



# Safe to Eat Workgroup (STEW) Meeting Notes



Wednesday, July 27, 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.	<a href="#">Information: Quick Updates</a> <b>Desired Outcome:</b> Inform and update the STEW	Jay Davis	9:40 AM (20 min)
3.	<a href="#">Discussion: 2019 Bass lakes (Panel 3) data and report</a> <b>Desired Outcome:</b> Inform, get feedback from the STEW	Jay Davis	10:00 AM (30 min)
4.	<a href="#">Discussion: Sampling Plan for 2023</a> <b>Desired Outcome:</b> Inform, get feedback from the STEW	Jay Davis	10:30 AM (20 min)
5.	<a href="#">Information: AB 762 - Fish and Shellfish Health Advisory Postings</a> <b>Desired Outcome:</b> Inform and update the STEW	Angie Noorda	10:50 AM (20 min)
<b>Break</b>			11:10 AM (10 min)
6.	<a href="#">Information: Overview of the California Bacteria Summit 2022</a> <b>Desired Outcome:</b> Inform and update the STEW	Charles Brooke	11:20 AM (10 min)
7.	<a href="#">Information: Bioaccumulation Monitoring Program Realignment &amp; Statewide Tribal Engagement</a> <b>Desired Outcome:</b> Inform and update the STEW	Anna Holder	11:30 AM (10 min)
8.	<a href="#">Wrap-up and Adjourn</a>	Anna Holder	11:40 AM (10 min)

## **Agenda Details**

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

#### **Discussion**

- See slides (6-7) and [recording](#) for full discussion

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

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

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

Bruce Monson (Minnesota Pollution Control Agency)  
Harry Ohlendorf (CH2M Hill)  
Christopher (Chris) Schmitt (U.S. Geological Survey)

#### ***OEHHA***

Tran Pham  
Wesley (Wes) Smith

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

Billy Jackl

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

R1:  
R2: Carrie Austin  
R3:  
R4: Emily Duncan  
R5: Selina Cole, Jordan Hensley, Alisha Wenzel  
R6: Kelly Huck  
R7:  
R8: Barbara Barry, Heather Boyd, Jason Freshwater  
R9: Jeremy Haas

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

OIMA/SWAMP  
Devan Burke  
Chad Fearing  
Tessa Fojut  
Greg Gearheart  
Rafael Maestu

#### **DFA**

Owen Bratton  
Angie Noorda

#### **DWQ**

Lisa Holmes

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

Nick Martorano (OIMA/SWAMP)

#### ***Other***

Charles Brooke (CA Dept. of Food and Agriculture)  
Sarah (Wheeler) Brower  
Christine Cosby (Yurok Tribe)  
Bridgette DeShields (SF Bay RMP, Chair of TRC, Integral Consulting Inc.)  
Robert Mackie (Orange County Environmental Resources Public Works)  
Dan Millemann (NJ Department of Environmental Protection)  
Jian Peng (County of Orange)  
Lauren Valentino (City of San Diego)  
Carolyn Yee (CA Dept. of Toxic Substances Control)  
+ 2 unidentified participants

