FCEC Partners Meeting
Palos Verdes Shelf Superfund Site

10 March 2022
10 AM – 12 PM
Virtual Meeting
Agenda

• Welcome and Introductions Current and New Partners (15 min)

• EPA Update (5 min)

• Activities Summary (40 min)
  – Pier Angler Outreach and Alternate Covid-19 Activities
  – Community Outreach and Alternate Covid-19 Activities
  – Enforcement Outreach

• Break (10 min)

• Conclusions/Recommendations from Annual Reports (30 min)
  – Outreach
  – Enforcement
  – DNC Pier Sign Inventory

• Open Forum (30 min)
Introductions

• Current and New Partners (15 min)
EPA Update

• EPA Update
  – Judy Huang/EPA Region 9 Remedial Project Manager
Pier Locations—Angler Outreach

Legend

Pier Locations
- SANTA MONICA
- VENICE
- HERMOSA BEACH
- REDONDO BEACH
- RAINBOW HARBOR
- PIER J
- BELMONT PIER
- SEAL BEACH
- CABRILLO PIER
Activities Summary – Heal the Bay

• Pier Angler Outreach – Heal the Bay
  – Halted Outreach in March 2020 Due to Covid-19 Restrictions
  – Modified Outreach During Covid-19 Restrictions
    • Monthly Electronic Webinars and Blogs in English and Spanish
      – August 2020 – December 2021
      – Posted on HTB Website and Social Media with link from FCEC website
    • Aquarium Pilot Opening March - April 2021
  – Resumed Day and Evening Outreach June 2021 - Present
    • Health and Safety Plan
    • DNC Pier Sign Monitoring
    • Total Contacted ~4,418 people
    • ~53% New
    • ~72% Aware of contamination
    • Awareness sources primarily Tip-cards (41%) and Pier Signage (38%)
    • 400 tip cards were handed out in English and Spanish
# Activities Summary – Heal the Bay

## Improved Data Field Sheet

**Educational Outreach Tally Sheet**

<table>
<thead>
<tr>
<th>Date:</th>
<th>Location:</th>
<th>Outreach worker:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

********** FILL OUT ONE LINE PER PERSON**********

<table>
<thead>
<tr>
<th>Is the person an adult or a child</th>
<th>Did they agree to speak to you?</th>
<th>Is the person receiving outreach for the 1st time ever, or is it a repeat?</th>
<th>Was person aware of DDT/PCB fish contamination advisories before this?</th>
<th>Awareness Source: Signage, Tips Card, AOP Team, Internet, Events, Media, Friends/Family, Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult</td>
<td>Child</td>
<td>No</td>
<td>Yes</td>
<td>New</td>
</tr>
<tr>
<td>Adult</td>
<td>Child</td>
<td>No</td>
<td>Yes</td>
<td>New</td>
</tr>
<tr>
<td>Adult</td>
<td>Child</td>
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<td>Yes</td>
<td>New</td>
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<tr>
<td>Adult</td>
<td>Child</td>
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<td>Adult</td>
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<td>Yes</td>
<td>New</td>
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<tr>
<td>Adult</td>
<td>Child</td>
<td>No</td>
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<tr>
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<td>Child</td>
<td>No</td>
<td>Yes</td>
<td>New</td>
</tr>
<tr>
<td>Adult</td>
<td>Child</td>
<td>No</td>
<td>Yes</td>
<td>New</td>
</tr>
</tbody>
</table>

*DDT/PCB = dichlorodiphenyltrichloroethanes/polychlorinated biphenyls; AOP = Angler Outreach Program;*
Activities Summary – Heal the Bay

Mapping Where Anglers Come From and Opportunities for Expanded Outreach
Online Outreach

-5-7 likes was the general range for AOP social posts - same for English and Spanish posts
-600-700 people reached per Facebook post
-1000-4000 impressions per Twitter post
### Activities Summary – Heal the Bay

