

# FCEC Partners Meeting Palos Verdes Shelf Superfund Site

3 May 2023

9 AM - 1 PM

**Hybrid Meeting** 



## Agenda

- Welcome, Introductions, and Agenda Review (25 min)
- EPA Update (10 min)
- Pier Angler Outreach Updates (45 min)
- Break (20 min)
- Enforcement Outreach Update (15 min)
- Community Outreach Update (30 min)
- Break (20 min)
- EA Updates (15 min)
- FCEC Outreach Material Redesign (45 min)
- Open Forum (until 1:00pm)



## Introductions

Current and New Partners



## **EPA Update**

- EPA Update
  - Renee Jordan Ward

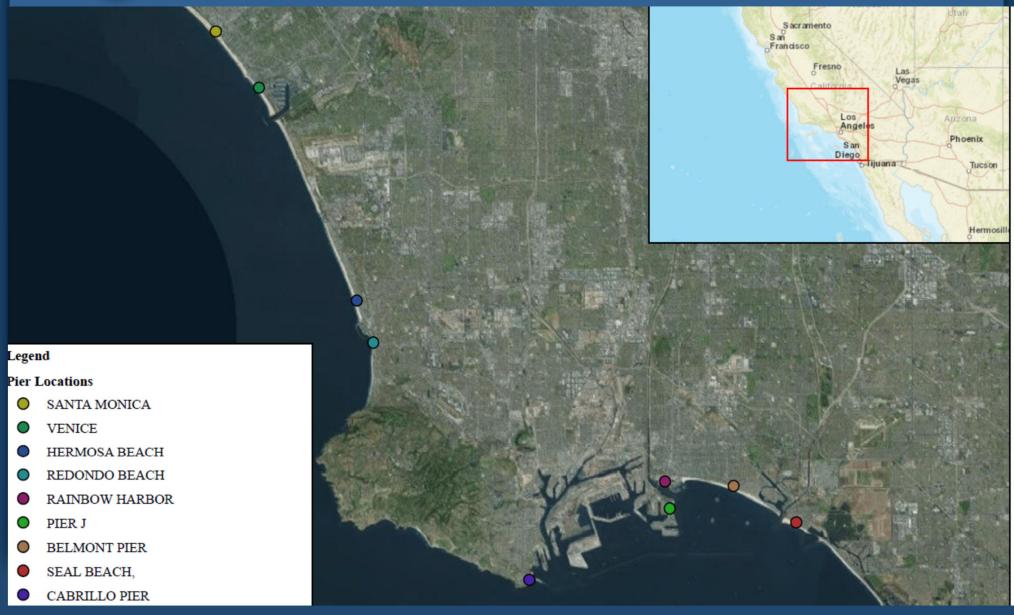


## Pier Angler Outreach Summary

- Pier Angler Outreach Heal the Bay and Cabrillo
  - October 2022 March 2023
  - Angler outreach contacted ~3,342 people
  - $\sim 1,308$  were new ( $\sim 39\%$ )
  - ~2,284 were aware of contamination (~68%)
  - ~650 tip cards were handed out in English (540), Spanish (105),
     Chinese (5)
  - Awareness sources
    - DNC Pier Signage (48.6%)
    - Tip-cards (23.1%)
    - Angler Outreach (23.2%)
    - Internet, Media, Friend/Family, and Other (5.1%)
    - Community Events (0%)

