



## Safe to Eat Workgroup (STEW) Meeting Notes

Wednesday, January 26, 2022  
9:30 AM - 12:00 PM (Pacific)

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



### Agenda Overview

Item	Topic	Lead	Time
1.	<a href="#">Roll Call, Agenda Review, Goals of the Meeting</a>	Jay Davis	9:30 AM (10 min)
2.	Information: <a href="#">Quick Updates</a> Desired Outcome: Inform and update the STEW	Jay Davis	9:40 AM (20 min)
3.	Discussion: <a href="#">STEW Charter Updates</a> Desired Outcome: Inform, get decision from the STEW	Anna Holder	10:00 AM (10 min)
4.	Information: <a href="#">Final Sampling Plan for 2022</a> Desired Outcome: Inform and update the STEW	Jay Davis	10:10 AM (25 min)
5.	Discussion: <a href="#">Planning for 2023 and Beyond</a> Desired Outcome: Inform, get feedback from the STEW	Jay Davis	10:35 AM (25 min)
Break			11:10 AM (10 min)
6.	Discussion: <a href="#">Post-fire Monitoring</a> Desired Outcome: Inform and update the STEW	Ali Dunn, Jay Davis	11:20 AM (20 min)
7.	Information: <a href="#">Bioaccumulation Monitoring Program Realignment</a> Desired Outcome: Inform and update the STEW	Anna Holder	11:40 AM (20 min)
8.	<a href="#">Wrap-up and Adjourn</a>	Anna Holder	11:55 AM (10 min)

## **Agenda Details**

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

#### ***Program/STEW Leads***

Ali Dunn (SWAMP)  
Anna Holder (SWAMP)  
Jay Davis (SFEI)

#### ***Peer Review Panel***

Harry Ohlendorf (SAC)  
Christopher (Chris) Schmitt

#### ***EPA***

Terrence (Terry) Fleming

#### ***OEHHA***

Lori Chumney  
Huyen Tran Pham  
Wesley (Wes) Smith

#### ***MLML/MPSL***

Autumn Bonnema  
Billy Jackl  
Scot Lucas

#### ***Regional Boards***

R1: Rich Fadness  
R2: Carrie Austin  
R3: Melissa Daugherty  
R4: Emily Duncan  
R5: Jordan Hensley  
R6: Alanna Misico, Laurie Scribe  
R7:  
R8: Heather Boyd, Terri Reeder  
R9: Chad Loflen

#### ***State Board***

##### **OIMA/SWAMP**

Carly Nilson  
Delany Broome  
Devan Burke  
Tessa Fojut  
Gabriella Moran  
Jennifer Salisbury

#### ***Water Quality Monitoring Council***

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

### **Other**

Carrie Brown (Household & Commercial Products Association)  
Michele Castro  
Marion Champion (Mission Springs Water District)  
Daniel (Dan) Deeds (US Bureau of Reclamation)  
Gail Delihant (Western Growers Association)  
Bridgette DeShields (SF Bay RMP, Chair of TRC, Integral Consulting Inc.)  
Lesley Dobalian (San Diego County Water Authority)  
Mary Elizabeth  
Ed Erisman  
Robert Mackie (Orange County Environmental Resources Public Works)  
Ana Montoya-Horn  
Jian Peng (County of Orange)  
Heather Peterson (San Francisco Public Utilities Commission)  
Fraser Shilling (UC Davis)  
Kelly Trunnelle  
Lauren Valentino (City of San Diego)  
2 individuals on the phone

