Safe to Eat Workgroup (STEW) Meeting Notes

Wednesday, March 27, 2024
9:30 AM - 11:30 AM (Pacific)
Link to Meeting Slides | Link to Meeting Recording

Synthesis PDS Links: Water Boards | CA Agencies, Other Programs / Interested Parties
A PDF of Tribal responses will not be shared.

Agenda Overview

Item	Topic	Lead	Time
1.	**Roll Call, Agenda Review, Goals of the Meeting**	Anna Holder	9:30 AM (10 min)
2.	**Information: Long-term Monitoring Priorities Assessment Process - Overview & Update** **Desired Outcome:** Inform and update the STEW	Anna Holder	9:40 AM (10 min)
3.	**Information: Long-term Monitoring Priorities Assessment Process - Feedback Synthesis** **Desired Outcome:** Inform and update the STEW	Anna Holder	9:50 AM (20 min)
4.	**Discussion: Long-term Monitoring Priorities Assessment Process - Priority Discussion & Open Forum** **Desired Outcome:** Get feedback from the STEW	Anna Holder	10:10 AM (60 min)
5.	**Wrap-up and Adjourn**	Anna Holder	11:10 AM (10 min)

Agenda Details

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

- See slides (3-4) and recording for full discussion

Program/STEW Leads
Ali Dunn (SWAMP)
Anna Holder (SWAMP)
Jay Davis (SFEI)

Peer Review Panel
Christopher (Chris) Schmitt (U.S. Geological Survey)

OEHHA
Loren Chumney
Tran Pham
Wesley (Wes) Smith

MLML/MPSL
Autumn Bonnema

Regional Boards
R1: Rich Fadness, Mike Thomas
R2: Gerardo Martinez
R3:
R4:
R5:
R6: Kelly Huck, Laurie Scribe
R7:
R8: Heather Boyd
R9: Chad Loflen

State Board
OIMA/SWAMP
Chad Fearing
Tessa Fojut

Other
Duyen Kauffman (Biomonitoring California)

Item 2. Long-term Monitoring Priorities Assessment Process - Overview & Update

An update on the Long-term Monitoring Priorities Assessment Process, including upcoming 2024 STEW meeting dates and topics will be presented.

Discussion

- See slides (5-13) and recording for full discussion
- No additional questions or discussion

Action Items

- None.

Item 3. Long-term Monitoring Priorities Assessment Process - Feedback Synthesis

A synthesis of all of the feedback received during the Long-term Monitoring Priorities Assessment Process, including from the Bioaccumulation Monitoring Priorities Survey, will be presented.

Discussion

- See slides (14-15) and recording for full discussion
- Also see PDFs of the Synthesis sheet for summarized responses from:
    - Water Boards
    - CA State Agencies, Other Programs / Interested Parties

    - A PDF of Tribal responses will not be shared.

- See notes in Item 4 for summary of discussion.

Action Items

- None.

Item 4. Long-term Monitoring Priorities Assessment Process - Priority Discussion & Open Forum

The STEW will discuss the synthesized feedback and any final priority recommendations that they feel should be taken under consideration by SWAMP Management when they make the final monitoring priority decisions for the SWAMP Statewide Bioaccumulation Monitoring Program.

Any member of the STEW and/or representative from a California Native American Tribe (Tribe), Community-Based Organization (CBO), California State Agency (Agency) or other type of bioaccumulation monitoring partner that would like to contribute to the discussion or share their near and/or long-term bioaccumulation monitoring needs and priorities may do so at this time.

Discussion

- See slides (16) and recording for full discussion

- Also see PDFs of the Synthesis sheet for summarized responses from:
    - Water Boards
    - CA State Agencies, Other Programs / Interested Parties
    - A PDF of Tribal responses will not be shared publicly

- Note that the “Percent that Identified Category as a Priority” for “Coastal Areas” (55%) may be skewed since it includes all respondents, even though some do not have direct connections to the coast. What would the percentage be if only those regions and Tribes with coastal connections are used to calculate the percentage?
    - 64% - the same as “Lakes and Reservoirs” and “Rivers & Streams”; Calculation completed after the meeting

- What are the “Other” species (i.e. non-fish or shellfish) that were identified as important during the feedback process?
    - Phytoplankton/zooplankton, bird eggs, lamprey eel, seaweed/kelp, native plants

- Regarding the phytoplankton/zooplankton request from Region 2 - was that related to wanting to understand food dynamics?
    - Yes
    - Note that some phytoplankton/zooplankton data have been collected in Region 2 (in San Pablo) and Region 9 (analysis of PCBs) that are already available.