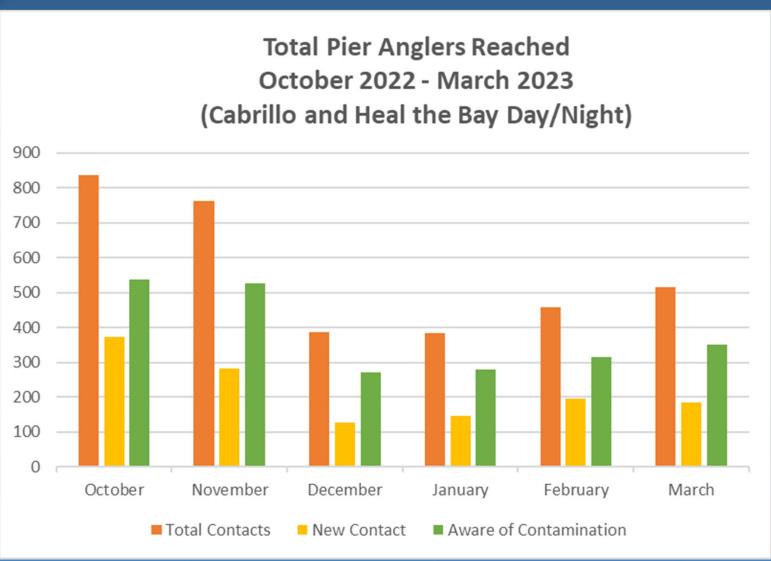


## Pier Angler Outreach Locations



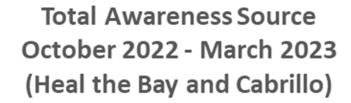


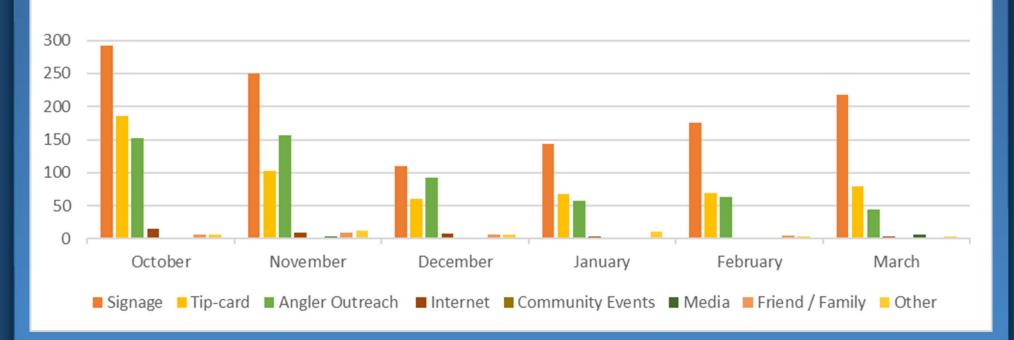
## Pier Angler Outreach





## Pier Angler Outreach







## **DNC Pier Sign Monitoring**





## 2023 DNC Pier Sign Condition

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Pier		Total	Total	Total	Good/OK	Damaged	Missing
	Fiel		(2022)	(2023)	(2023)	(2023)	(2023)
1	Santa Monica	6	5	4	4	0	1
2	Venice	6	5	4	3	1	2
3	Marina Del Rey/ Burton Chase Park	0	0	0	0	0	0
4	Ballona North Creek/ Play del Rey Jet	4	2	2	2	0	0
5	Ballona South	4	0	0	0	0	0
6	Dockweiler Beach	1	0	0	0	0	0
7	El Porto/ El Segundo	1	1	1	1	0	0
8	Manhattan Beach	4	0	0	0	0	0
9	Rocky Point	1	0	0	0	0	0
10	Cabrillo	8	8	8	0	8	0
11	Hermosa Beach	5	4	4	2	2	0
12	Redondo Beach	6	6	6	6	0	0
13	Pier J	4	3	3	3	0	0
14	Rainbow Harbor	5	4	5	5	0	0
15	Belmont	5	5	5	3	2	0
16	Seal Beach	5	5	4	4	0	1
17	Torrance Beach	2	0	0	0	0	0
18	Royal Palms/ White Point	2	2	1	1	0	1
L	Total	69	50	47	34	13	5

-July 2020 69 total signs, 18 Piers

- July 2022 50 total signs, 12 Piers

- March 202347 total signs, 12 Piers
- 34 in Good/OK condition
- 13 damaged
- 5 missing

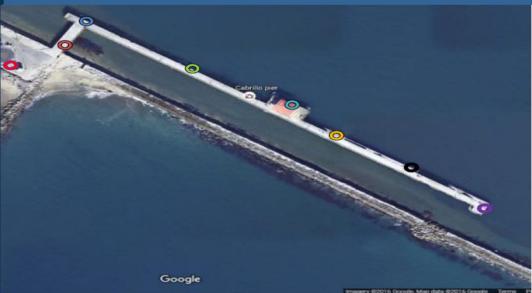


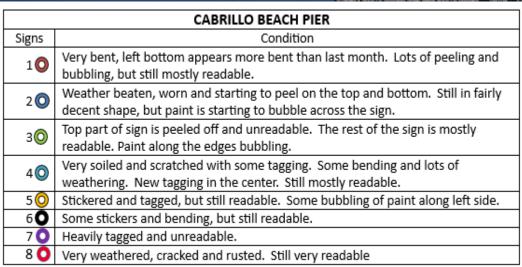
## Pier Angler Outreach Cabrillo

- Pier Angler Outreach –Cabrillo
  - October 2022 March 2023
  - Angler outreach contacted ~474 people
  - ~186 were new (~39.2%)
  - ~230 were aware of contamination (~48.5%)
  - ~146 tip cards were handed out in English (120) and Spanish (26)
  - Awareness sources
    - Angler Outreach (63.9%)
    - DNC Pier Signage (17.4%)
    - Internet (7.3%)
    - Friend/Family (7.3%)
    - Tip-cards (0%)
    - Media, Community Events, and Other (2.5%)



## Cabrillo Pier Sign Monitoring March 2023

























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60



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# Pier Angler Outreach – Heal the Bay

- The program's primary aim continues to be the education of pier and shoreline anglers on the risks of consuming DDT and PCBs-contaminated white croaker.
- Secondary goals are to educate anglers on other locally caught fish with regards to catch limits and consumption guidelines concerning DDT, PCBs, and mercury.

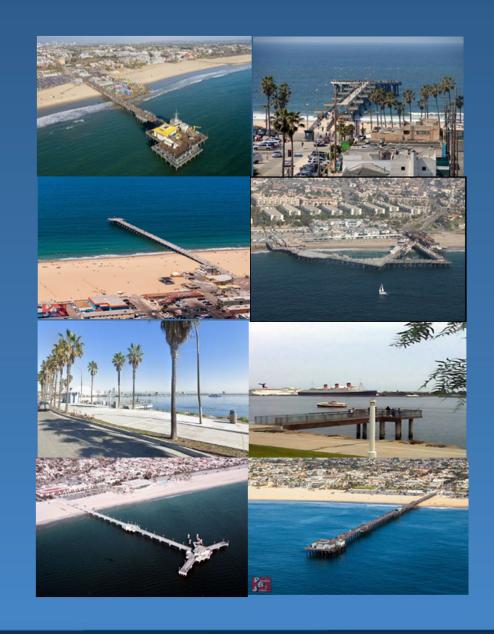




## Program Overview

- Outreach on 8 piers:

