California's Bioaccumulation Monitoring Program
Tribally-centered Fish Consumption Application
Tribal Advisory Committee Meeting Summary

Monday, December 8, 2025
10:00 AM - 12:00 PM

The goal of this meeting was to get to know Tribal Advisory Committee (TAC) members and invited guests, give an overview of the Tribally-centered Fish Consumption Application we're developing, and begin to get feedback on priorities.

Attendees

Tribal Advisory Committee Members (listed alphabetically by Tribal Affiliation):

- Big Valley Band of Pomo Indians: Sarah Ryan (Environmental Director)
- Cahto Tribe of the Laytonville Rancheria: Anira G'Acha (Environmental Director)
- California Indian Environmental Alliance: Sherri Norris (Executive Director)
- Cherokee: Gladys Bustos (Tribal member)
- Coastal Defenders: Coach Jackson (Founder, Nanticoke People)
- Enterprise Rancheria: Debie Rasmussen (Environmental Director)
- Eskuin Tribe: Jessica Lopez (Tribal Chair)
- Pinoleville Pomo Nation: Terri McCartney (Environmental Director)
- Robinson Rancheria Band of Pomo Indians: Luis Santana (Fish & Wildlife Director) & Gloria Mitchell (Tribal Elder)
- Shingle Springs Band of Miwok Indians: Zach Gigone (Environmental Scientist)
- Tolowa Dee-ni' Nation: Brittney Ford (Tribal Resource Specialist)

TAC Members invited but not able to attend:

- Quartz Valley Indian Reservation: Sarah Schaefer (Environmental Director)
- Tolowa Dee-ni' Nation: Monica Hiner (Environmental Division Manager)
- Viejas Band of Kumeyaay Indians: Daniela Mejia (Water Quality Technician)

Invited Guests:

- California State Water Resources Control Board: Nate Blacksmith (Tribal Affairs Manager)
- San Francisco Estuary Institute: Jay Davis (Clean Water Program Director)
- US EPA: Renee Jordan Ward (Fish Contamination Education Collaborative - Palos Verdes Shelf)

Project Team:

- California State Water Resources Control Board: Anna Holder (Project Lead), Devan Burke (Environmental Scientist), Hannah Merges (CA Sea Grant Fellow)
- San Francisco Estuary Institute: Tony Hale (Program Director for Environmental Informatics), Gemma Shusterman (Software Engineering Manager)
    - Cristina Grosso (Managing Technical Director) was not able to attend
- Office of Environmental Health Hazard Assessment: Wes Smith (Senior Toxicologist), Loren Chumney (Environmental Scientist), Tran Pham (Research Scientist)

Welcome & Grounding

The Project Team welcomed all to the first Tribally-centered Fish Consumption Application TAC Meeting, went over meeting logistics and provided a brief overview of the project goals, timeline, and scope.

Attendees reviewed and approved meeting agreements: to respect one another, be constructive, be engaged, and be respectful of each other's time.

The goal of this Tribally-centered Fish Consumption Application project is to develop an interactive and user-friendly Fish Consumption Application that includes and contextualizes bioaccumulation monitoring data, science, thresholds, advisories, and guidance associated with fish consumption and human health that is tailored to the needs of California Tribal users who consume fish for subsistence and/or cultural purposes.

The project scope and timelines as described in the Work Plan were reviewed.

TAC Meetings will be used to:

- Provide updates on application development
- Get feedback and guidance on key application & documentation decisions
- Review and test application features and functions, when ready
- Get feedback and guidance on outreach, communication, and engagement with Tribes, when ready for broader testing and/or distribution of the application

Advisory Committee Member Introductions

TAC members and invited guests introduced themselves and shared:

1) Their name, title and affiliation
2) What knowledge and expertise are you looking forward to sharing with us throughout this process?

TAC members noted the knowledge and expertise they share will be based on their lived experiences, generational memory, cultural responsibilities, and the deep connections indigenous peoples have had with the fish, lands, and waters from which they come.

Descriptions of TAC Member knowledge, experience and expertise included but was not limited to:

- understanding of traditional harvest and consumption practices,
- fish ecology, movements and behavior
- contaminant exposures and impacts on traditional foods
- environmental monitoring and management required to understand and communicate how consumption of traditional foods that are contaminated can impact human health and wellness
- relationship of above topics to Tribal Government engagement with the Water Boards Tribal Beneficial Uses process
- Tribal community outreach and engagement practices for beneficial relationships and the empowerment of Tribal voices.

Application Development Process, Update & Feedback

The Project Team shared an overview of the application development process and draft mockups that illustrated ideas the Project Team has for the application as used on a desktop computer or a mobile device.