### **Action Items**

- None

## **Item 2. Quick Updates**

### **Discussion**

- See slides (8 - 9) and recording for full discussion
- 2019 Bass Lakes data and data report
  - All data needed for the 2019 Bass Lakes data report is ready for Jay's review. Jay will work on the draft data report, and will be ready to discuss it at the July STEW meeting
  - Only one R9 oyster file left (PCBs; will not be used in report)
- 2020 Coast analysis and data status
  - Shipped the last of the 2020 coast samples on Jan 24, 2022. FedEx lost one of the coolers; Autumn is working on tracking down what was in it.
  - Everything else has been dissected and reported
- New fish consumption advisories
  - [Lake Webb \(Kern County, Nov 2021\)](#)
  - [Los Banos Reservoir \(Merced County, Dec 2021\)](#)
  - No other updates to add
- Updates on TMDLs
  - No updates from Region 2 (San Francisco Bay) or Region 5 (Central Valley)
  - Still working on review of the [Delta Mercury Control Program](#)
- Monitoring Council Updates
  - Council briefed the Secretaries of the California Environmental Protection Agency

(CalEPA) and the California Natural Resources Agency (CNRA) (30 min meeting)

- Highlighted the STEW and [Realignment](#) efforts
- Secretaries approved new Council Members: [Mark Starr](#), [Krista Kamer](#), and [Lorien Fono](#)
- Next will be a briefing on [AB 1066](#) which requires the Council to “undertake various actions relating to water quality data collection and to review existing water quality monitoring, assessment, and reporting efforts and recommend specific actions and funding needs necessary to coordinate and enhance those efforts” in priority inland water-contact recreation sites.
- Next [Council meeting](#) is on Feb 24, 2022; agenda coming soon
- STEW Co-chairs will give an update on STEW activities to the Council in Aug
- Council is trying to elect Co-Chairs for the [Justice, Equity, Diversity, and Inclusion \(JEDI\) Workgroup](#)
  - JEDI workgroup is seeking nominations for interested individuals to serve in leadership capacities. The JEDI workgroup has Council advisors ready to provide support but seeks two co-chairs who are willing to organize regularly scheduled meetings, direct workgroup activities, set goals, and manage deliverables. Please send nominations together with a brief biography that contains your educational and professional background, and why you’d like to serve in a JEDI leadership role to Peter Vroom ([pvroom@sandiego.gov](mailto:pvroom@sandiego.gov)) by February 28, 2022. This information will be sent out to workgroup members for consideration, and elections will occur during our first 2022 meeting.
  - Please reach out to Peter Vroom ([pvroom@sandiego.gov](mailto:pvroom@sandiego.gov)) if you are interested in reviewing the draft charter for the workgroup
  - If you are interested in staying informed of JEDI Workgroup activities, join the [JEDI Workgroup email list](#)
  - STEW Co-chairs will be members of the JEDI Workgroup and will represent the STEW
- Other updates from the group
  - [Virtual Forum: PFAS in San Francisco Bay Fish](#), Feb 4, 2022, 9 AM – 3:30 PM PT
    - Join environmental and public health agencies, representatives of tribes and local fishing communities, and the general public to discuss PFAS sources and the contamination of San Francisco Bay sport fish, and build consensus for next steps to protect everyone who catches and eats fish from the Bay.
    - [Registration Link](#) | [Meeting Agenda](#)
  - No other updates from the STEW

### Action Items

- All: Send nominations for JEDI workgroup Co-Chairs to [pvroom@sandiego.gov](mailto:pvroom@sandiego.gov) by Feb 28, 2022.
- All: If you see “BOG” referenced on any webpages, please email location and description to [anna.holder@waterboards.ca.gov](mailto:anna.holder@waterboards.ca.gov).

- All: If you would like additional resources added to the Relevant Literature page, please email information to [anna.holder@waterboards.ca.gov](mailto:anna.holder@waterboards.ca.gov).

### Item 3. STEW Charter Updates

The Monitoring Council and its [Justice, Equity, Diversity, and Inclusion \(JEDI\) Workgroup](#) has requested that each Workgroup revise their mission and charter to reflect JEDI initiatives. The STEW Co-chairs have reviewed the [existing STEW Charter](#), [drafted a Revised STEW Charter](#), and distributed it to the Workgroup in an email on January 19, 2022 for review. A brief recap of the updates and feedback received thus far will be presented, followed by discussion of comments so that the STEW can come to a consensus regarding finalizing revisions and adopting the updated Charter.

