Fish Contamination Education Collaborative Partners Meeting
3 May 2023
9 AM to 1 PM
Los Angeles County Sanitation Districts
Joint Water Pollution Control Plant (JWPCP)
Operation Auditorium
24501 S Figueroa St, Carson, CA 90745

Attendees (29):

**California Department of Toxic Substance Control (DTSC):**
Chinh Sheow
Ted Peng
Eileen Mananian

**Daniel B. Stephens & Associates (DBS&A):**
Hannah Erbele
John Dodge

**EA Engineering, Science, and Technology, Inc. (EA):**
Travis Austin*
Kathy Monks*

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

**Heal the Bay (HTB):**
Frankie Orrala*
Katherine Pease*
Kayleigh Wade*
Crystal Barajas*
Willian Quinteros*
Benmin Sun

**Boat People SOS (BPSOS):**
Hang Nguyen

**Los Angeles County Sanitation District (LACSD):**
Chi-Li Tang*

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

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

**U.S. Environmental Protection Agency (EPA):**
Judy Huang*
Renee Jordan Ward*
Erica Yelensky
Romie Duarte
John Chesnutt

**California Department of Fish and Wildlife (CDFW):**
Dan Waligora
Bruce Joab
Lt. Michael Vicknair

**University of Southern California (USC):**
Maria Madrigal
Linda Chilton

**United States Geological Survey (USGS):**
Chris Sherwood

*In-person attendance
Meeting Purpose
Bring FCEC partners together to meet new members and provide updates on program activities.

1. Welcome, Introductions, and Agenda Review
   - John Chesnutt from EPA (San Francisco Regional Office) welcome.
     - Stressed the importance of Partners meeting and reducing the consumption of contaminated fish.
     - Introduced Renee as the new remedial project manager at EPA.
   - Travis Austin (EA) welcome, filling in for Laura Levine (EA).
   - Online and in-person introductions.

2. EPA Update – Renee Jordan Ward
   - Opportunity to reevaluate outreach post-pandemic.
   - Renewed Contract with EA as prime. No gap in funding.
   - New funds include material redesigns. Input on outreach materials for redesign will be requested later in the presentation.

3. Pier Angler Outreach Updates
   - Travis Austin (EA) provided an overview of the Pier Angler Outreach conducted by Cabrillo Marine Aquarium and Heal the Bay.
     - 9 piers collectively: Santa Monica, Venice, Hermosa Beach, Redondo Beach, Rainbow Harbor, Pier J, Belmont Pier, Seal Beach, Cabrillo Pier
     - Day outreach at all piers; Venice and Redondo night outreach on weekends.
     - Pier signs overwhelmingly received highest public awareness.
     - 47 signs on 12 Piers – down from July 2020 (69 signs) and July 2022 (50 signs)
       - 34 good, 13 damaged, 5 missing.
       - The new contract includes funding for pier sign maintenance, updates to signs, and/or relocation of signs.
     - Travis Austin presented slides on behalf of Cabrillo.
       - 64% awareness through angler outreach.
       - Damaged signs. Leading causes are environmental and vandalism.
       - Signs at low height are more likely to be bent or vandalized. High signs are not as visible or legible and do not draw much attention, but they are much less likely to be vandalized.
     - 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.
       - The secondary goal is to educate anglers on other locally caught fish with regards to catch limits and consumption guidelines concerning DDT, PCBs, and mercury.
       - Current team and languages spoken: Crystal Barajas (Spanish), Willian Quinteros (Spanish), Benmin Sun (Chinese), and Frankie Orrala (Spanish). Team met Renee during her site visit.
       - Current (October 2022 to March 2023) awareness numbers similar to awareness from last year (October 2021 to March 2022). New anglers are more common in the summer, but the Angler Outreach Program (AOP) team has also noticed an increase in awareness in the summer.
       - Signage and tip-cards are the most effective sources of awareness.
o Signage condition:
  ▪ Santa Monica – Good.
  ▪ Venice Pier – 2 missing. High level of vandalism, likely due to the signs being too low.
  ▪ Hermosa – 2 good, 2 bad.
  ▪ Redondo Beach Pier – Replaced recently, good condition.
  ▪ Pier J – Good condition (people w/o fishing license go here), but signage is not in a highly visible location. The signs are placed on streetlights and are too high off the ground to be easily read (~9-ft). Recommend moving the signs to the piers.
  ▪ Rainbow Harbor Pier – good condition.
  ▪ Belmont Pier – Graffiti for first time.
  ▪ Seal Beach Pier – good condition, but 1 missing.
  ▪ Ballona Creek, Playa del Rey – 1 good, 1 not good. (Not in good spot, could be higher). New hiking pier at Ballona Creek. The AOP team has noticed increased fishing activity in this area.
  ▪ El Porto, El Segundo – good condition, but not a lot of angler traffic. More tourists and people relaxing on the beach than anglers. Could move this sign to a higher profile area.
  ▪ Royal Palm, White Point – 1 missing and 1 in fair condition, but not in a good location. There is a new lifeguard tower that would be a better location for the sign.

  o 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.