#### Aquarium Patio Pilot

<table>
<thead>
<tr>
<th></th>
<th>March</th>
<th>April</th>
<th>May</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitors to HTB Aquarium</td>
<td>361</td>
<td>1364</td>
<td>2487</td>
</tr>
<tr>
<td>QR HTB Blog</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>QR English Tipcard</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>QR Spanish Tipcard</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>QR Chinese Tipcard</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>QR Vietnamese Tipcard</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Virtual version of AQ field trip

Developed and offered virtual field trip on Fish Contamination and Food Web
Pier Outreach: Jun 2021 – Feb 2022

- Represents:
  - Reopening the Piers
  - Develop Health and Safety Plan
  - Rehire 2 experienced team members
  - Data collected Jun 2021 – Feb 2022
  - Preliminary Analysis
Activities Summary – Heal the Bay

Total Anglers Surveyed: Jun 2021 – Feb 2022

 PARTICIPANT BREAKDOWN

- New: 60%
- Repeat: 40%

n= 4,565
Activities Summary – Heal the Bay

Total Anglers surveyed from Santa Monica through Seal Beach: Jun 2021 – Feb 2022

![Bar graph showing total anglers surveyed from Santa Monica through Seal Beach from June 2021 to February 2022. The graph includes data for each month, with labels for 'New' and 'Repeat' anglers. The total number of anglers surveyed is 4,565.]
Activities Summary – Heal the Bay
Total Anglers Aware of Fish Contamination: Jun 2021 – Feb 2022

- 75% aware
- 25% not aware

n= 4,565
Activities Summary – Heal the Bay

Awareness Source: Jun 2021 – Feb 2022

Awareness Source
(June 2021 - February 2022)

<table>
<thead>
<tr>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signage</td>
<td>1353</td>
</tr>
<tr>
<td>Tip-card</td>
<td>1201</td>
</tr>
<tr>
<td>AOP Team</td>
<td>692</td>
</tr>
<tr>
<td>Internet</td>
<td>0</td>
</tr>
<tr>
<td>Events</td>
<td>0</td>
</tr>
<tr>
<td>Media</td>
<td>120</td>
</tr>
<tr>
<td>Friend/Family</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
</tr>
</tbody>
</table>

n=3,401
Activities Summary – Heal the Bay

Evening Outreach: Jun 2021 – Feb 2022

Participant Breakdown

- New: 395 (59%)
- Repeat: 275 (41%)

n= 670
Activities Summary – Heal the Bay
Total Anglers surveyed: Jun 2021 – Feb 2022
(Venice and Redondo Beach Pier)

Total Anglers surveyed from Venice and Redondo Beach Pier

<table>
<thead>
<tr>
<th>Month</th>
<th>New</th>
<th>Repeat</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>50</td>
<td>19</td>
</tr>
<tr>
<td>July</td>
<td>99</td>
<td>36</td>
</tr>
<tr>
<td>August</td>
<td>36</td>
<td>34</td>
</tr>
<tr>
<td>September</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>October</td>
<td>37</td>
<td>27</td>
</tr>
<tr>
<td>November</td>
<td>53</td>
<td>37</td>
</tr>
<tr>
<td>December</td>
<td>38</td>
<td>19</td>
</tr>
<tr>
<td>Jan '22</td>
<td>27</td>
<td>19</td>
</tr>
<tr>
<td>Feb '22</td>
<td>32</td>
<td>23</td>
</tr>
</tbody>
</table>

n= 670

59% New
41% Repeat
Activities Summary – Heal the Bay

Total Anglers Aware of Fish Contamination: Jun 2021 – Feb 2022 (Venice and Redondo Beach Pier)

79% aware
21% not aware

Total Anglers Aware of Fish Contamination Advisories

n= 670
Activities Summary – Cabrillo

• Pier Angler Outreach – Cabrillo
  – Halted Outreach in March 2020 Due to Covid-19 Restrictions
  – Resumed Day Outreach September 2021 - Present
    • Health and Safety Plan
    • DNC Pier Sign Monitoring
      – 8 DNC Pier Signs
      – 7 Good and 1 Fair Condition, Still Readable
    • Total Contacted ~700 people
    • ~39% New
    • ~73% Aware of contamination
    • Awareness sources primarily Outreach Team (52%) and Pier Signage (35%)
Community Events Booth Display Board
Activities Summary – DBS&A

