



Safe to Eat Workgroup (STEW) Meeting Notes



Wednesday, January 31, 2024
9:30 AM - 11:30 PM (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 (30 min)
3.	Information: Long-term Monitoring Priorities Assessment Process - Overview & Update Desired Outcome: Inform and update the STEW	Anna Holder	10:10 PM (10 min)
4.	Information: Office of Environmental Health Hazard Assessment (OEHHA) Monitoring Priorities Desired Outcome: Inform and update the STEW	Loren Chumney, Wes Smith	10:20 AM (20 min)
Break			10:40 AM (10 min)
5.	Information: Long-term Monitoring Priorities Assessment Process - Tribe / CBO / Agency Open Forum Desired Outcome: Inform and update the STEW	Anna Holder	10:50 AM (30 min)
6.	Wrap-up and Adjourn	Anna Holder	11:20 PM (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

Anna Holder (SWAMP)
Jay Davis (SFEI)

Peer Review Panel

Harry Ohlendorf (Independent)

OEHHA

Loren Chumney
Tran Pham
Wesley (Wes) Smith

MLML/MPSL

Autumn Bonnema
Gary Ichikawa
Billy Jackl

State Board

OIMA/SWAMP
Jennifer Salisbury

Regional Boards

R1:
R2:
R3:
R4:
R5:
R6: Kelly Huck
R7:
R8:
R9: Chad Loflen

Water Quality Monitoring Council

Nick Martorano (OIMA/SWAMP)

Other

Noah Ben-Aderet (CA Dept. of Fish and Wildlife)
Duyen Kauffman (Biomonitoring California)

Item 2. Quick Updates

- See [slides](#) (5-12) and [recording](#) for full discussion

Monitoring Data & Documentation Update

Year	Monitoring Element	Data Status (Est. completion date)	Document Status (Est. completion date)
2020	Coast (Central CA)	Remaining organics data available in CEDEN (Mar 2024)	Cruise Report Interpretive Report (2025)
2021	Lakes (Panel 4)	Organics data available in CEDEN (Mar 2024)	Cruise Report Data Report (2024*)
2022	Realignment (Region 9)	Organics data available in CEDEN (May 2024)	Cruise Report Data Report (2024*)
	Rivers (Region 5)		Cruise Report Data Report (2024*)

Year	Monitoring Element	Data Status (Est. completion date)	Document Status (Est. completion date)
	Special Project (Region 3)		NA - up to R3 project leads to write report
2023	Lakes (Panel 5)	Metals data available in CEDEN (Jun 2024) Organics analysis (TBD 2024)	Cruise Report published! Data Report (2024*) Interpretive Report (2025)
2024	Coast (Central & Northern CA)	Monitoring to begin in Apr 2024	Monitoring Plan published! Data Report (2025) Interpretive Report (2026)

* Upon receipt of organics data

- New fish consumption advisories
 - [South Lake \(Inyo County, Dec 2023\)](#)
 - *Coming soon:* Lake Morena (San Diego County)
- Updates on TMDLs
 - No one present to provide updates.
- Monitoring Council Updates
 - All 2024 meetings will be virtual until further notice.
 - [Next meeting](#): Apr 5
- Other updates from the group
 - [Bioaccumulation Monitoring Program Training Series](#)
 - Tribal-centered training series co-developed by SWAMP & the California Indian Environmental Alliance (CIEA)
 - Upcoming Courses (all offered 9 am – 12 pm PT, via Zoom)
 - **Jan 30, 2024:** Intro to the Bioaccumulation Monitoring Program and STEW
 - [Slides & recording](#) have been posted on the [Training Series webpage](#).
 - **Feb 20, 2024:** [Bioaccumulation monitoring study design & preparation](#)
 - **Mar 19, 2024:** [Bioaccumulation monitoring sample collection protocols & processing](#)
 - **Sep 17, 2024:** [Bioaccumulation monitoring data QA/QC & submission to SWAMP/CEDEN](#)