#### Discussion

- See slides (10 - 13) and recording for full discussion
- Proposal for a consensus: The STEW supports adoption of the updated charter, including revisions discussed and agreed upon today.
- Discussion centered around the power of a single party to block decisions, with specific concern around the impacts of a single party blocking regulatory-related decisions that may prevent the STEW from making recommendations that may benefit or be in support of communities that may have been historically marginalized or excluded from decision making processes, and be impacted or burdened by decisions.
  - The STEW and the Water Quality Monitoring Council do not have regulatory authority; workgroup scope is limited to monitoring and data generation. Regulatory-centered recommendations would be outside the scope of both the STEW and the Council.
  - For the history of the workgroup we have been able to come to consensus, and generally speaking one party has not blocked decisions or actions that the majority of the group supports.
  - Comments from the chat:
    - [Regulatory-centered recommendations are] not the type of recommendations this group would make. I don't think the source and who is discharging pollutants would be incorporated. You [the STEW] could recommend a lower pollutant threshold based on consumption for the protection of beneficial uses.
    - The Council itself is non-regulatory and would generally make recommendations related to frequency of monitoring and what species to monitor and potentially to help identify protective thresholds.
- Consensus Results: There was consensus in support of the proposal among those that chose to participate in the consensus process
- Charter Amendment Process: If anyone would like to propose amendments to the charter, all they need to do is email [anna.holder@waterboards.ca.gov](mailto:anna.holder@waterboards.ca.gov) with their amendment recommendation and the STEW Co-Chairs will add the item to an upcoming agenda.

## Action Items

- Anna: Accept revisions to the revised STEW Charter as discussed and post it on the [STEW Home Page](#)

## Item 4. Final Sampling Plan for 2022

This group has been discussing the sampling plan for 2022 and beyond in some capacity since Jan 2021. An update on the final 2022 sampling plan will be presented.

## Discussion

- See slides (14 - 19) and recording for full discussion
- 2022 Sampling Priorities
  - Completing the current coastal survey (Central and North Coast)
  - Initiate second river and stream survey (Central Valley Region)
  - Realignment Sampling (San Diego Region)
- Coastal Sampling Discussions
  - Sampling recap:
    - North coast had consistently higher concentrations, mostly because of fish life histories (long lived, more time to bioaccumulate pollutants); there are not many urban or mining-related sources of pollutants
    - 2018: Sampling in the Southern CA Bight ([link to Marine Pollution Bulletin Publication](#))
    - 2020: Sampling in the Central Coast; 12 zones ([link to 2020 Cruise Report](#))
    - 2022: Sampling in the Central and North Coast; 8 more zones (sampling plan in development)
    - 2024: Finish sampling remaining zones
  - Discussion around dropping Central Coast, Pacifica Coast, Farallon Islands, Bodega Harbor, Crescent City Harbor zones from sample list.
    - Sampling these zones in the past generally required a lot of effort for very few (if any) samples.
    - Sampling the Farallon Islands requires hiring a boat, but is informative in terms of mercury pathways entering the coastal food web.
    - Comment from the Chat: A lot of fishing is done at the Farallons, especially for lingcod and rockfish - out of Berkeley harbor especially
    - Discussion Outcome: Keep Pacifica Coast and Farallon Island locations in coastal plan, drop: Carmel Coast, Bodega Harbor, Crescent City Harbor.
  - Discussion around why sampling the coast is taking four years instead of two as originally planned.