• Community Outreach and Alternate Covid-19 Activities
  – Halted Outreach in March 2020 Due to Covid-19 Restrictions
  – Resumed Community Event Outreach October 2021 - Present
    • Health and Safety Plan
    • Aquarium of the Pacific Baja Splash Festival October 2021
      – ~300 Attendees & tip-cards distributed in English (200), Spanish (50), Chinese (25), Vietnamese (25)
    • LA County Parks Dia de los Muertos Chalk Festival November 2021
      – ~300 Attendees & 20 English tip-cards distributed
  • Upcoming Community Events March 2022
    – Aquarium of the Pacific Noche de Estrellas
    – Aquarium of the Pacific 17th Annual International Children’s Festival
Activities Summary – DBS&A
Activities Summary – DBS&A

- Community Outreach and Alternate Covid-19 Activities
  - Modified Bait Shop Outreach – Telephoned and material drop-off
    - August 2020 delivered to 4 of 40 shops (performed by HDR)
    - July 2021 delivered to 33 of 40 shops
      - Tip-cards in English (1,400), Spanish (1,75), Chinese (250), and Vietnamese (300)
    - December 2021 delivered to 6 of 40 shops
      - Tip-cards in English (275), Spanish (275), Chinese (50), and Vietnamese (50)
  - Upcoming deliveries in late Spring 2022
    - Replace shops that have gone out of business or no longer sell bait
Activities Summary - BPSOS

• Community Outreach and Alternate Covid-19 Activities
  – Halted Outreach in March 2020 Due to Covid-19 Restrictions
  – Alternate Electronic Outreach September/October 2020
    • Translate Outreach materials & posted to FCEC website and BPSOS Social Media
      – Common Subsistence and Sport Fish of Southern California Fish Identification.
      – Fish contamination map showing red and yellow zones of DDT and PCB contamination.
      – Identifying Croakers.
      – Fish Market Owner Fact Sheet.
      – Remedial Investigation Report Fact Sheet.
      – Safer Fish Preparation and Cooking Guide.
Activities Summary - BPSOS

- Community Outreach and Alternate Covid-19 Activities
  - Alternate Electronic Outreach September/October 2020
  - BPSOS Website visits: 4,500 (January 1, 2021-March 1, 2021)
  - BPSOS Newsletter: 384 Recipients
    - 82 February 2021
    - 150 June 2021
    - 152 July 2021
- [https://bpsoscca.org/fcec](https://bpsoscca.org/fcec)
- Social Media: BPSOS FCEC Facebook and Instagram Postings

<table>
<thead>
<tr>
<th>Date Posted</th>
<th>People Reached (FB+IG)</th>
<th>Engagements (FB only)</th>
<th>Likes (FB+IG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/16/2020</td>
<td>99</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>10/26/2020</td>
<td>241</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>4/22/2021</td>
<td>96</td>
<td>2</td>
<td>12</td>
</tr>
</tbody>
</table>
Activities Summary - BPSOS

• Community Outreach and Alternate Covid-19 Activities
  – Resume Community Event Outreach Anticipated in April/May 2022
  • Health and Safety Plan
Activities Summary - CCHC

• Community Outreach
  – Halted Outreach in March 2020 Due to Covid-19 Restrictions
  – Resumed Community Event Outreach in January 2022
    • Health and Safety Plan
    • Chinese New Year Festival January 2022
      – 1,000 Attendees
      – Distributed tip-cards in Chinese (385) and English (50)
    • Anticipated Upcoming Event June 2022 Walkathon & Carnival in San Gabriel
Activities Summary – Toxics Epidemiology Program of LA County

• Community Outreach
  • Halted FCEC activities in March 2020
  • Reassigned to LACDPH during Covid-19
  • Pier sign monitoring November 2021
    – 13 signs need cleaning, 7 need replacement
    – March 2022 next inspection
  • Anticipate restart FCEC activities after June 2022
Activities Summary – Enforcement