#### **Action Items**

- None

## Item 2. Quick Updates

### Discussion

- See slides (8 - 12) and [recording](#) for full discussion
- [2016 Bass lakes report](#) complete!
- 2020 Coast data and report
  - 12 zones sampled
  - Data status: Data status: 3 PCBs samples not yet extracted; pending submission to SWAMP
  - 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).
- 2021 Bass lakes (Panel 4) data and report
  - Sample status: All dissections complete; organics sent to SGS\_Axys for analysis, Hg and Se analyses complete, awaiting reporting.
  - Data status: Files are being submitted to SWAMP as they are completed; on target to have metals processed by mid-Oct. 2022; Other/Age/Organics by end-Dec. 2022.
  - Report status: The [Cruise Report](#) is complete; on target to have a draft data report distributed and ready to discuss during the Apr. 2023 STEW Meeting.
- 2022 monitoring update
  - Reduced effort due to budget constraints
  - Rivers monitoring in the Central Valley Region is underway - three of four sites have been sampled. See the [Monitoring Plan](#) for more details.
  - Realignment monitoring in the San Diego Region - all lake sampling and one of five coastal sites have been sampled. See the [Monitoring Plan](#) for more details.
  - Remaining sampling will be completed in Aug.-Sep. 2022
- SWAMP Bioaccumulation Monitoring Program Fact Sheet now available in 7 languages!
  - The Fact Sheet is posted on the [STEW webpages](#) (Toolbox) and [Program page](#) (top of page) in: [English](#), [Spanish](#), [Simplified Chinese](#), [Traditional Chinese](#), [Hmong](#), [Korean](#), and [Tagalog](#).
- New fish consumption advisories
  - [Prado Lake \(San Bernardino County, Mar. 2022\)](#)
  - [Lake Isabella \(Kern County, May 2022\)](#)
  - *Coming soon:* Updated sampling and analysis plan to be released in the coming weeks; will include information needed to develop advisories (e.g., fish lengths)
- Updates on TMDLs
  - Region 5 staff still reviewing the [Delta Mercury Control Program](#) (DMCP); will notify the STEW when there is something to share
- Monitoring Council Updates
  - [Next meeting](#) Sep. 1, 2022; Jay and Anna will give an update on the STEW. Meeting will be held at the CalEPA building in Sacramento and virtually, from 10 am - 3 pm

- Other updates from the group
  - From the chat: There have been very little submitted regarding bioaccumulation monitoring for the [National Water Quality Monitoring Conference](#) next year [April 24–28, 2023, at either Hartford, Connecticut or Virginia Beach, Virginia, final location will be released at a future date]. Keep an eye out for a call for abstracts next week and submit good talks along this topic if you have them.
  - [Southern California Bight Regional Monitoring Program](#) 2023 is coming up; kickoff meeting is Sep.12, 2022.

### Action Items

- None

### Item 3. 2019 Bass lakes (Panel 3) data and report

A brief overview of the 2019 data will be presented, followed by discussion. A draft report will be distributed to the Workgroup in an email by Aug. 10. Please email comments to Jay ([jay@sfei.org](mailto:jay@sfei.org)) by Aug. 31.

### Discussion

- See slides (13 - 42) and [recording](#) for full discussion
- Jay provided a brief overview of the Long-term Monitoring Survey and the data that will be included in the 2019 Lakes Data report
- The long-term lakes monitoring includes 190 lakes throughout the state, broken up into 5 panels of ~35 lakes for each panel; monitoring began in 2015 and is scheduled to be completed in 2025. See the [website](#) for completed monitoring plans, cruise reports, and data reports.
- 2019 Data Findings
  - Lakes with notably high mercury concentrations include Little Rock Reservoir and Guadalupe River Watershed water bodies.
  - Approximately 1,000 sport fish were collected. The main target species for mercury analysis was Largemouth Bass; Common Carp was the most commonly sampled species for organics analysis
  - Sampled a number of lakes in Guadalupe River Watershed, which are known to be highly impacted by what was the most productive mercury mine in North America. Guadalupe Reservoir (maximum greater than 10 ppm) and Almaden Reservoir (maximum greater than 5 ppm) are adjacent to the New Almaden mercury mining district.
  - Concentrations compared to OEHHA Advisory Tissue Level (ATL) guidelines for eating fish for each of the following populations suggested:
    - Women 50 years and older and men 18 years and older (less sensitive population): Three locations (Guadalupe Reservoir, Almaden Reservoir, and Little Rock Reservoir) had mean concentrations greater than 1.3 ppm, which corresponds to the “no consumption” recommendation for that population.