- San Francisco Region [Realignment](#)
 - Outreach to San Francisco Region Tribes and Community-Based Organizations (CBOs) to take place this week (via email)
 - Workshop(s) to begin in Feb 2024
 - Thu. Feb. 29, 1:30 - 3:30 pm - Intro & Process Kick-off (Tribes & CBOs - virtual only)
 - Wed. Mar. 6, 1:30 - 3:30 pm - Feedback from Tribes (virtual only)
 - Mon. Mar. 18, 9 - 11 am - Feedback from CBO (hybrid)
 - **If you represent a Tribe or CBO in the San Francisco Region and would like to participate in or stay informed of the San Francisco Region Realignment process, please email anna.holder@waterboards.ca.gov**
- [San Francisco Bay RMP](#)
 - Bay-wide sport fish monitoring in 2024 - planning process underway
 - [2023 RMP Annual Meeting](#) - PFAS in Bay Fish talk and other materials available on website
 - Review period just ended on a draft manuscript on PFAS in Bay fish. If you would like to see the draft, please email jay@sfei.org.
- San Francisco Bay subsistence fisher consumption survey questionnaire development
 - Funded by San Francisco Region, project will wrap around May 2024
 - 2nd Workshop with Community-Based Organizations on Feb 15
- [All Positives Possible](#) Carquinez Strait monitoring study
 - Funded by US EPA
 - Fish monitoring for mercury, PCBs, PFAS at four locations began in Sep 2023
 - Monitoring methods will include San Francisco Bay RMP methods and collection by community members
- OEHHA is looking for:
 - [Seafood Safety Toxicologist](#) (Final Filing Date: Until Filled)
- Biomonitoring California is looking for:
 - [Exposure Assessment Scientist](#) (Final Filing Date: 2/2/2024)
 - [Senior Research Scientist](#) (Final Filing Date: 2/12/2024)
 - [Communications and Outreach Specialist](#) (Final Filing Date: 2/15/2024)
 - [Senior Environmental Scientist \(Specialist\)](#) (Final Filing Date: Until Filled)
- The [CEDEN interface](#) (particularly for filtering and downloading data) is currently experiencing some glitches. This does not impact the data, which can be obtained in the more raw forms via the [CA Open Data Portal](#).
 - If you experience any issues with CEDEN, please email ceden@waterboards.ca.gov

- *Note from the chat:* There is some equity work being done by Fish and Wildlife <https://wildlife.ca.gov/JEDI>. It might be worth exploring how to provide bioaccumulation education during their outreach to community based programs like fish in the city and the Vamos a Pescar grant program. It could also be a good way to get additional fish tissue samples from representative species.

Action Items

- If you represent a **Tribe** and are interested in the Training Series, please [register for the course\(s\) of interest to you!](#)
- If you represent a **Tribe or CBO in the San Francisco Region** and would like to participate in or stay informed of the San Francisco Region Realignment process, please email anna.holder@waterboards.ca.gov.

Item 3. 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](#) (13-20) and [recording](#) for full discussion
- No additional questions or discussion

Action Items

- All (especially **Tribes / Agencies / Community-Based Organizations**): See the [Ways to provide feedback section](#).

Item 4. Office of Environmental Health Hazard Assessment (OEHHA) Monitoring Priorities

A representative from OEHHA will present on their near and/or long-term bioaccumulation monitoring needs and priorities.

Discussion

- See [slide](#) (21) and [recording](#) for full discussion
- Also see the [OEHHA Template](#)
- OEHHA is in the process of finalizing the 2024 list of priority waterbodies for consumption advisory development. About 15 water bodies are on the list, and it is anticipated that closer to 9 water bodies will have advisories developed.
 - *Resource shared in the chat:* [OEHHA Water Body Prioritization Process for Developing or Updating Fish Advisory](#) (2023)
- OEHHA has developed a list of water bodies where more sampling would be helpful and shared that document with the SWAMP Bioaccumulation Monitoring Program.
 - The list of water bodies will be considered during the Long-term Monitoring Priorities synthesis process.

