



## Fish Contamination Education Collaborative Partners Meeting

7 November 2023

1:00 p.m. to 4:00 p.m.

Los Angeles County Sanitation Districts

A.K. Warren Water Resource Facility

Operation Auditorium

[24501 S Figueroa St, Carson, CA 90745](https://www.lacsd.org/24501-S-Figueroa-St-Carson-CA-90745)

### Attendees:\*

**California Department  
of Toxic Substance  
Control (DTSC):**

Chinh Sheow  
Daniel Cordero  
Eileen Mananian

**Daniel B. Stephens  
& Associates  
(DBS&A):**

Heather Hackstedde

**EA Engineering, Science,  
and Technology, Inc. (EA):**

Travis Austin\*\*

**Chinese Christian Herald  
Crusade (CCHC):**

Lisa Loo

**Heal the Bay (HTB):**

Frankie Orrala\*\*  
Crystal Barajas

**Boat People SOS  
(BPSOS):**

Hang Nguyen

**Los Angeles County  
Sanitation District  
(LACSD):**

Chi-Li Tang\*\*

**Los Angeles Regional  
Water Quality Control  
Board (RWQCB):**

Stefani Daryanto  
Emily Duncan

**U.S. Environmental Protection  
Agency (EPA):**

Renee Jordan Ward\*\*  
Judy Huang

**California Department of Fish  
and  
Wildlife (CDFW):**

Lt. Michael Vicknair  
Dan Waligora

**State Water Resources Control  
Board (SRWCB):**

Caitlin Gray

**Cabrillo Marine Aquarium:**

Jim DePompei

**University of Southern California  
(USC):**

Maria Madrigal

\*Total attendees = 19

\*\*In-person attendance

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## Meeting Purpose

Bring FCEC partners together to meet new members and provide updates on program activities.

### 1. Welcome, Introductions, and Agenda Review

- Importance of Partners meeting and reducing the consumption of contaminated fish.
- Online and in-person introductions.

### 2. EPA Update – Renee Jordan Ward

- Update since last meeting:
  - Travis Austin with EA was officially introduced as the Project Manager under a contract with EPA.