- Budget issues (trying to follow original sampling design with OEHHA and Regional additions, but with smaller budget than originally planned, and regular increase in sampling costs)
    - 2020 sampling was significantly impacted by (1) COVID-19 (increased safety precautions resulted in less efficient and effective sampling), and (2) delayed contract start (resulted in delayed start date for sampling and significantly reduced sampling season)
  - Discussion around the distribution of fishing effort. Do we know if people are fishing at all sites at the same rates?
    - Fishing effort was a factor that was considered during the original development of the sampling design. More recent analysis of fishing effort has not been conducted.
  - Discussion around concerns/issues with sampling from south to north.
    - Discussion Outcome: No issues. OK to proceed from south to north.
- River Sampling Discussion
  - Note that historical utility of sampling small rivers and streams: sampling of small rivers and streams has not identified problem areas, especially compared to large river sampling.
  - 2022: Sampling at five sites to support Region 5 needs (and supplemented with funding from Region 5): Sacramento River at Bend Bridge Near Red Bluff, Feather River upstream Yuba City, American River, South Fork at Coloma, Mokelumne River (Mokelumne River FH), San Joaquin River at Lander Avenue

### **Action Items**

- Autumn/Jay: Keep Pacifica Coast and Farallon Island locations in coastal plan, drop: Carmel Coast, Bodega Harbor, Crescent City Harbor.
- Jay: Distribute 2022 Rivers Monitoring Plan once complete.

### **Item 5. Planning for 2023 and Beyond**

This group has been discussing the sampling plan for 2022 and beyond in some capacity since Jan 2021. The workgroup will discuss sampling priorities for 2023 and beyond.

### **Discussion**

- See slides (20 - 28) and recording for full discussion
- Long-term Rivers Sampling Discussions
  - Survey in 2011 included 63 sampled locations. Higher elevation locations generally had lower mercury concentrations; lower elevation locations (i.e., valley floor) generally had higher mercury concentrations.

- Discussion around agreement in mercury concentrations trend agreement between river locations and lake and reservoir sampling locations.
  - Trends in lakes and rivers are generally in agreement: Higher elevation lakes also generally have lower mercury concentrations, vice versa.
  - Robust dataset for the Delta via the [Delta Regional Monitoring Program](#) (Delta RMP) over the past six years; mercury concentrations in the Delta appear to be strongly driven by hydrology.
- Original long-term plan includes revisiting rivers in 2024 - will be discussing whether we want to keep that in our plan and making decision on that later today.
- General plans for 2023 and beyond
  - 2023: Complete Lakes Panel 5; to remain consistent with Panels 1-4 and complete a full cycle of bass lakes sampling
  - 2024: Conduct long-term monitoring priorities assessment and adjustments
  - 2nd coast survey report to be pushed out a couple of years so we can finish the coastal sampling first
  - Should consider leveraging other sampling efforts in long-term planning
    - The [EPA National Lakes Assessment](#) (NLA) is happening in 2022 (occurs every five years)
    - The [EPA National Rivers and Streams Assessment](#) (NRSA) is scheduled for 2023 to 2024
- Proposal for a consensus: The STEW supports deprioritizing regular river sampling, unless:
  - Regions/partners are able to contribute a substantial amount of funds/resources towards river monitoring/analysis, OR
  - A Regional Realignment Advisory Committee indicates that river sampling is an essential priority for that region, OR
  - The Program receives a significant increase in funding
- Discussion around prioritization of long-term rivers sampling proposal
  - Note that current sampling is focused on sport fishing, but fish that are “safe to eat” are more aligned with subsistence fishing. Concern about misalignment between sampling design (focused on recreational fishing beneficial uses) and subsistence fishing (focused on tribal, cultural, tribal subsistence, and subsistence beneficial uses)
    - The SWAMP Bioaccumulation Monitoring Program and the STEW are beginning to address this misalignment by going through the [Realignment Process](#) in each region. Also see [Item 7 below](#) for more updates, information, and resources.
  - Note that from a statewide, big-picture perspective, it seems like the trout sites in rivers and streams would be a relatively low priority, given the information available

showing low concentrations and the large number of sites involved if they are to be sampled.