- OEHHA is in the process of developing a document that describes the process OEHHA goes through to develop the list and will share when it is available.
- Can archived samples be analyzed for PFAS?
 - Yes - the amount of tissue and storage methods are sufficient for PFAS analysis.
- Would it be helpful for OEHHA to have PFAS analysis done on archived samples? Could those data be used for future PFAS related advice?
 - Yes - OEHHA is currently scoping the development of a PFAS Advisory Tissue Level (ATL). Having occurrence PFAS data throughout the state would be helpful as the PFAS ATL is developed, and will again be useful when advisories are developed.
- Note that the SWAMP Bioaccumulation Monitoring Program is considering analyzing archive samples for PFAS in the next year or so. More details will be able to be shared after budget discussions and decisions occur.
- Can OEHHA share the 2024 list of priority waterbodies for consumption advisory development?
 - Yes - it is still under final review and approval; once that is complete the list will be shared with the STEW.
 - In the future, OEHHA would like to present and discuss this list annually in the fall.
- Reminder that OEHHA goes through the water body prioritization process annually - so new data are considered and prioritized each year.
 - At the Apr. 2023 STEW Meeting, OEHHA gave a presentation on their process for prioritizing the development of fish advisories and shared their priorities for 2023.
 - See the Apr 23 STEW [Notes](#) (page 5-6), [Recording](#), and [Slides](#) (page 12-22).
 - [Slide](#) 21 contains the list of prioritized water bodies for 2023 - note that the slide shown in the recording displays incorrect water body region assignments, and the [linked slides](#) show the corrected water body region assignments.
- For the list of prioritized water bodies where more sampling would be helpful - how were those priorities made?
 - Higher priority water bodies are usually those with some data that indicates very high mercury concentrations.
- Note that when we analyze archived samples, the data will be flagged with a hold time error, even though the data are still scientifically robust.
 - This may impact the extent to which the data can be used for the Integrated Report, but could still be used for OEHHA Fish Consumption Advisories and other uses.
 - Note that it is common practice in the persistent organic pollutant research community to analyze and use archives samples years or even decades after they have been collected, so long as they are archived properly.

- How can regions find out how many archives they have?
 - Moss Landing Marine Lab staff can share an updated list with Anna and interested Regional Board STEW Coordinators.
- Which lab is analyzing samples for PFAS?
 - The SWAMP Bioaccumulation Monitoring Program is using the chemistry lab(s) with which we have contracts (Babcock and SGS-Axys). See the [Quality Assurance Project Plan \(QAPP\)](#) for more details.
- Can we create a different QA Code (or flag) to indicate that the hold time is not an issue?
 - Developing a different QA Code (or flag) is not recommended; data users should instead look at the lab batch comments to understand whether the QA Code impacts the appropriate use of the data.
 - The SWAMP Bioaccumulation Monitoring Program is interested in developing a guidance document to help users navigate such data interpretation issues, and will describe QA codes or flags that data users should be aware of when analyzing data.

Action Items

- OEHHA/Anna: Once the 2024 list of priority waterbodies for consumption advisory development are finalized, share with the STEW.
- Anna: Add a standing item for OEHHA at the fall STEW meeting, so OEHHA can present the list and the STEW can help inform the final prioritization of water bodies for the following year.
- Anna/SWAMP IQ: Develop a survey for data users to share common data questions (e.g. QA Codes, how to interpret lab batch comments) and use those responses to develop a guidance document that describes QA codes or flags and other things that data users should be aware of when analyzing and interpreting data.
- Autumn: Generate and share an updated list of available archives with Anna.
- Anna: Share the list of archives with all Regional Board STEW Coordinators.

Item 5. Long-term Monitoring Priorities Assessment Process - Tribe / CBO / Agency Open Forum

Any 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 share about their near and/or long-term bioaccumulation monitoring needs and priorities may do so at this time.

Tribe / CBO / Agency partners who would like to express interest in a more formal presentation during the Feb STEW meeting may do so at this time.

- Meeting Information: Wed. Feb. 28, 2024, 1:30 pm - 4:30 pm PT | [Registration Link](#)
- Optional [External Partner Template](#)

Tribe / CBO / Agency partners who are unable to present at the Jan 31 or Feb 28 STEW meetings but would still like to provide feedback may do so by completing the [Bioaccumulation Monitoring Priorities Survey](#) by Mar 1, 2024.

Discussion

- See [slide](#) (22) and [recording](#) for full discussion
- No Tribes or CBOs joined or shared during the Open Forum time slot.