   Santa Monica, Venice,
   Hermosa, Redondo, Pier J,
   Rainbow Harbor, Belmont &
   Seal Beach
- Each pier visited by Angler Outreach Team 3x/week
- Evening Outreach:
   Venice & Redondo pier
   visited every Saturday





## **Angler Outreach Team**

#### **Current Team:**

- Crystal Barajas Spanish
- Willian Quinteros Spanish
- ▶ Benmin Sun Chinese
- ► Frankie Orrala Spanish





## **Angler Outreach Tally Form**

	•		Ludeutio	nai outica	ch Tally Sh	1000				SE: Form # dified August 1, 202
	:					worker:		Day Out		Night Outreach
Total # anglers on pier at beginning/end of shift:/ ********* FILL OUT ONE LINE PER PERSON************************************										
	Is the person an adult or a child	Did they agre- to speak to you?	Was person aware of DDT/PCB* fish contamination advisories before this?	Is the person receiving outreach for the 1st time ever, or is s/he a repeat?	Awareness source: Signage, Tip- card, AOP* Team, Internet, Events, Media, Friend/Family Other	Language spoken during outreach	Bucket Examine dg (Y/N)	Species and Number of Fish Caught (make a note if the number is an estimate)	Zip Code	NOTES
1	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
2	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
3	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
4	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
5	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
6	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
7	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
8	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
9	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
10	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
11	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
12	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
	□Adult □Child	□ No □ Yes	□ No □ Yes	□ No □ Yes						
Dat	a Sheet Checked in F		Person	Date						
Data Sheet Entered Electronically										
Electronic Data Checked										

- Surveys conducted in the daytime 3 days/week
- 2,868 total anglers
   approached across 8 piers
   from October 2022-March
   2023; 2,536 total anglers
   interviewed
- 472 tipcards distributed

English = 420

Spanish = 79

Chinese = 5

Tally form includes anglers receiving outreach (new/repeat, awareness source, language spoken)

<sup>\*</sup>DDT/PCB = dichlorodiphenyltrichloroethane/polychlorinated biphenyls; AOP = Angler Outreach Program;



# Angler Outreach Day/ Evening Participant Breakdown

Reporting Period: October 2022 – March 2023 (6 months)

#### **Morning Outreach**

▶ New: 870 (41%)

Aware: 1,717 (80%)

▶ Total: 2,144

#### **Evening Outreach**

▶ New: 252 (64%)

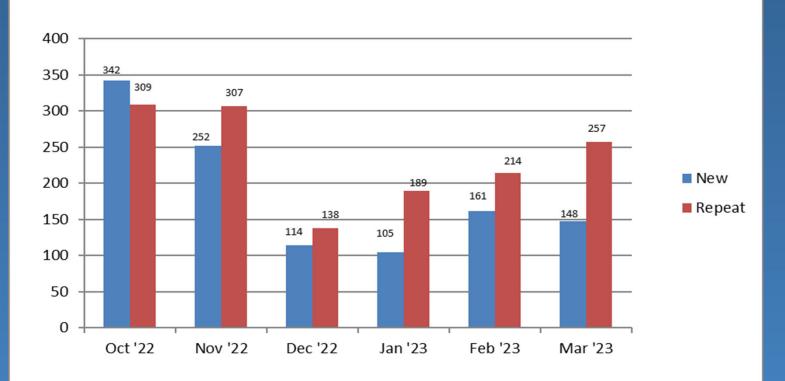
• Aware: 337 (86%)