### 3. Pier Angler Outreach Updates

- Travis Austin provided an overview of the Pier Angler Outreach conducted by Cabrillo Marine Aquarium and Heal the Bay.
  - 11,097 people reached through angler outreach (3,886 new anglers).
  - 8,020 people (72%) aware of contamination.
  - 1,642 tip cards were handed out.
  - October 2022–September 2023 Pier Outreach update:
    - Nine piers collectively: Santa Monica Pier, Venice Pier, Hermosa Beach Pier, Redondo Beach Pier, Rainbow Harbor, Pier J, Belmont Pier, Seal Beach Pier, and Cabrillo Pier.
    - Pier signs overwhelmingly ranked as the highest public awareness source.
    - Peak outreach during summer months. Seasonal fluctuations are in line with previous reporting periods.
    - 42 signs on 17 Piers – down from July 2020 (69 signs), July 2022 (50 signs), and May 2023 (47 signs):
      - 23 good, 19 damaged, 10 missing.
      - 5 signs at Seal Beach Pier were recently replaced with California Office of Environmental Health Hazard Assessment (OEHHA) signage without coordination of the Fish Contamination Education Collaborative Partners Meeting (FCEC) partners. EA is working with the City of Seal Beach to figure out who replaced the signs and possibly coordinate future outreach and signage efforts.
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- Heal the Bay inspected signs on 16 piers or coastal structures:
    - Plan to implement pilot study to clean 11 signs across 5 separate piers to determine the effectiveness of cleaning and maintenance activities prior to implementation of maintenance of all sign locations.
  - Jim De Pompei and Travis presented the slide on behalf of Cabrillo:
    - 68.3% awareness through angler outreach (most cited source of fish contamination awareness).
    - 36.5% are aware of contamination.
  - Frankie Orrala, Heal the Bay presented slides:
    - Primary aim continues to be the education of pier and shoreline anglers on the risk of consuming dichlorodiphenyltrichloroethane (DDT) and polychlorinated biphenyl (PCB)-contaminated white croaker.
    - Secondary goals are to educate anglers on other locally caught fish with regards to consumption guidelines concerning DDT, PCBs, and mercury.
    - Eight different pier locations, Santa Monica, Venice, Hermosa, Redondo, Pier J, Rainbow Harbor, Belmont, and Seal Beach.
    - Current team and languages spoken: Crystal Barajas (Spanish), Willian Quinteros (Spanish), Benmin Sun (Chinese), and Frankie Orrala (Spanish).
    - Angler Outreach Tally Form (new/repeat anglers, awareness source, language spoken).
    - Angler outreach conducted:
      - Day time 3 days/week.
      - Nighttime every Saturday (Venice and Redondo Pier only).
    - Current (October 2022 to September 2023) awareness numbers are similar to awareness from last year. Awareness is typically higher in summer months than in winter months.
    - Signage and tip-cards are the most commonly attributed sources of awareness.
    - Outreach team members are noticing new anglers fishing at the piers (moving to area/second generation anglers/out of state visitors). The percentage of new anglers during evening outreach was higher than daytime outreach (61% vs 32%). Awareness of contamination during evening outreach was reported as 83%.
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- Summary: There are still anglers who are unaware of fish contamination, especially minority groups where English is not their primary language. Signs and tip cards are the best outreach materials to inform anglers about fish contamination.
  - Zip Code Analysis (36% daytime anglers that were new contacts provided zip codes. Zip codes are only collected from new anglers – repeat zip codes were not collected):
    - 87% Los Angeles County
    - 7.5% Orange County
    - 1.2% San Bernardino County
    - 1.4% Riverside County
    - 2.5% Other/out-of-state
  - Day time—Highest zip code San Pedro, then Huntington Park, and North Long Beach.
  - Nighttime—Highest zip code Huntington Park, then Hawthorne, and Torrance (South LA county majority).
  - Questions and Comments/Discussion:
    - Renee recommended comparing day versus night zip code data for just Redondo and Venice piers, since the nighttime outreach is only conducted at those two piers.
      - Frankie stated that Redondo is open 24 hours – other piers have varying closing times.
      - Travis stated EA can produce a zip code analysis figure to compare daytime and nighttime zip code data for Redondo and Venice piers.
      - Crystal suggested comparing data collected on Saturdays between daytime and nighttime outreach, because night data collected from these piers is only collected on Saturday.
      - Frankie clarified that zip code data is only collected from new anglers.
      - Travis and Judy followed up with a suggestion to request zip code data from everyone and then filter information as needed for specific analyses. Judy conveyed that we want all the data to see if the demographics have shifted.
  - Renee asked how the angler outreach team differentiates between awareness from tip-cards versus the outreach team, because the outreach team members are the ones that hand out the tip-cards to pier anglers.
    - Frankie stated that anglers that recognize the outreach team will often cite their awareness source as the outreach team while anglers that learned about the contamination from previous outreach team members often attribute their awareness from the tip-cards.
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- Judy: Our target is subsistence anglers. Night angler outreach was started as pilot study (because some subsistence anglers are only available to fish at night)
  - Crystal: How do we determine whether someone is subsistence angler or not?
    - Judy suggested asking anglers how much fish is eaten overall – (rather than asking anglers if they are subsistence anglers, because their definition may be different than that of the project).
    - Mike suggested asking how many times per week anglers consume fish off the piers.
    - Frankie relayed that repeat anglers are counted as subsistence anglers.
      - Renee: Some people are catch and release anglers, so we need to be careful with that distinction. Crystal followed-up stating she also sees lots of repeat catch and release anglers.
- Comment: Tip cards and Angler Outreach Program (AOP) team combined are more effective than signage.
  - Judy suggested that HTB propose a pier signage cleaning schedule. Tip cards and AOP are helpful to track separately. Travis – confirmed, need to track separately.