- Were crustaceans grouped with shellfish?
    - Yes

- Note that having a long term plan that identifies when water bodies will be sampled is helpful for planning and coordination purposes. We want to make it *easy* for Regions and other monitoring partners to see when partnership, budget augmentations, and coordination makes sense.

- Note challenge of matching monitoring priorities and funding cycles with other monitoring efforts (e.g. Bay / Bight / Delta RMP, EPA National Condition Assessments).

- Regarding statistical statewide trend monitoring
    - Note that the program prioritized statistical statewide trend monitoring in the past (e.g. 10-year lake 5-panel monitoring design), but the current status of our budget and long list of needs may not accommodate that kind of monitoring design at this time.

    - What is the status of synthesis and reporting of the Long-term Lakes Panel Monitoring?
        - Synthesis is underway - a draft report focusing on mercury is planned for early 2025; full report including all organics analyses will follow shortly thereafter.

    - Note that some water bodies identified in the past Long-term Monitoring Plans are no longer fished or even fishable. We don't want to continue spending money in places that won't support the protection of public health or give us a return on that investment.

    - Note that this statistical statewide trend monitoring was pushed by past US EPA representatives and the Program has not received feedback from current US EPA representatives.

- Regarding statewide shellfish monitoring
    - Do we know what it would cost to conduct statewide shellfish monitoring?
        - No - an estimate hasn't been developed recently and developing a scope would require details, time and resources that we do not have right now.

    - Recommend including as an option in the tiered long-term monitoring plan

    - Note that there have been discrete shellfish monitoring projects conducted by Regions and through the Realignment.

    - Recommend coordinating with CA Dept. of Public Health (CDPH) and CA Dept. of Fish and Wildlife (CDFW) if/when the program pursues statewide shellfish monitoring - particularly as it relates to their existing shellfish monitoring programs and coordination of sample collection.

- Are we aware of water bodies that are listed for mercury (or other consumption related uses), that have TMDLs, but that we know are popular fishing locations and for which we have no data and/or an OEHHA advisory has not been developed?
    - A specific list has not been developed, but it is highly likely that certain individuals at Regional Boards are aware of such water bodies.
    - Note a similar gap to be aware of: water bodies that are on the 303(d) list, we know are fished, have not been sampled in a while and do not have a TMDL.

- Regarding PFAS monitoring
    - Note the surprise by some that PFAS did not come up as being more important.
    - Note that it comes down to whether we want to be reactive to thresholds, advisory tissue levels (ATLs), lawsuits, etc. as they arrive or proactive and generate data that can inform those processes.
    - Many managers are asking "Why should we spend money on PFAS analysis when we don't yet have thresholds or ATLs to enforce?"
        - We can't develop those things until we have sufficient data
        - Existing data are primarily from San Francisco Bay and San Diego Bay, which don't necessarily reflect the risk or experiences of all of California.
    - Would it make sense for the Program to fund toxicity studies to support ATL development?
        - The Bay RMP has considered this in the past and has completed some small toxicity studies. In general, toxicity studies are expensive and the Bay RMP relies on the broader bioaccumulation community to fund toxicity studies.
    - Is the Statewide Program going to fund the analysis of archive data?
        - Yes, budget permitting.
        - At the Feb. 13 SWAMP Roundtable, SWAMP Coordinators were asked to review a list of available archive samples that could be analyzed for PFAS and indicate whether (1) they intend on paying for analysis or samples within their Region and/or, (2) if they would like the Statewide Program to prioritize funding and analysis of samples within their Region. **This feedback is due by Apr 5**, and will be used by the Statewide Program to inform which archive samples will be prioritized for analysis given our current budget.
    - Is there a sufficient quality assurance process associated with the collection, processing, analysis, and storage of samples specifically for PFAS?
        - Yes. Those processes are described in detail in Moss Landing's Standard Operating Procedures, which are referenced in the Program's Quality Assurance Project Plan (QAPP).
        - Note that it would be helpful if those processes are described more explicitly in the QAPP.
    - Will OEHHA use the Program's monitoring data to develop their ATLs?
        - YES! The Program's data will be used to understand: relevant exposure of PFAS from different types of species, environmental fate and transport through the system, PFAS behaviors and risk as a class.
- Regarding monitoring for algal toxins and microplastics
    - Note that there are serious logistical challenges associated with monitoring for these contaminants at this time (e.g. analysis of cyanotoxins must occur within 24 hours of collection; lack of efficient and fiscally approachable methods of collection, processing, and analysis that will prevent microplastic contamination)

    - For methods that do exist, they are currently budgetarily prohibitive for the Program.
    - The need for monitoring these contaminants is present and growing - we want to be proactive, keep track of method development, and get ourselves ready for when monitoring is feasible.