Total: 392



#### New & Repeat Anglers from October 2022 – March 2023

#### Total Anglers surveyed from Santa Monica through Seal Beach

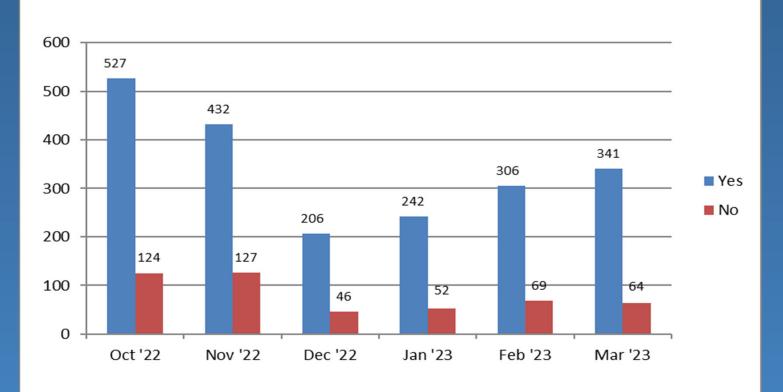


n= 2,536



#### **Total Awareness from October 2022 – March 2023**





n= 2,536

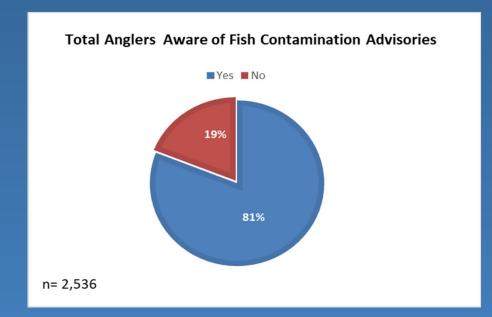


#### **Total Awareness Comparison from previous year**

#### October 2021-February 2022

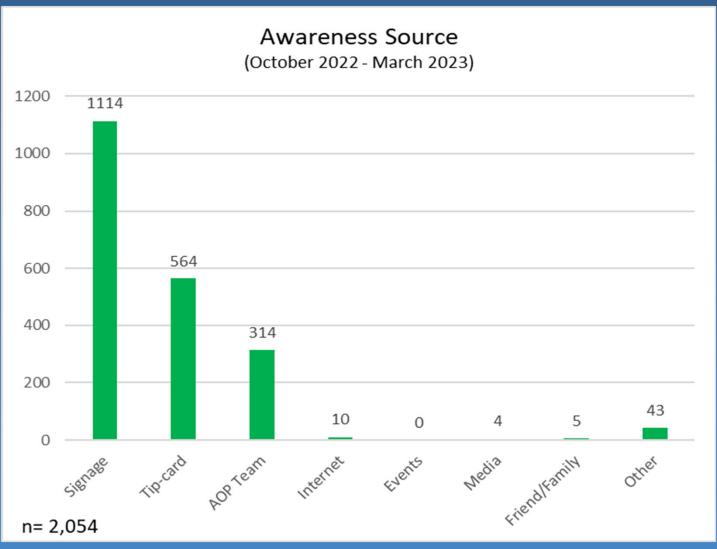
# Total Anglers Aware of Fish Contamination Advisories Yes No 18% 82% n= 2,085

#### October 2022-March 2023



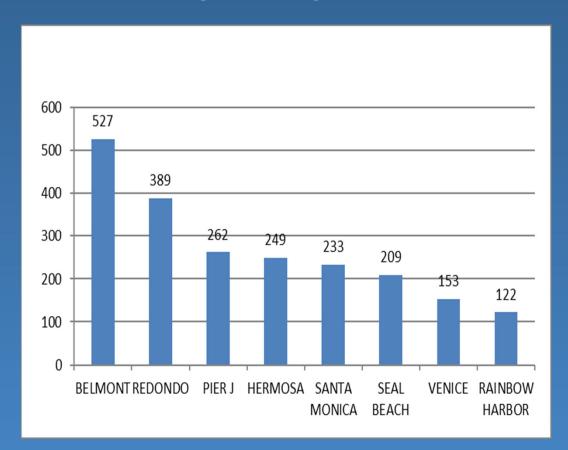


#### **Awareness Sources**

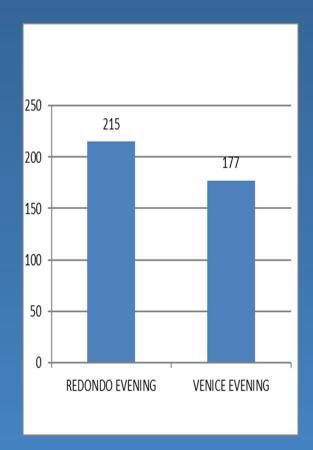




## Belmont was the busiest pier during morning outreach



#### Redondo pier was the busiest pier during evening outreach





# Angler Outreach Evening Participant Breakdown

Reporting Period: October 2022 – March 2023 Venice and Redondo Beach Pier

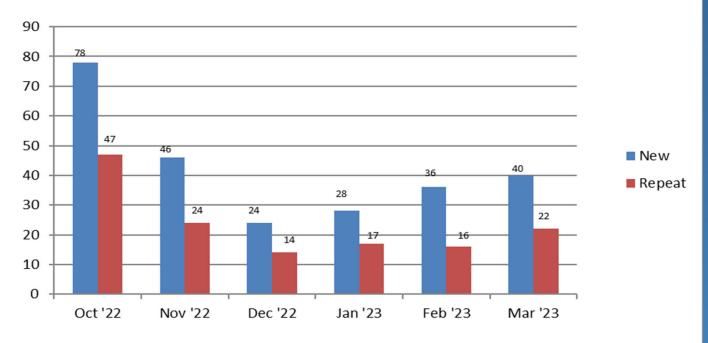
▶ New: 252 (64%)

Aware: 337 (86%)

▶ Total: 392

## New and Repeat Anglers from October 2022 – March 2023 Venice and Redondo Beach Pier





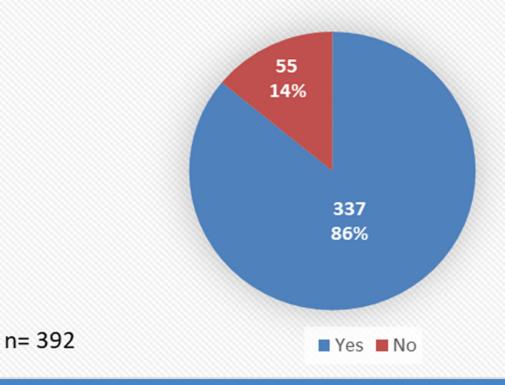
Outreach activity 4 days per month

n= 392



# Total Anglers Aware of Fish Contamination October 2022 – March 2023 (Venice and Redondo Beach Pier)







## Pier Sign Condition March 2023

707	Total	Total	Good/OK	Damaged	Missing
Pier	(2022)	(2023)	2023	2023	2023
Santa Monica	5	5	4		1
Venice	5	6	3	1	2
Ballona Creek	2	2	2		
El Porto/El Segundo	1	1	1		
Hermosa	4	4	2	2	
Redondo Beach	6	6	6		
Royal Palm/White Point	2	2	1		1
Pier J	3	3	3		
Rainbow Harbor	4	5	5		
Belmont Pier	5	5	3	2	
Seal Beach	5	5	4		1
Total	42	44	34	5	5