- Consensus results: N/A. More time is needed to consider and discuss the proposal. The STEW agreed to push the discussion and decision-making process to the April meeting.
- Additional comments from the chat:
  - I do think there is opportunity to provide detailed recommendations about river and enclosed bay sampling and what else is needed based on the science and needs of the tribes and communities most at risk. Then ask the Council to elevate that detailed recommendation to the Secretaries and potentially the legislature (not the state staff because we can't) but someone outside state service can engage the Legislature to provide specific additional monitoring recommendations including the funding needed via the legislative process (starting with Bloom, Quirk, or Dodd). No better time than now with a surplus to provide such a "report" of need especially with regards to data inequality.

### **Action Items**

- Anna: Add prioritization of long-term rivers sampling and consensus process to agenda for April meeting.
- Regional Coordinators: Begin to think about sampling needs that might be coming in 2025 and beyond.

### **Item 6. Post-fire Monitoring**

During the Oct. 2021 STEW meeting, attendees expressed interest in exploring the extent to which the Bioaccumulation Monitoring Program and STEW can and should conduct post-fire monitoring to better understand the impacts fires have on the bioaccumulation of pollutants (See [Oct. 2021 Meeting Notes](#) - Item 3. 2021 Sampling Update, bottom of page 5). The Workgroup will follow-up on this request, brainstorm and discuss feasibility and potential next steps.

#### Relevant Resources

- [References on fire impacts on contaminants in fish](#)
  - References have also been added to the [STEW Relevant Literature page](#)
- [SWAMP Post-Fire Water Quality Monitoring Framework Wiki](#)
  - Wiki on post-fire monitoring in the context of the [SWAMP Bioassessment Program](#)
- [SWAMP Post-Fire Monitoring Map](#)
  - Map created to assist State and Regional SWAMP partners and the Statewide SWAMP Bioassessment Program in preparing for post-fire monitoring.

### **Discussion**

- See slides (30 - 36) and recording for full discussion
- [SWAMP Bioassessment Program](#) has been conducting post-fire monitoring since 2019; having longer-term post-fire monitoring discussions. See 2nd bullet in Relevant Resources section above for more information, resources, maps, etc.

- Post-fire monitoring literature review on fire impacts on contaminants in fish conclusion: there doesn't appear to be a compelling case for dedicating resources to post-fire bioaccumulation monitoring at this time. See 1st bullet in Relevant Resources section above for list of literature, abstracts, links to publications, etc.
- Proposal for a consensus: The STEW supports deprioritizing post-fire bioaccumulation monitoring at this time.
- Chat discussion around bioaccumulative substances in fire retardants:
  - [Fire retardants are] usually phosphorus based for things like air drops [for wildfires] (i.e. ammonium phosphates - not bioaccumulative)
  - They use phosphates and fertilizers primarily for aerial fire fighting
  - [phosphorus-based fire retardants are] typically referred to as Phos-Chek
  - [Phos-Chek Fire Retardants For Use in Preventing & Controlling Fires in Wildland Fuels](#)
- Discussion around using existing monitoring efforts to collect data to better understand post-fire impacts:
  - Recommendation addition of PBDEs (Polybrominated diphenyl ethers) to list of analytes for analysis in developed areas that may have post-fire impacts
  - Possibility to do more archiving in areas that may have post-fire impacts and/or processing existing archived samples to learn more about potential impacts of fires on the bioaccumulation of pollutants in fish tissue
  - Additional comment from the chat: We may have some NLA sites that are in fire areas (BA and biacc) collected
- Proposal amendment: The STEW supports deprioritizing post-fire bioaccumulation monitoring at this time, however existing sampling should collect data that can inform post-fire impacts (e.g., PBDEs), and the STEW should consider sample archiving and processing of archived samples to learn more about potential impacts of fires on the bioaccumulation of pollutants in fish tissue.
- Consensus results: There was consensus in support of the proposal among those that chose to participate in the consensus process.