- Women 18-49 years and children 1-17 years (more sensitive population): A substantially greater number of water bodies had mean concentrations greater than 0.44 ppm, which corresponds to the “no consumption” recommendation for that population.
- Preliminary long-term data trends suggest that 2019 data are relatively elevated compared to 2015 and 2017 datasets; 2019 and 2017 are more similar compared to 2015, which has substantially lower concentrations
- *Question:* Median bass mercury increases 2015-2017-2019; does this have anything to do with climate/drought? Would we have expected this based on the 2007-08 statewide survey (does it reflect known high mercury levels)?
  - *Response:* Great question. We’re not sure yet, but it is something that we will consider when we do the full interpretive report in 2025.
- Guadalupe Watershed Review
  - Lots of work has been done in this watershed in general (e.g. experiments on how to control methylmercury in lakes), although this is the first time SWAMP has sampled these lakes.
  - Substantially high concentrations within the watershed are not a surprise given it contains the 5th most productive mercury mine in the world
- Approximately 1,000 prey fish were collected. The most common species collected were Bluegill and Largemouth Bass. There was some variation among results, although prey fish generally show similar patterns as sport fish
- Mercury (ppm wet weight) versus length (mm) for bass species figure recommendations:
  - Consider putting Lake Nacimiento on the same graphic as Almaden & Guadalupe Reservoirs, because Lake Nacimiento too has an upstream mercury mine
  - Consider making the mercury scale the same for both the largemouth bass (1) and largemouth bass (2) figures (i.e. 0 - 3 ppm), and create a third figure with values greater than 3 ppm. This will make the largemouth bass (1) and largemouth bass (2) figures more comparable and make it easier to see the majority of the data, which have values less than 3 ppm.

### **Action Items**

- Jay: Distribute draft report to STEW email lists by Aug. 10
- All: Email comments to Jay ([jay@sfei.org](mailto:jay@sfei.org)) by Aug. 31

## Item 4. Sampling Plan for 2023

This group has been discussing the sampling plan for 2023 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](mailto:jay@sfei.org)) by Sep. 1. Due to permit constraints additions cannot be made after this date.

### Discussion

- See slides (43 - 47) and [recording](#) for full discussion
- We need to finalize the sampling plan earlier than in past years so we can meet permitting deadlines.
- Priorities include: Complete Bass Lakes Panel 5; Remain consistent with Panels 1-4; Include OEHHA add-ons; Possibly other high priority additions
- Timeline:
  - Jay send out list of Panel 5 lakes today (Jul 27)
  - OEHHA and Regions send requests to Jay by Sep 1
  - Finalize Monitoring Plan at Nov 3 STEW meeting
- 2023 addition suggestions:
  - Sample young largemouth bass to compare to pre-oxygenation data in Lake Hodges (Region 9) and San Pablo Reservoir (Region 2); Regions are finding it difficult to get the budget to conduct this type of sampling.
  - Both Lake Hodges and San Pablo have a different type of oxygenation from the Guadalupe Reservoirs. Speece cone in Lake Hodges has already been up and running for a few years. San Pablo is under construction - hopefully it will be running consistently beginning spring 2023; if so, it would be best to collect fish in Oct. 2023 to compare to previous Oct. data from San Pablo. Prof Marc Beutel UC Merced is the best contact for mercury in Lake Hodges.
- Plan for 2024 and beyond:
  - 2024: Monitoring: Complete Coast Round 2; possible Realignment sampling; Reports: Data report on Panel 5; Draft interpretive report on full bass lake dataset; Long-term priorities assessment & discussion
  - 2025: Draft report (data and interpretive) on 2nd coast survey
  - Potential topics to consider during 2024 priorities assessment & discussion
    - DDT issues in Southern CA - California Sea Grant and University of Southern California Sea Grant held a [California Stakeholder DDT Research Needs Workshop](#) last week on the topic. Lots of concern about DDT and it seems like that group is going to try and revisit data analysis and communication, considering how to spend their funds toward this issue. There is a need for better characterization of occurrence in a variety of fish species.

- *Bonus resource: [DDT – A Never Ending Story](#). July 2022. AllWet article series by Mark Gold, D.Env., OPC’s Executive Director and Deputy Secretary for Ocean and Coastal Policy at the California Natural Resources Agency*
      - PFOA/PFAS in fish tissue is a topic that may be of interest.
- *Question:* When was the last time Big Bear Lake was sampled?
  - *Response:* Data for Big Bear Lake from 2016 are available on the [Safe to Eat Portal](#). We also sampled Big Bear Lake in 2021 as part of Bass Lakes Panel 4 - data generation is in progress and not yet included on the Safe to Eat Portal.
- *Question:* Region 8 is considering permitting a new effluent for highly treated wastewater and is concerned about Constituents of Emerging Concern (CECs) and potential bioaccumulation in fish. Are there any recommendations for resources that could inform what should be included in the discharger’s monitoring plan?
  - *Response:* The San Francisco Bay Regional Monitoring Plan has monitored CECs in fish near a municipal wastewater outfall in the past. Jay will follow-up with Barbara Barry regarding additional resources. Also recommend reaching out to Erica Kalve, who is the [CEC Program](#) Lead at the State Water Board.