Item 6. Wrap-up and Adjourn

Review next steps and action items.

Discussion

- See [slides](#) (23-28) and [recording](#) for full 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
- All: Email anna.holder@waterboards.ca.gov with future STEW meeting speaker/topic recommendations

Ways to provide feedback during the Long-term Monitoring Priorities Assessment

- **Tribes / Agencies / Community-Based Organizations (CBOs)** interested in presenting at the Feb 28 STEW meeting - email anna.holder@waterboards.ca.gov the following ASAP:
 - Notification of interest in presenting in discussions, and how you would like to share information (e.g. [External Partner Template](#) or other format)
 - A preferred time your representative will be able to present the priorities on Wed. Feb. 28, 2024 (1:30 pm - 4:30 pm PT)
- **If you are unable to present but would still like to provide feedback** - please complete the [Bioaccumulation Monitoring Priorities Survey](#) by **Mar 1, 2024**.
- Attend and participate in [upcoming Long-term Monitoring Priorities Assessment & STEW Meetings](#); [Join the STEW email list](#) to stay informed and receive updates.

Recent STEW Meetings with Long-term Monitoring Priorities Assessment Item

Meeting Date	Agenda Item	Meeting Documents
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 (<i>Tentative</i>)	Meeting Documents
Wed. Feb. 28, 2024 1:30 pm - 4:30 pm PT	Process overview & update <i>Tribe / Agency / CBO Presentations</i>	Registration Link

Meeting Date	Meeting Focus (<i>Tentative</i>)	Meeting Documents
Wed. Mar. 27, 2024 9:30 am - 12:30 pm PT	Process overview & update Reflection, synthesis, priority setting	Registration Link
Wed. Apr. 17, 2024 9:30 am - 12:30 pm PT	Process recap Presentation of priorities & next steps	Registration Link
Apr. 24, 2024 9:30 am - 12:30 pm PT	Regular STEW Meeting	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

Appendix: SWAMP Bioaccumulation Monitoring Program - Priorities and Needs Update Templates

Link to [blank External Partner Template](#), for reference. Some formatting may be revised in the below templates to reduce page length (e.g. delete sections where no response was submitted), but all submitted content remains the same.

Office of Environmental Health Hazard Assessment (OEHHA) Template

Contacts

Contact Title	Contact Name	Email Address
Section Chief, OEHHA-FEWS	Wes Smith	wesley.smith@oehha.ca.gov

Bioaccumulation Monitoring Wish List

If the SWAMP Bioaccumulation Monitoring Program had unlimited resources (funding AND people), what bioaccumulation-related monitoring would you like to see occur in your region, or statewide? Please be as specific as possible (e.g. include water body names, species and/or analytes of interest).

More than 140 fish consumption advisories have been developed for California state waters as the result of a robust collaboration between OEHHA and the STEW. This collaboration is bolstered by frequent communication and continued monitoring. OEHHA has identified items that would increase the species and locations with consumption advice. Presented below are priorities identified by OEHHA.

We recommend the following two priorities as important for long-term monitoring statewide:

1. Collection and analysis of contaminants in shellfish that are consumed by humans from freshwater, estuarine, and marine waters.
2. Analysis of PFAS in both fish and shellfish.

OEHHA has identified specific needs at the following water bodies:

1. Pardee Reservoir – Collect and analyze species for PCB congeners. Carp and catfish were high in Aroclor 1260 the 1980's.
2. Hernandez Reservoir – Collect and analyze species for mercury. This reservoir had high levels of mercury when previously sampled. Since those samples were taken, the reservoir went dry (or nearly so) and has since refilled.
3. Region 7 canals and drains – Collect and analyze commonly targeted and consumed fish species for organochlorine pesticides. Concentrations were relatively high in baitfish collected from the drains in Region 7.
4. Davis Creek – Collect and analyze commonly targeted and consumed species for mercury. Mercury concentrations were very high in small baitfish from Davis Creek.

Additionally, public inquiries regarding water bodies and/or species without current advice are listed in the table below.