• Enforcement Outreach
  – CDFW
    • Continued Recreational and Commercial Fishing inspections during Covid-19 Restrictions
    • 177 Recreational Fishing
    • 5 Commercial Fishing (1 Fish Market, 4 Restaurant Inspections)
    • CDFW Update
  – City of Long Beach
    • Grant expired 2019
    • No fish market and restaurant inspections performed
    • No DNC per sign monitoring and maintenance
  – Los Angeles Department of Public Health
    • Grant expired in February 2022
    • No fish market and restaurant inspections performed
BREAK FOR 10 MINUTES
Annual Report Results and Recommendations (Aug 20-Jul 21)

- Community Outreach
  - Angler (June-July 2021)
    - Primary Languages English and Spanish (Day) and Chinese (Night)
    - Popular Piers Santa Monica and Redondo Beach (Venice closed)
    - New Respondent Increase ~70%
    - Awareness Decrease from 76% to 55%
    - Awareness Source Change from Outreach Team to DNC Fish Signage
  - Day Zip codes 87% LA, 11% Orange, 1% San Bernardino, 0.5% Riverside Counties
  - Night Zip codes 96% LA, 4% Orange
  - Community Events – Diversify, Encourage Sign-in Sheets, LACUSD
Annual Report Results and Recommendations (Aug 20-Jul 21)
Annual Report Results and Recommendations (Aug 20-Jul 21)

• Community Outreach
  – Bait Shops Recommendations
    • Replace 2 West Marine and 3 Closed shops
    • Korean material requests San Pedro, Long Beach, Seal Beach, Huntington Beach
Annual Report Results and Recommendations (Aug 20-Jul 21)
Annual Report Results and Recommendations (Aug 20-Jul 21)

• Community Outreach
  – Electronic
    • FCEC website completed May 2020
    • Increased visits and engagement
    • Social Media (Facebook) less effective
    • HTB Monthly Blogs and Webinars
  – Recommend Partners Increase Postings to FCEC Website and Social Media (Facebook, Instagram, Twitter)
Annual Report Results and Recommendations (Aug 20-Jul 21)

FCEC Website
Annual Report Results and Recommendations (Aug 20-Jul 21)

Facebook Total Reach

Facebook Total Impressions
Annual Report Results and Recommendations (Aug 20-Jul 21)

- Enforcement September 2020-July 2021
  - Recreational Fishing Inspections (177)
    - 4,266 Anglers Reached
    - 14% White Croaker Observed
    - 67% Aware of Contamination
    - 40% Tip-card Distributed
    - 3 White Croaker Violations
  - Commercial Market (1) and Restaurant (5) Inspections
    - 0% White Croaker Observed and Violations
    - 80% Unaware of Contamination
  - Recommend CDFW Record Awareness, White Croaker Locations, Tip-card Languages; and Increase Commercial Inspections
Annual Report Results and Recommendations (Aug 20-Jul 21)

• Pier Sign Status June 2021
  – 18 Piers
  – HTB (on behalf of Cabrillo, City of LGB, LACDPH)
    • Assessed 45 of 69 DNC Pier Signs
    • Venice closed (6)
    • 20 DNC Pier Signs Missing and Need Replacement
      – 18 Missing: Santa Monica (1), Ballona North (3), Ballona South (4), Dockweiler (1), Manhattan Beach (4), Rocky Point (1), Hermosa (1), Pier J (1), Torrance (2)
      – 2 Replacement: Ballona North (1) and Hermosa (1)
Annual Report Results and Recommendations (Aug 20-Jul 21)

- Pier Sign Status Recommendations
  - Record Monitoring Dates and Photos
  - Place Signs at Height (9 feet)
  - Consider UV Coating
- Need Replacement Monitoring for City of LGB
Open Forum

- Replacement DNC Pier Sign Monitoring for City of Long Beach and (LACDPH)
- Market and Restaurant Inspections
- Other Topics
Thank you!

- EPA appreciates your education, outreach, and enforcement efforts
- Further suggestions or concerns, please contact:

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