#### Action Items

- Jay: Send out list of Panel 5 lakes today (Jul. 27)
- OEHHA/Regions: Email requests to Jay ([jay@sfei.org](mailto:jay@sfei.org)) **no later than Sep. 1**
- Jay: Develop & distribute draft 2023 Monitoring Plan, in enough time for STEW review and to Finalize at the Nov STEW Meeting. Estimated to be sent out for review around mid-Oct.
- Jay: Follow-up with Barbara Barry regarding additional CEC monitoring resources

#### Item 5. 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 outreach and application materials for local agencies, an update on implementation of the Grant Project, and the status of the grant tasks.

#### Discussion

- See slides (48), [Speaker presentation](#), and [recording](#) for full discussion
- Angie provided an overview of the AB 762 Fish and Shellfish Consumption Advisories Program Grant Project, and status of grant and other timelines.
- AB 762 was enacted in 2019 and *requires* Local Health Officers to post OEHHA fish consumption advisories

- [Senate Bill 74](#) (SB 74, 2020) enabled the Water Board's Division of Financial Assistance (DFA) to create a grant program to support the posting of OEHHA fish consumption advisories
- Timeline
  - Oct. 2021: Agreement executed
  - May 2022: Initial outreach to Local Health Officers
  - Jun. 2022: Application sent out to Local Health Officers
  - **Sep. 30, 2022: Deadline for Local Health Officers to submit applications to CCDEH**
  - Feb. 2023: Notification of awards
  - After Local Health Officers receive an award they must install the sign(s) within 180 days
  - Spring/Summer 2023: DFA will submit a status report to Legislature
- Prioritization criteria includes: Waterbody size, Number of species with "do not eat" advice, Number of fishers (usage), CalEnviroScreen score, Travel time to another waterbody with advisory, No current signs at waterbody
- For more information, see the [Fish and Shellfish Advisory Signage Grant Program – Outreach and Application Materials for Local Agencies](#)
- *Question:* OEHHA has received calls from Local Health Officers regarding requirements for location, sign materials, sign size, etc. Is there a recommended contact we can point people to for these types of questions?
  - *Response:*
    - There are no specifications noted at this point other than that the sign needs to be permanent to be eligible (i.e. Handouts are not eligible for the grant)
    - If you receive any questions about the application and sign specifications please direct them to Justin Malan ([justin@ccdeh.com](mailto:justin@ccdeh.com)), the CCDEH Executive Director.
  - *Recommendation from the chat:* Maybe look to the CCHAB Network for their guidance on posting signage? Or maybe this workgroup could develop a specific guidance on posting and signage

### Action Items

- Anna: Set up a meeting between SWAMP, DFA, OEHHA to discuss CCDH contact, and the development of FAQ and Guidance Resources.



## Item 6. Overview of the California Bacteria Summit 2022

The California Bacteria Summit will take place at Cal EPA headquarters from September 14th-16th. This 3-day interactive event will cover the current science and regulatory aspects of California's approach to bacteria. Engaged participants will be included in discussions and workgroups to address key barriers to ensuring waters are safe to swim and shellfish are safe to eat in California.