- Is having PCB data helpful for the development of OEHHA Fish Advisories, or will only providing mercury data be sufficient?
    - OEHHA prefers when PCB data is available for at least one species in a water body (e.g. catfish, carp).

- What will be presented to SWAMP Management for their prioritization discussion?
    - Anna will walk them through the Synthesis sheet, summarize conversations that have occurred, and share the recommendations and project ideas that were discussed during this meeting.
    - SWAMP Management will be asked to decide the *specific* monitoring priorities for 2025 (hopefully also 2026), and more general longer-term priorities they would like to see for the next five years or so.

- Will the STEW be given an opportunity to provide revisions to the Synthesis sheet?
    - If representatives from Agencies, Tribes, or Other Monitoring Programs or Interested parties would like to make ***minor updates to their columns*** (e.g., add/remove "X" for water body type/species type/contaminant class) - please email anna.holder@waterboards.ca.gov your update request(s) **by 5pm on Tuesday, April 2.**

- Will the STEW be given an opportunity to provide iterative feedback on SWAMP Management decisions?
    - No, unless SWAMP Management explicitly asks for it.
    - The STEW has spent the last 14 months providing feedback on their priorities and what they would like the future of the Program to look like. That feedback will be used to inform management.
    - However, the STEW will be able to provide feedback on the long-term monitoring plan once it is developed.

Some reminders

- The Realignment and associated budget will continue to be a high priority - budget from that effort will not be reduced.

- Opportunities for feedback and identifying specific monitoring and analysis requests will continue through the annual monitoring plan development, review, and feedback process.

- Our needs will continue to change and there is the expectation from SWAMP management to reassess priorities like we have been doing over the past year and revise long-term monitoring priorities every 5 years or so. **In other words, what we decide now will not necessarily lock us into those decisions forever - we reserve the right to change our minds and priorities as our needs and resources evolve.**

Recommendations and/or potential options identified during discussion

- When writing the long-term plan, structure in a way that reflects what can be accomplished at different funding tiers, and include a list of potential projects that should be completed as soon as resources are available (e.g. statewide consumption survey).
    - Note shared in the chat from SWAMP Management: I totally support that idea - it would be great to revisit those funding tiers + project lists again so that we are at the ready with project ideas if/when funding comes through.

- Prioritize requests from OEHHA and the Integrated Report so we can fill data gaps related to Fish Consumption Advisory development and Integrated Report assessments - potential options:
    - ONLY monitor water bodies / species / analytes identified as having gaps by OEHHA and Integrated Report
    - Reserve a percentage of the budget for filling OEHHA and Integrated Report data gaps
    - Only prioritize specific OEHHA and Integrated Report data gap requests when explicitly requested during the annual feedback process

- Regarding frequency of mercury analyses - potential options:
    - Continue status quo (i.e. analyze at nearly every location and sample)
    - Only analyze for mercury in areas and species where:
        - data are missing from that location or species,
        - data are old (10 years or older)
        - OEHHA or the Integrated Report teams indicated a couple more samples are needed for analysis
        - Regions, Tribes, or others explicitly request it during the annual feedback process

- Regarding frequency of PFAS analyses - potential options:
    - Wait until EPA, CA, and OEHHA have determined their respective thresholds / ATLs before we monitor PFAS statewide.
    - Start with a pilot study - potential options:
        - ONLY analyze current archive samples and then revisit
        - Analyze archive samples AND collect new samples at pre-selected and randomized locations and only analyze select indicator species
        - Analyze archive samples AND collect new samples at locations and for species explicitly requested during the annual feedback process
    - Analyze for PFAS at nearly every location and sample

- Regarding trend monitoring - potential options:
    - Continue status quo (i.e., 10-year panel monitoring designs - but note that expectations will need to be reduced substantially [e.g. from monitoring 35 lakes/ year to something closer to 15 lakes/year])
    - Cease ALL trend monitoring at this time (i.e. only monitor according to specific requests)
    - Switch focus to filling gaps and understanding trends associated with very old data (10 years or older); rather than focus on statistical statewide representation

Project ideas

- Statewide consumption survey (to understand consumption locations, fishing intensity, target species, methods, and concerns of consumers)
    - Note that there is a public health need to understand consumption at water bodies that are not technically legal to fish. Coordination and partnership with CDFW and OEHHA will be critical.
    - Note that a number of Regional Boards are pursuing efforts related to consumption surveys - recommend coordinating with those Regions to learn from each other and make a plan for implementing a statewide consumption survey.