### Action Items

- Anna/Ali: Provide SWAMP Bioassessment Monitoring Program post-fire monitoring updates at future STEW meetings, as appropriate
- All: Future sampling and planning discussions should consider collecting data that can inform post-fire impacts (e.g., PBDEs due to fires in developed areas), and the STEW should consider archiving samples and processing archived samples to learn more about potential impacts of fires on the bioaccumulation of pollutants in fish tissue.

## Item 7. Bioaccumulation Monitoring Program Realignment

The implementation of the [Bioaccumulation Monitoring Program Realignment](#) is underway. This agenda item will include an update on progress and next steps, including increasing early engagement with Tribes and discussing the longer-term interest in partnership and participation from Water Board Regional Coordinators (e.g. [SWAMP](#), [FHAB](#), [Tribal](#), STEW, Basin Planning).

### Relevant Resources

- [2022 Sampling and Analysis Workplan - San Diego Region](#)
- [Meeting Notes \(Jun Mtg; Sep Mtg, Nov Mtg\)](#)
- [Realignment Plan Executive Summary](#)
- [Realignment Fact Sheet](#)

### **Discussion**

- See slides (37 - 42) and recording for full discussion
- San Diego Region Realignment Update
  - 2021 (Year 1) discussions focused on sampling and analysis priorities. 2022 Sampling and Analysis Workplan (linked above) for more details and recommendations
  - 2022 (Year 2) discussions will be around how to best use and communicate the findings of the monitoring to Tribes and communities
- Long-term Realignment Planning
  - Will initiate conversations with Regional Coordinators (Jan - Feb 2022) and Tribal Governments (Mar - Nov 2022) to get a better understanding of their interest and readiness to partner and participate in a future Realignment Cycle
  - Conversations from Jan - Nov 2022 will be used to inform which Region will go through the next Realignment Cycle & when the next round of sampling will occur (2024 or 2025, TBD)
  - Tribal Engagement Plan summarizing the intentions and methods behind the 2022 statewide Tribal engagement effort will be published in Mar 2022
  - Document summarizing discussions and long-term realignment timeline recommendations will be published in Dec 2022

### **Action Items**

- Anna: Provide updates at future STEW meetings
- Anna/Ali: Circle back with F. Shilling to inform and continue conversations around Realignment efforts

## Item 8. Wrap-up and Adjourn

- Review action items
- Review items for next meeting
- Next meeting: Apr 28, 2022, 1:00 pm - 4:00 pm
  - ***Please note the change in the Apr meeting date/time. Calendar invites for the meeting will be updated shortly after the Jan meeting agenda is distributed.***

## Discussion

- See slides (43 - 50) and recording for full discussion
- Discussion around new consensus procedures (occurred at the end of Item 6, but notes and action items were moved here to make them easier to find)
  - Need to add an “abstain” category to the process so individuals are able to “opt-out” of the consensus process (i.e., indicate “yes” or “no”) if they would like to do so.
  - Comments from the chat: I would suggest a voting category reflecting abstaining from voting for whatever reason. In my case I have been bouncing in and out of the meeting due to other priorities and did not feel comfortable voting without all the info.
- April meeting date revised from Apr 27 to Apr 28, 2022, 1:00 pm - 4:00 pm
- Anna & Jay are scheduled to give a STEW Update to the [California Water Quality Monitoring Council](#) at the Aug 25, 2022 meeting (specific time on the agenda TBD)

## Action Items

- Anna: Add an “abstain” category into future consensus processes.
- All: Email [anna.holder@waterboards.ca.gov](mailto:anna.holder@waterboards.ca.gov) with future STEW meeting speaker/topic recommendations.
- Anna: Post meeting notes, presentation, and recording on the [Meetings page](#), send email to STEW once complete.