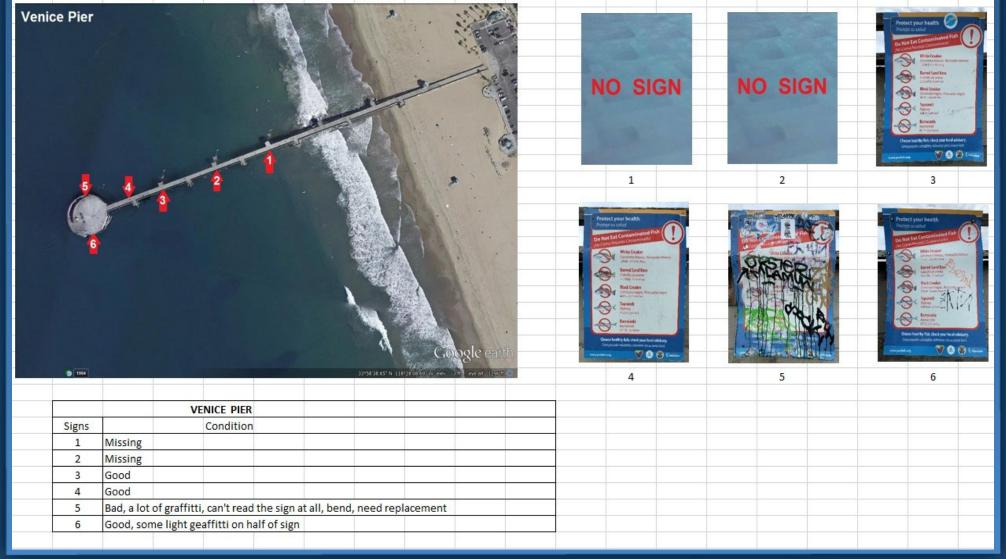


## Santa Monica Pier



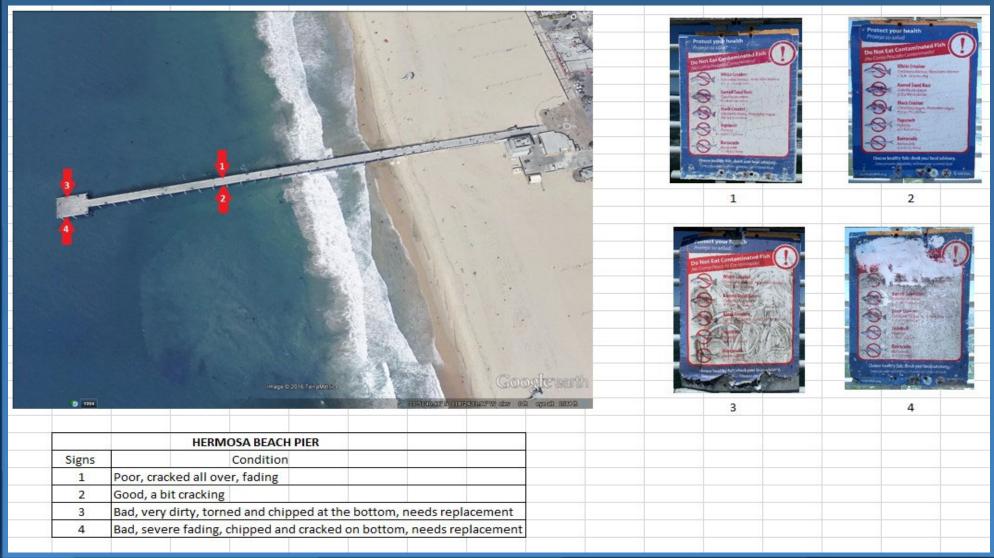


## Venice Pier



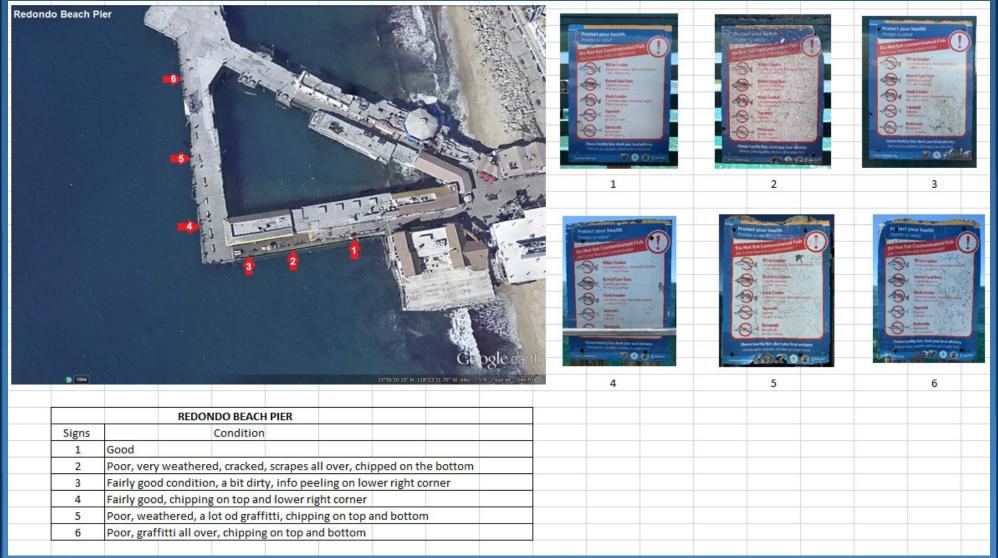


## Hermosa Beach Pier



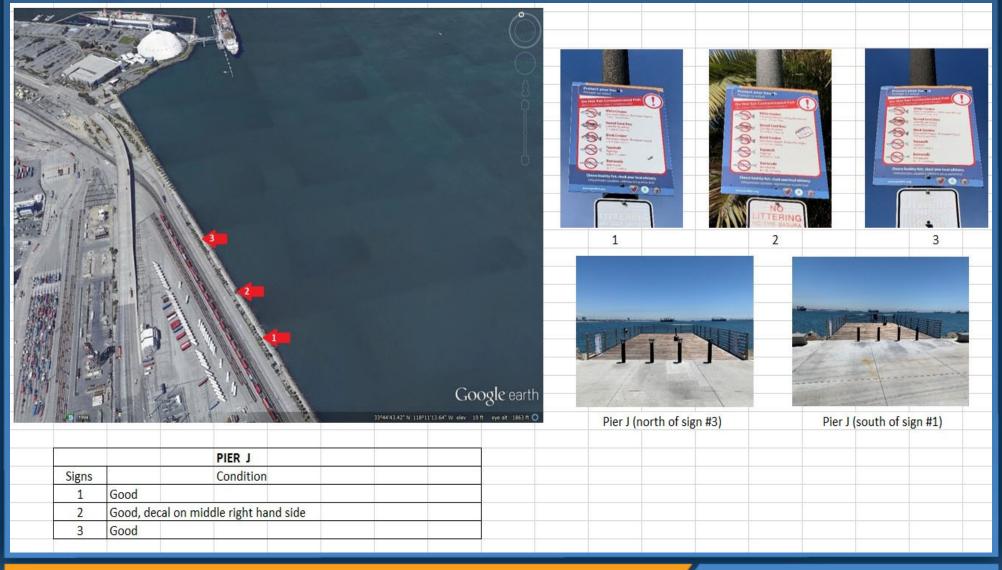


## Redondo Beach Pier





## Pier J





## Rainbow Harbor Pier



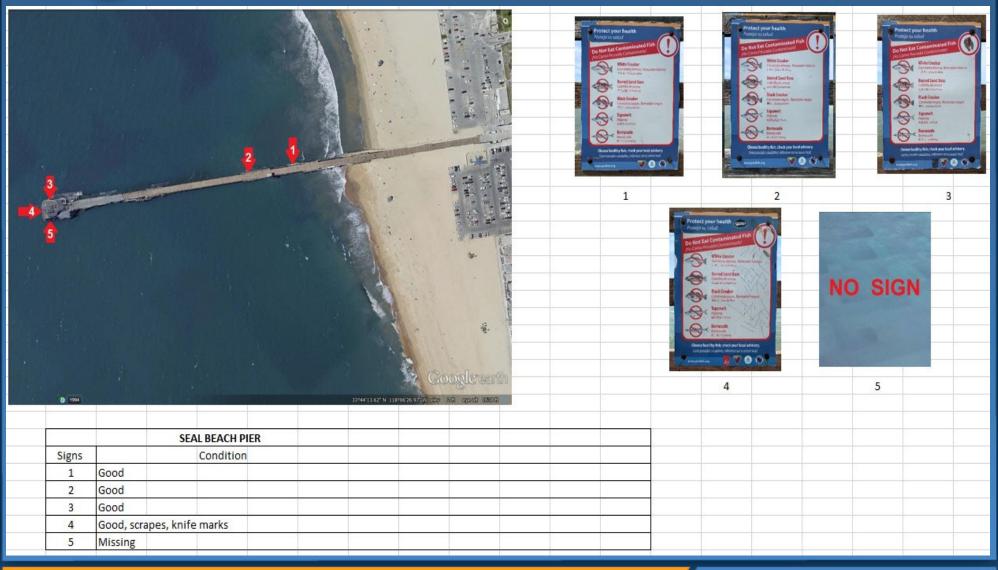


## **Belmont Pier**



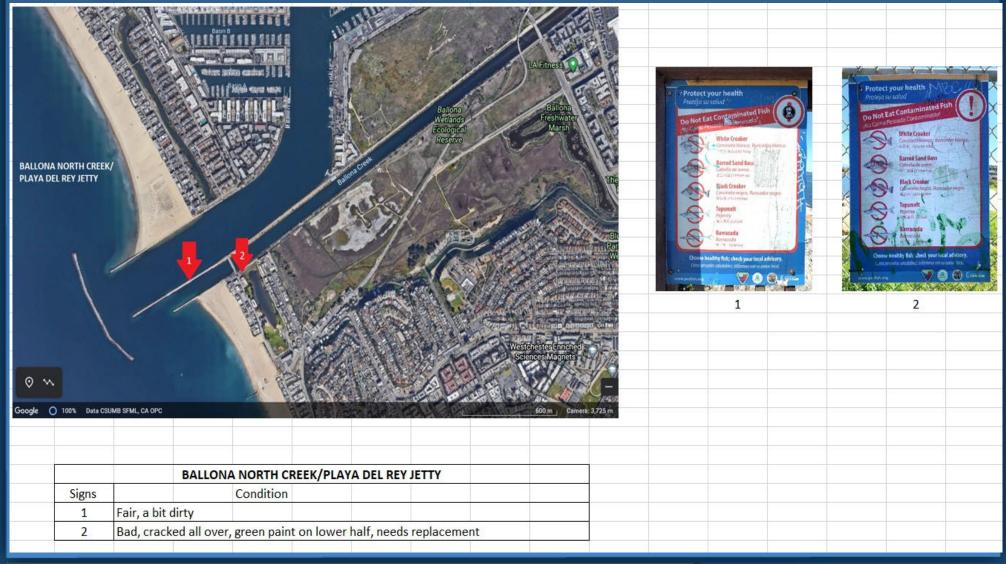


## Seal Beach Pier



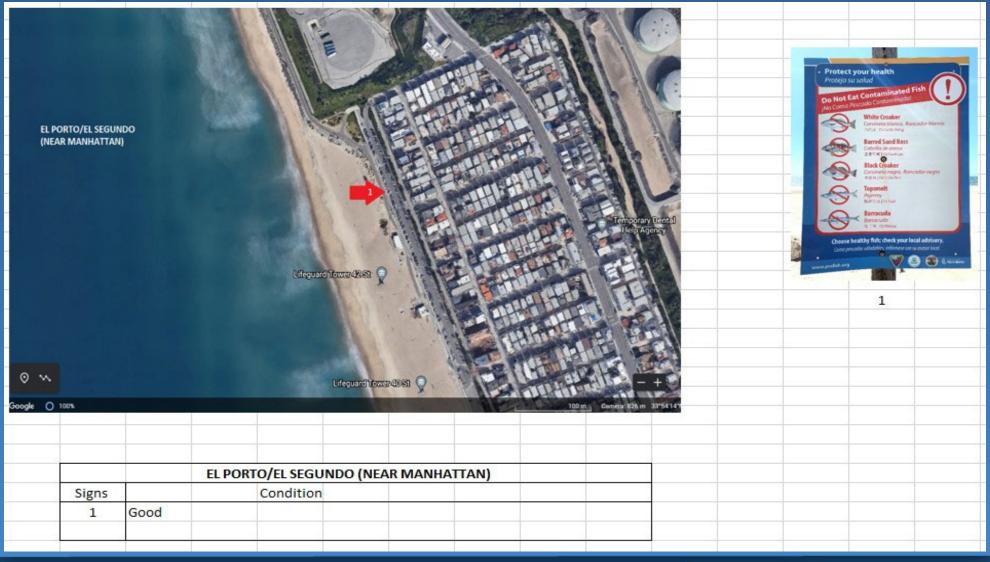


## Ballona Creek-Play del Rey



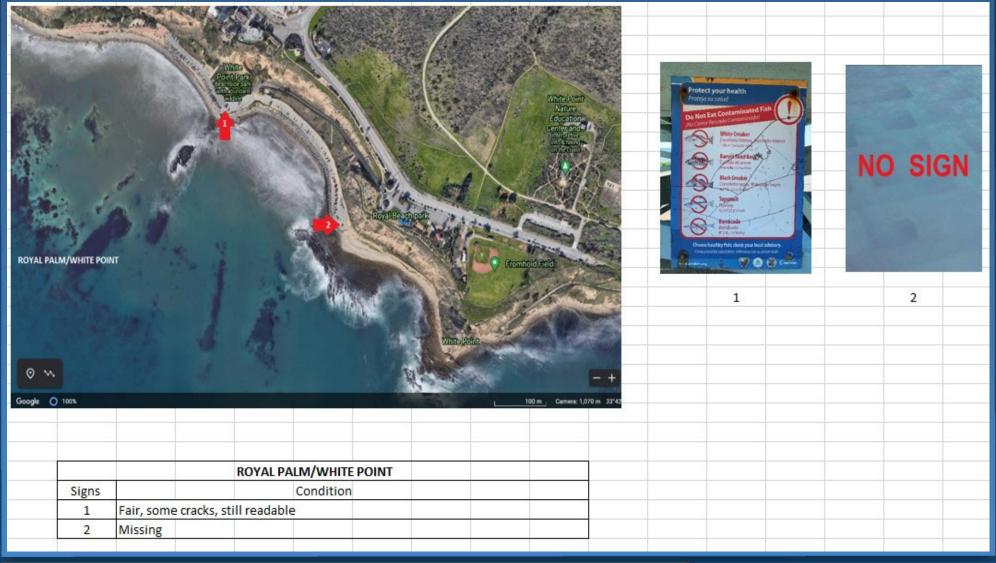


## El Porto – El Segundo





## Royal Palm-White Point





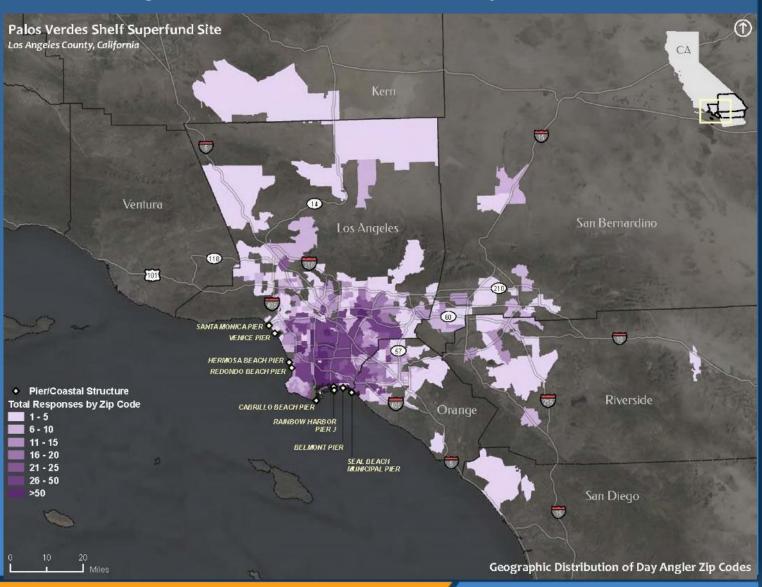
### HTB - Angler Outreach Summary

- Overall, there are still anglers who are unaware of local fish contamination, especially minority groups where English is not their primary language and they are subsistence anglers.