• Zip Code Analysis
  ▪ The majority of anglers interviewed were from South Los Angeles.
  ▪ Possible task to highlight zip codes with highest density 50%

• Questions & Comments/Discussion
  ▪ Renee: Two considerations for signs: clean/replace & relocate to better heights. If we want to replace signs, do we wait until a new design is printed? Also discussed new/better coating. Requesting FCEC feedback.
    ▪ QR codes on new signs? – Also brought up at the last FCEC meeting.
    ▪ Monitoring more often might be better (every few months).
    ▪ Sign monitors or Survey 123 to upload pictures to online database?
  ▪ Travis: How often are signs cleaned, how difficult is it to clean the signs?
    ▪ Frankie, a few times a month would be helpful for cleaning.
    ▪ LA County was doing the maintenance. Need to move cleaning task to a different organization.
  ▪ Comment: Tip cards and Angler Outreach Program (AOP) combined are more effective than signage.
  ▪ Judy: HTB to come up with proposal for cleaning schedule. Tip cards and AOP are helpful to track separately. Travis – confirmed, need to track separately.

4. Enforcement Outreach Update (Michael Vicknair, CDFW)
• Patrols are down since last meeting (Primarily due to staffing at CDFW; staffing has been addressed in 2nd Quarter 2023); Office in Seal Beach closed which has created some logistical issues.
• 10 white croakers in angler possession (not a lot).
• 1 commercial business inspection – Currently, there is not much desire for white croakers in commercial market.
• Anglers don’t want to take tip cards from officers. This could be due to awareness and/or materials being distributed by uniformed officers.
• Discussion: Future Enforcement needs?
  o Is there a list of commercial businesses that are routinely inspected? How many commercial businesses are on the list for inspections? – Yes, but the number of inspections depends on the availability of officers. Officers typically do inspections on off days. Will be a priority now that staffing is up.
  o Very few market violations in the past several years. The FCEC may consider moving toward educational outreach to maintain awareness of PV Shelf fish contamination and reevaluate enforcement.
    ▪ Should there be more of a focus on education over enforcement? Backsliding might require a return to enforcement.
  o Some anglers want to keep white croakers despite awareness of fish contamination. Outreach materials might be more useful if they provide more education on the health effects. Material design changes to be discussed later.

5. Community Outreach Update
• Travis Austin (EA) provided an overview for outreach events conducted by DBS&A, BPSOS, CCHC.
• Request for materials in Korean, fish identification (ID) card in Spanish.
• Need to update physical materials such as the accordion/trifold educational boards, tablecloths, and standing banner displays, in addition to content. EA is working on repairing and replacing fishing game materials as a priority task.
• DBS&A (Hannah Erbele)
  o 1 outreach event at the Aquarium of the Pacific since the last FCEC meeting.
  o Researching new outreach event opportunities for upcoming year. Will target 10 events per year.
  o Bait shop outreach:
    ▪ 5 shops either closed or do not sell bait anymore. DBS&A will work with EA and EPA to replace these shops in areas with high density pier anglers.
    ▪ Planning to conduct in-person bait shop outreach but will keep in mind local health warnings and restrictions.
    ▪ Ask shops what works and what doesn’t.
    ▪ Who will be willing to participate.
• BPSOS (Hang Nguyen)
  o Comic books and fish ID cards are popular.
  o QR codes would be helpful on outreach materials.
  o The larger stuffed fish in the fishing game need stronger magnets to allow kids to catch them.
  o BPSOS would like an FCEC table runner for future outreach event booths.
  o Even through people speak Vietnamese, they don’t always read it. Less text in the materials is better.
  o Since the pandemic, people seem to be more aware and interested in health effects and risks.
• CCHC (Lisa Loo)
  o Events held in San Gabriel Valley: Arcadia Asian Fall Festival and San Gabriel Lunar New Year Festival.
FCEC Partners Meeting Summary
3 May 2023 Meeting

- Targeting the Asian/Chinese communities
- Tip cards are the most popular and Fish ID cards.
- Not many attendees fish but very interested in contamination issues.
- Interest in recommendations on how to eat fish safely.
  - Materials need to be replaced: booth in box and fishing game.
  - CCHC would like an FCEC banner for future outreach event booths.
  - Researching events for 2023.