TAC discussion of the mockups included:

- A note that many water bodies do not have data associated with them, or the data are not recent (e.g. 10+ years old). Discussion included the importance of the Water Boards and Tribes to work together to fill those data gaps and find ways to share data so that it can be included in the application, as appropriate.
- The applications potential relationship to the Water Boards Tribal Beneficial Uses process and discussions, particularly as they relate to conversations around subsistence consumption thresholds and exposure scenarios.
- The differences between:

    - gotmercury.org, now available here - a resource that enables users to put in their weight and the types of seafood they eat in one week to understand how those choices impact ocean health and human health.
    - Safe to Eat Portal Map - a resource that exists but is no longer supported by the Water Boards and therefore only has data through 2017. It displays tissue data collected by the SWAMP Bioaccumulation Monitoring Program and relates tissue data to OEHHA Fish Consumption guidelines. Users can click on a location and get basic information about the data and trends, as well as make it easy for users to find similar information on nearby locations.
    - SWAMP Data Dashboard - a resource that enables users to view data collected by all SWAMP programs (including bioaccumulation monitoring program data) and conduct interactive but simple trends analyses or location comparisons.
    - OEHHA Fish Advisory Map - a map that displays locations for which OEHHA has developed site-specific Fish Consumption Advisories and Safe Eating Guidelines
    - The application that will be developed through this process - an interactive and user-friendly resource that will enable users to enter information about themselves and their consumption habits and receive customized guidance on where and how to reduce their exposures to pollutants while consuming fish according to their cultural practices. This application will combine data, features and functionality the TAC likes about the other applications or in general, will be automated to include additional data as it becomes available, and will be developed such that the Water Boards and OEHHA can maintain the application after the funding for Phase 1 of this ends.
- How consumption frequency will be displayed and engaged with in the application.
- General support for having Tribal spokespersons give voice to how and why one might use the application (via video), but concern related to using an AI generated image of a Tribal person to represent those future Tribal representatives.

Recommendations made by TAC members included:

- The state needs to commit to supporting and funding the collection of bioaccumulation monitoring data and information, be it collected by the state's Bioaccumulation Monitoring Program or by Tribal Monitoring Programs.
- Any information about Tribal cultural practices, knowledge and wisdom as they relate to fish consumption needs to be directed, reviewed, and approved by TAC members.
- During this phase of the project, the application needs to include the following:
    - language that explains how long fish consumption serving recommendations last and how they can be interpreted over the long-term or when an individual wants to consume multiple species from multiple waterbodies.
    - language that explains *why* it asks for information about the user's age, weight, and whether they can become pregnant, and how a person's risk changes depending on what information they enter (e.g., explaining how risks increase for children, and people who want to have children).
    - the ability for users to adjust their desired consumption frequency, which would then inform application outputs and consumption recommendations.
    - the ability for users to input data required for the application to do an analysis (e.g., individual age, weight, whether they can become pregnant) but that the application does not store that information in any way. Once the user exits the application, the data that was shared is no longer accessible to the application or the agencies that will maintain it (i.e., the Water Boards)
- In future phases of the project, the following should be considered:
    - Including tissue data from permittees or other sources that may not submit data to the sources from which the application will pull (i.e., the California Environmental Data Exchange Network [CEDEN] via the California Open Data Portal)

Meeting Reflection, Next Steps & Adjourn

During the meeting reflection, TAC members and invited guests noted the parts of today's conversation that were most valuable included:

- hearing feedback and perspectives from TAC members; listening to others questions and ideas
- being able to review and discuss mockups and specific examples together
- discussions about the data and science related to mercury levels in fish
- discussions and brainstorming around currently available resources (e.g., data, maps or visualization tools, funding for the project, etc.)

Project Team Action Items

- By Dec 15, 2025 - Share the following with Meeting Attendees for review and feedback:
    - Meeting Summary Notes (including slides and recording for reference)
    - 2026 Availability & Interests Poll
- By the end of Jan 2026 - Share updated mockups that reflect feedback received during TAC meeting
- Send email invitations to recommended prospective TAC members
- Post finalized Notes on the Project Webpage once approved by TAC
- Continue development of application & documentation based on TAC meeting conversations

TAC Attendees Action Items

- By Jan 16, 2026 - Review and provide feedback on:
    - Meeting Summary Notes
    - 2026 Availability & Interests Poll
- By the end of Jan 2026 - Send feedback related to application features or functionality that comes to mind to anna.holder@waterboards.ca.gov or by adding comments to the 2026 Availability & Interests Poll.
- Initiate introductions or send contact information to anna.holder@waterboards.ca.gov for recommended prospective TAC members.

Other Useful Links

The links below were provided before the meeting or shared during or shortly after the meeting, but are not already provided above:

- TAC Fact Sheet - good for sharing with colleagues who you think might be interested in joining the TAC
- Report that discusses statewide trends in mercury in fish in lakes with black bass (2015-2023)