- Signs, tip-cards and our Heal the Bay outreach team continue to be the most effective ways to inform the angler community about local fish contamination.
- During the summer months, the angler community remains large and new, and outreach efforts must continue in order to inform and make better decisions when consuming potentially contaminated fish from piers, including those who fish at night.



### Zip Code Analysis Where Anglers Came From - Daytime

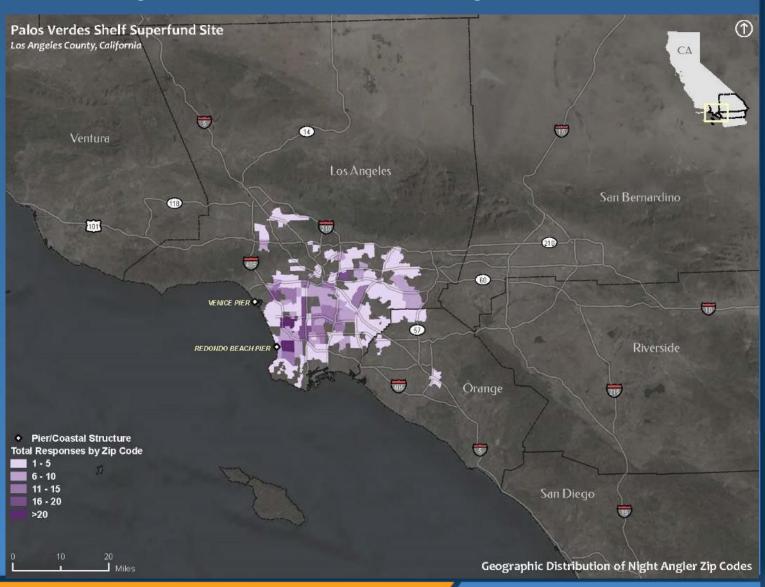
Source: 2021-2022 PVS Angler Outreach Report.





### Zip Code Analysis Where Anglers Came From - Nighttime

Source: 2021-2022 PVS Angler Outreach Report.





## Pier Angler Outreach

Questions or Comments?





### **BREAK FOR 20 MINUTES**



## Enforcement Outreach Update

- California Department of Fish and Wildlife October 2022 February 2023
  - 38 Recreational Fishing Patrols
    - 412 total contacts