Inquiry Date	Waterbody Inquired	Species inquired
3/26/2019	Alpine County lakes: Kirkwood, Caples, Woods, Red, Upper & Lower Blue Lakes, Indian Creek Reservoir, and the East & West Carson Rivers	Mackinaw, Brown Trout, Rainbow Trout, Lahonton Cutthroat Trout, and Brook Trout
10/1/2020	Anderson Lake, Stevens Creek, Uvas Reservoir	Crayfish
2/19/2022	Bon Tempe Reservoir	Additional Species
2/19/2022	Bon Tempe Reservoir	Trout
8/21/2018	Coast	Starry Rockfish
6/17/2019	Coast	Salmon
10/31/2019	Coast	Boccacio
10/31/2019	Coast	Ocean Whitefish
7/13/2023	Coast	Opaleye
7/13/2023	Coast	Sheephead
6/22/2020	Dana Point Harbor/Coast	Calico Bass
6/22/2020	Dana Point Harbor/Coast	Spotted Sand Bass
3/24/2021	Folsom Lake	Crappie
1/6/2022	Indian Valley Reservoir	Kokanee Salmon
9/19/2023	Lake Amador	Any species
7/19/2019	Lake Berryessa	Bluegill
3/24/2021	Lake Berryessa	Crappie
1/29/2021	Lake Del Valle	Trout
3/24/2021	Lake Natoma	Crappie
2/17/2021	Lake Tahoe	Any species
10/14/2019	Loch Lomond	Any species
7/8/2022	Los Gatos Creek	Crayfish
1/27/2020	Marin Coast	Salmon: King

Inquiry Date	Waterbody Inquired	Species inquired
10/9/2022	New Hogan Lake	Striped Bass
3/13/2023	New Hogan Lake	Striped Bass
8/23/2021	Newport Harbor	Spotted Sand Bass
9/19/2023	Pardee Reservoir	Any species
7/15/2020	Quarry Lakes (Fremont)	Any species
9/29/2022	Riverfront Park lakes near Russian River in Sonoma County	Bass
9/29/2022	Riverfront Park lakes near Russian River in Sonoma County	Bluegill
8/13/2021	Sacramento area	Crayfish
9/8/2021	San Bernardino County Regional Parks lakes other than Lake Gregory	Any species
9/11/2019	San Diego Bay	Pacific Oysters
4/12/2023	San Diego Bay	Halibut
8/30/2018	San Francisco Bay	Bat Ray
8/23/2022	San Francisco Bay area	Crayfish
12/5/2018	San Francisco Bay/coast	Herring
12/5/2018	San Francisco Bay/coast	Mackerel
9/12/2021	San Lorenzo River	Crayfish
8/15/2019	Santa Clara county water bodies	Crayfish
8/16/2018	Santa Cruz Coast	Mackerel, Pacific Chub
3/10/2021	Santa Margarita Lake	Any species
11/13/2021	Santa Monica to Seal Beach	Spotted Sand Bass
12/7/2020	Shadow Cliffs Lake	Rainbow Trout
3/27/2019	Shasta lake	Brown Trout
6/26/2021	Stevens Creek	Crayfish
1/19/2023	Tomales Bay	Little Neck Clams

Inquiry Date	Waterbody Inquired	Species inquired
6/9/2020	Uvas Reservoir	Catfish
3/26/2019	Whiskeytown Lake	Kokanee salmon
3/27/2019	Whiskeytown Lake	Brown Trout
3/26/2019	Any water bodies with these species	Kokanee Salmon, Trout, Landlocked Salmon
6/10/2021	Any water bodies with this species	Crayfish

Bioaccumulation Monitoring Program Sticking Points

Please highlight any roadblocks or sticking points that are preventing you from being able to fully access or use data or information generated by the SWAMP Bioaccumulation Monitoring Program.

Common examples include: difficult to find what we need, lack of funding, lack of people, not enough time or subject matter expertise to be able to adequately interpret / visualize / communicate data / results, etc.

Note - content below was shared verbally during the meeting and added here after

- Data coming from whole body samples (or other samples prepared differently than a skin-off fillet) may not be able to be included in future advisories and/or internal conversations and revised OEHHA data analysis and risk communication methods will need to be discussed and considered moving forward.