#### **4. Enforcement Outreach Update (Lt. Michael Vicknair, CDFW)**

- October 2022 through September 2023.
  - 58 recreational patrols.
  - 51 citations issued.
  - No white croaker related citations.
  - No white croaker seized.
  - No commercial business violations.
  - Discussion: CDFW encourages cleaning pier signage and updating public outreach literature.
  - Caitlyn asked how the current data on white croaker compares to previous years.
    - Mike stated that in the last few years, CDFW has not seen many white croaker.
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## 5. Community Outreach Update

- Travis provided an overview for outreach events conducted by DBS&A, BPSOS, and CCHC.
  - Limited awareness of contamination reported by event attendees.
  - Event display (booth in a box) materials require updates.
  - DBS&A (Heather Hackstedde):
    - Two outreach events since May 2023:
      - Baja Splash Festival – Aquarium of the Pacific, Long Beach (October 2023)
      - Lummis Day Festival – Sycamore Grove Park, Highland Park (November 2023)
    - Researching new outreach event opportunities for upcoming year.
    - Bait shop outreach:
      - 36 active bait shops.
      - Some shops either closed or do not sell bait anymore. DBS&A will work with EA and EPA to replace these shops to hit the numeric goal of 40 shops.
      - Planning to conduct in-person bait shop outreach in December.
    - Partner materials distribution:
      - October 2023 EPA order for new outreach material has been received and is ready to be distributed to partners.
    - DBS&A recommends adding a laminated QR page that directs users to sign up for the newsletter.
  - BPSOS (Hang Nguyen):
    - Five events attended since May 2023:
      - Senator Umberg’s Biannual Community Health and Resources Fair (July 2023)
      - Garden Grove Police Department National Night Out (August 2023)
      - Community Wellness Event – Holy Spirit Church (August 2023)
      - Community Health and Resource Fair – Vietnamese Alliance Church (August 2023)
      - Nhan Hoa Annual Health Fair (September 2023)
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- Community members like images of fish present on the tip card to aid in fish identification.
- Digital materials requested by booth attendees. Would like to see a tip card compatible with storing on their phone.
- BPSOS is in need of more comic books to pass out to event attendees.
- CCHC (Travis Austin presented for Lisa Loo):
  - Chinese Christian Herald Crusades Annual Walkathon and Carnival (April 2023):
    - Some attendees claim to have previously received outreach materials.
    - The fishing game is attractive for attendees with children.
  - Researching events for 2024.
  - CCHC recommended repairs to the fishing game.
- Community Outreach Summary/Questions:
  - Comments regarding how many attendees are anglers or are aware of existing contamination:
    - Follow-up with a suggestion to include a column with awareness information in the new Outreach Summary standard format.
  - Both Cabrillo and Heal the Bay expressed interest in setting up permanent displays for FCEC outreach materials at their respective aquariums.

## 6. Upcoming Activities (Travis/Renee)

- [Pvsfish.org](https://pvsfish.org) updates to the partner contacts page and bait shop location map have been completed:
    - The annual reports will be posted to the website once finalized. Partners will be informed when the reports are available online.
    - The eNewsletter will be distributed on 1 December 2023.
    - Addition upcoming updates include:
      - Advisory information.
      - Updated website photographs.
  - Pier signage redesign anticipated for 2024.
  - Booth in a box and fishing game updates are upcoming in 2024.
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## 7. Outreach Material Redesign (Renee)

- Renee presented the newly redesigned tip card and requests feedback on ways to improve the tip card from partners by 1 December 2023.
- Outreach Material Redesign subcommittee expected to meet again to finalize tip card design.

## 8. Open Forum

- E-newsletter:
  - A QR code linking event attendees to an online newsletter signup sheet suggested for the booth in box updates.
- Review curriculum guide to ensure it is up to date:
  - DBS&A to work with Travis and Renee on ways to improve outreach to teachers and students (K-12) through potential collaboration with the LA Unified School District.
- Comment about tip card serving recommendations exclusive to PCBs and DDT. Should there be additional serving suggestions based on other contaminants?
  - EPA and the FCEC's role are to inform the community of the issue relative to Palos Verdes Shelf contamination. The tip card should not contain information regarding other sources of contamination.

## 9. Adjourn

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