but is not a priority given the effort and resources
 - Did we sample hatchery salmon a while back?
 - Yes - but monitoring is associated with rivers, not coastal monitoring.
 - Data that we have collected show low concentrations of mercury and PCBs, making salmon a good consumption choice.
 - *Decision:* The Bioaccumulation Monitoring Program will not be monitoring salmon in 2024.
 - Have any analyses on Dungeness crab in the North Coast Region been done outside of the CDPH biotoxin study, since it is such a large fishery in the north coast?
 - The Statewide Bioaccumulation Monitoring Program has not
 - The San Francisco and Santa Ana Regions did something with the Coastal Fish Consumption Program about 20 years ago.
 - In the 1990s the San Francisco Bay RMP monitored red rock crabs.
 - Over the past couple of years, the San Francisco Region monitored for shore crabs in Tomales Bay; the data on that is being worked up now.
 - OEHHA gets requests from the public occasionally - is that something the STEW is interested in?
 - Yes! We would love to get information on those requests.

Action Items

- Jay: send out list of remaining Coast Round 2 locations (by Jul. 28)
- All: email requests to Jay (jay@sfei.org) **no later than Sep. 1**
- Jay: Develop & distribute draft 2024 Monitoring Plan, in enough time for STEW review and to finalize at the Oct STEW Meeting

Item 5. San Francisco Bay Regional Monitoring Program 2019 PFAS Study

The San Francisco Bay Regional Monitoring Program (Bay RMP) analyzed PFAS in a subset of the samples collected in 2019. Given growing concern about PFAS in fish, in 2022/2023 the RMP conducted further analysis on samples archived in the 2019 effort. Preliminary results from the recent analysis will be presented.

Discussion

- See slide (37) and [recording](#) for full discussion
- 2022 RMP PFAS Fish Monitoring Update included analysis of 57 archived samples from 10 different bay locations; archived samples were from 2009 (7 samples), 2014 (28 samples), and 2019 (22 samples); analytical methods targeted 40 PFAS.
- Key findings
 - Archives showed variety of PFAS by location and species
 - Predominant measurements of PFOS in a variety of locations and species
 - The San Francisco Waterfront showed substantial amount of 7:3 FTCA (precursor to other PFAS)
 - South Bay and Artesian Slough sites have higher concentrations of PFAS than other areas
 - Most South Bay samples and two averages are above the MA Fish Action Level (0.22 ppb ww); CA does not have PFAS threshold at this time.
- Draft report will be published in Oct 2023; manuscript anticipated for Jan 2024
- Questions
 - What is the status of OEHHA's development of a PFAS threshold?
 - OEHHA is still looking at data and development is under consideration.
 - Is there any way to determine how localized the species are?
 - White croaker and striped bass move around quite a bit
 - Sturgeon show some regional variation
 - More information about fish movement is provided on RMP reports
 - Was analysis done SWAMP style, on filets only (i.e. without head and guts)?
 - Correct.
 - Are there any plans to analyze whole organisms? Or is that more of a future Realignment question?
 - RMP is not planning on analyzing whole organisms, but could be a topic to discuss during the Realignment process.
 - RMP has done some skin-on vs. skin-off comparisons in White Croaker (skin-on is approximately 50% higher in concentrations)

Action Items

- None

Item 6. Wrap-up and Adjourn

- Review action items
- Review items for next meeting

Discussion

- See slides (38-43) and [recording](#) for full discussion
- The Lahontan Region is planning on sampling water, sediment, and Kutzadi (Alkali fly) larvae at Mono Lake. Local tribes are concerned about radiation in Mono Lake. Looking for support and guidance related to sediment sampling.

Action Items

- All: If anyone has experience in or equipment for sediment sampling, please email laurie.scribe@waterboards.ca.gov
- Anna: Post meeting materials and recording on the [Meetings page](#), send email to STEW once complete
- All: Email anna.holder@waterboards.ca.gov with future STEW meeting speaker/topic recommendations