- Community Outreach Summary/Questions
  - FCEC Partners had comments and discussion regarding selecting new bait shops based on zip code analysis and requesting feedback from bait shop personnel regarding the display of outreach materials and where anglers are most likely to interact with materials.
  - Map of events by zip code – Renee (EPA) compares proposed outreach event locations to high-density angler zip code areas when approving them.

6. EA Updates (Travis/Renee)
- Contract renewed with EA as the prime to continue the educational outreach and to refresh program materials.
- FCEC website (https://pvsfish.org/) posts upcoming community events, e-newsletter, reports. This is part of the reason for the 4-week notice.
  - EA and EPA would like the FCEC Partners to review and provide feedback on the website and ways to improve it.
  - The website is missing fish advisories for DDT and PCBs.
- EA requested responses from FCEC outreach partners to inventory outreach material needs and updates.
- EA is initiating repairs and updates to the Booth in a Box and fishing games.

7. FCEC outreach material redesign
- Travis and Renee would like the FCEC’s participation in updating outreach materials.
- Outreach materials
  - Update outreach materials – up to 4 material designs per year.
  - Asked FCEC to help decide which outreach materials to prioritize for updates.
  - Prioritize tip card outreach materials because these materials can travel, and they are used by all partners.
  - FCEC sub-committee organization: EPA is requesting 1 person from each partner organization to participate in the sub-committee to work on redesigns.
- Tip-card draft ideas:
  - Current cards lack information. What do we want to the materials to say? What is the message?
  - Tip cards could improve the “why” the fish should not be consumed and ways to reduce risk if people choose to consume the fish.
  - Educational opportunities: i.e., QR codes (e.g., outreach materials, to FCEC website)
  - Comments on existing tip card map:
    - Not colorblind friendly
    - Larger map
    - What do the colors mean?
  - Comments on Existing Do Not Eat page:
    - not clear, only place that discusses contamination.
o Comments on Internal page:
  ▪ Updating information as appropriate
o Suggest providing information about DDT and PCB contamination on the outreach materials; what are the health effects?
o Timeline: Subcommittee – kickoff meeting end of May.
  ▪ Draft tip card by fall FCEC Meeting
  ▪ May need to print existing materials if needed, but we don’t want excess of old materials.
  ▪ May 12th – email EA/EPA of interest to participate.
  ▪ May 19th – email redesign ideas and top priority materials that need to be updated.

• Discussion:
o Recommendation to collect information from the angler community and have angler representation on subcommittee.
o Questions to potentially address:
  ▪ What does contamination mean?
  ▪ What are health effects to family members?
  ▪ What are the symptoms?
  ▪ Why anglers are more at risk than other communities?
o Recommendation for a “personal testimonial” to put a face to the issue.
o Comment about repeat communities that are aware about the contamination but still consume fish. Should there be an extra emphasis on repeat consumers?
  ▪ EPA’s role is to inform the community of the issue. The FCEC cannot control or judge what a person decides to do with that information.
  ▪ Can improve educational items (e.g., methods to reduce risk if a person decides to consume)
o QR codes might be problematic for some people.
o CDFW: Remove any regulatory language or implications that might create barriers for education. (e.g., size limits will change according to CDFW)
o Does the group want to include what is OK to eat on the tip card?
  ▪ May evaluate additional fish to include based on pier angler data and current OEHHA fish advisories.
  ▪ Is this list up to date? – consistent with current OEHHA?
o What does a 4-times a year update mean? –> 4 individual outreach items can be updated per year.
o Recommendation to consider social science research on what changes behavior when thinking about updating materials.

8. Open Forum
  • Include top 5 species caught per year as part of annual reports?
  • E-newsletter
    ▪ Distribution list?
    ▪ What is the purpose of the newsletter? What information should be included?
    ▪ Who is the target?
  • Social media
    ▪ Link to Facebook page that hasn’t been updated since 2019.
- Historical Facebook use/analytics has shown that it might not be worth the effort to maintain vs. viewership.
- Comment about people having shorter attention-spans: sites like Instagram are more popular than Facebook and websites.
- Any analytics on website viewership?
- Include general information on DDT and PCBs; younger audiences are not aware of what these chemicals are.

Adjourn