### Discussion

- See slides (50), [presenter slides](#), and [recording](#) for full discussion
- California Bacteria Summit will take place Sep. 14-16 in the CalEPA Building in Sacramento
- Daily Goals:
  - Day 1 (Sep 14): Develop a common understanding of the evolution of the standards and science relevant to defining and achieving waters that are safe to swim and shellfish that are safe to eat.
  - Day 2 (Sep 15): Review current source reduction and regulatory tools and identify what's working well, what may be falling short, and potential improvements or opportunities to effectively reach our goals.
  - Day 3 (Sep 16): Identify needed regulatory actions and research for achieving waters that are safe to swim and shellfish that are safe to eat, and discuss a process for implementing these actions, including immediate next steps.
- **Note that the Summit is not a conference** - this is an opportunity to work with stakeholders in the private and public sector on the challenges bacteria pose to our ability to recreate in and eat shellfish from California waters.
- **Main interest/focus of the Summit is on fecal indicator bacteria**; cyanobacteria will likely be added to conversation in the future (after the Summit)
- Registration will be open August 8th, and seats are limited
- For more information, contact Charles Brooke ([Charles.Brooke@cdfa.ca.gov](mailto:Charles.Brooke@cdfa.ca.gov))
- *Question*: Will people be able to attend and contribute virtually?
  - *Response*: Active engagement and participation will be in-person. However, talks will be recorded and posted online after the event.
- *Question*: Even though it will focus on fecal indicator bacteria, I imagine there will be a lot of discussion about leveraging sampling programs at water bodies of concern including those for harmful algal blooms (HABs), bioaccumulation of other pollutants etc.
  - *Response*: Everything is open for discussion. There will be a panel discussion that will speak specifically about the shellfish consumption issue, HABs, and bioaccumulation of other pollutants and other pathogen risks.

## Action Items

- All: Keep an eye out for info on how to register - coming Aug 8!

## Item 7. Bioaccumulation Monitoring Program Realignment & Statewide Tribal Engagement

The implementation of the [Bioaccumulation Monitoring Program Realignment](#) and the [2022 Tribal Engagement Plan](#) is underway. This agenda item will include an update on progress and next steps.

Tribes can schedule a meeting with Bioaccumulation Monitoring Program staff, by completing the [Tribal Engagement Interest Form](#) to indicate their interest in connecting with us, their availability to set up a meeting, who should be included in the meeting invitation, and their contact information.

## Discussion

- See slides (51 - 52) and [recording](#) for full discussion
- Anna provided a brief update on the progress and status of the Bioaccumulation Monitoring Program Realignment and the 2022 Statewide Tribal Engagement effort.
- San Diego Region Realignment Update
  - 2021 (Year 1) discussions focused on data and information needs and priorities.
  - 2022 (Year 2)
    - Monitoring based on priorities established in Year 1
    - Advisory Committee discussions will focus on identifying communication and engagement needs, with an overall goal to develop a Communication and Outreach Plan for the San Diego Region.
    - Meeting 4 was held on May 12; Meeting 5 to be scheduled for Sep./Oct. 2022
- 2022 Statewide Tribal Engagement Update
  - Focus is on relationship building and information sharing, and will inform which Region will go through the next Realignment Cycle, to begin in 2024.
  - Outreach has included: (1) emails sent to the [Tribal Matters email list](#) in mid-May and mid-Jul, and (2) letters sent to Tribal Chairs only (Mar), and letters sent to Tribal Chairs as well as environmental and cultural contacts (to be sent before Aug 10).
  - Anna has met with a number of Tribal representatives and would like to continue to do so for the foreseeable future.

## Action Items

- Anna: Provide updates at future STEW meetings
- Tribes: If interested, schedule a meeting with Bioaccumulation Monitoring Program staff by completing the [Tribal Engagement Interest Form](#).

## Item 8. Wrap-up and Adjourn

- Review action items
- Review items for next meeting
- Next meeting: **Nov. 3, 2022**, 9:30 am - 12:30 pm
  - ***Please note the change in the Nov meeting date. Calendar invites will be updated shortly after the July 27 STEW meeting.***

## Discussion

- See slides (53 - 59) and [recording](#) for full discussion
- Noted date of Nov meeting changed from Nov. 2 to Nov. 3, 9:30 am - 12:30 pm to prevent scheduling conflicts of key speakers; the time of the meeting will remain the same.
- Potential Nov. agenda topics will include: Quick Updates, 2022 Sampling Update, Final Monitoring Plan for 2023, Guest Speaker, Planning for 2024 and Beyond, Planning for 2023 STEW Meetings.
- Review of Action Items for each agenda item. See the “Action Items: section under each Agenda Item above for more details.

## Action Items

- Anna: Post meeting notes, presentation, and recording on the [Meetings page](#), send email to STEW once complete.
- Anna: Update Nov calendar invitation to new date (Nov. 3).
- All: Email [anna.holder@waterboards.ca.gov](mailto:anna.holder@waterboards.ca.gov) with future STEW meeting speaker/topic recommendations.