- Development of open and interactive data resource(s) that display:
    - All available bioaccumulation monitoring data / results (collection entity (i.e. not just SWAMP), location, time period, number of samples, analyses, etc.)
    - Data on fishing effort (e.g. from CDFW California Recreational Fisheries Survey (CRFS), consumption surveys)
    - Integrated Report data (303(d) list, Category 3 water bodies)
    - TMDL data (water bodies with TMDLs or similar regulatory actions)
    - OEHHA Fish Consumption Advisory Data (locations with advisories + advisory details, time of last update, status of posted advisory signs, water bodies on OEHHA's "to do list", etc.)
    - Analysis of water bodies with 303(d) listings and the age of the data used to develop the listings, to determine if new data should be collected to re-assess listing status
    - Water bodies that are slated for monitoring in the coming years (collection entity (i.e. not just SWAMP), location, time period, number of samples, analyses, etc.)

- Development of an application that would make it easier for Tribes and communities that consume fish or shellfish for subsistence or cultural purposes to understand their risks of consumption in a way that more closely aligns with their cultural practices and lived experiences.
    - Note that the Program has secured some funding to begin the development of this application. Work will begin in the next year or so, and the Program will solicit feedback from and work closely with Tribal partners and OEHHA throughout the development process.

Action Items

- Anna:
    - Share a PDF of the Synthesis Sheet that was shared during the meeting
    - Brief SWAMP Management on synthesis & recommendations
    - Update the STEW at Apr 24 Meeting
    - Work with Jay to develop a Long-term Monitoring Plan + Present at Oct 30 STEW Meeting

- Representatives from Agencies, Tribes, or Other Monitoring Programs or Interested parties that already provided feedback during the long-term monitoring priorities assessment process:
    - If representatives would like to make ***minor updates to their columns*** (e.g., add/remove "X" for water body type/species type/contaminant class) - please email anna.holder@waterboards.ca.gov your update request(s) by **5pm on Tuesday, April 2.**

- Regional Board SWAMP/STEW Coordinators:
    - Review the list of available archive samples that could be analyzed for PFAS and indicate whether (1) your Region intends on paying for analysis of samples within the Region and/or, (2) if you would like the Statewide Program to prioritize funding the analysis of samples within the Region, **by Friday Apr 5.** See the Feb. 13 SWAMP Roundtable recording, notes, and slides for links and instructions.

- Program/STEW Leads:
    - During the next QAPP update, more explicitly describe PFAS quality assurance processes.

Item 5. Wrap-up and Adjourn

Review next steps and action items.

Discussion

- See slides (17-20) and recording for full discussion

- No additional questions or discussion

Action Items

- Anna: Post meeting materials and recording on the Meetings page, send to STEW email list once complete

- All: Review the Meetings page and register for Zoom calls, download calendar invites

Recent STEW Meetings with Long-term Monitoring Priorities Assessment Item

Meeting Date	Agenda Item	Meeting Documents
Mar. 27, 2024	Process overview & update Reflection, synthesis, priority setting	Slides Notes Recording
Feb. 28, 2024	Process overview & update Tribe / Agency / CBO Presentations	Slides Notes Recording
Jan. 31, 2024	Regular STEW Meeting Tribe / Agency / CBO Presentations	Slides Notes Recording
Jan. 24, 2024	Process overview & update Water Boards Presentations	Slides Notes Recording
Dec. 20, 2023	Process overview & update Water Boards Presentations	Slides Notes Recording
Nov. 29, 2023	Process overview & update Q&A / Open Forum	Slides Notes Recording
Oct. 18, 2023	Item 7. 2024 Long-term Monitoring Priorities Assessment Process	Slides (pg. 72 - 82) Notes (pg 8 - 10) Recording
Jan. 18, 2023	Item 6. Planning for 2024 Long-term Monitoring Priorities Assessment	Slides (pg. 32 - 35) Notes (pg 7 - 8) Recording

Upcoming Long-term Monitoring Priorities Assessment & STEW Meetings

Meeting Date	Meeting Focus (*Tentative*)	Meeting Documents
Apr. 24, 2024 9:30 am - 12:30 pm PT	Regular STEW Meeting Presentation of priorities & next steps	Registration Link*
Jul. 31, 2024 9:30 am - 12:30 pm PT	Regular STEW Meeting	Registration Link*
Oct. 30, 2024 9:30 am - 12:30 pm PT	Regular STEW Meeting	Registration Link*

* Attendee can register for all regular STEW meetings at one time