    - 0 Citation White Croaker over limit
    - 0 White Croakers seized
    - 10 observed possession
  - 1 Commercial Business Inspection: No violations
  - Public Outreach Materials Distributed: Tip cards English (43), Spanish (16)
- Discussion Topics
  - Future FCEC enforcement needs after loss of 2 grants during the pandemic.
  - Incidence of angler intention to keep white croaker despite awareness of contamination may indicate a need for more outreach about the health effects of consuming contaminated fish.



### **Enforcement Outreach**

Questions & Comments?





## Community Outreach Summary

#### Total community events DBS&A, BPOS, CHCC

- 19,700 Total event attendees
- 2,066 Total tip cards English (422), Spanish (150), Chinese (1,457), Vietnamese (37)
- Limited awareness of contamination
- Limited Outreach Print Materials
  - Requested materials in Korean
  - Requested Fish ID poster into Spanish
- Booth in Box Materials
  - Fishing game broken rods, ripped fish
  - Display boards, table runner, carrying case







### Community Outreach – DBS&A

#### Completed Events

- Aquarium of the Pacific 18<sup>th</sup> Annual International Children's Festival, March 18-19, 2023
  - ~1,000 total attendees
  - ~300 attendees stopped by booth
  - Tip cards in English (62), Spanish (5), Chinese (2)
  - Pamphlets in English (112), Spanish (15), Chinese (19)
  - Comic books in English (231), Spanish (34), Chinese (3)
  - Fish identification cards in English (103), Spanish (14), Chinese (6)
  - 2 curriculum guides were provided to a local teacher
  - 5 families spoken to were aware of some sort of contamination in the region but did not know the cause or scope of the contamination

## Community Outreach - DBS&A

#### Observations/Recommendations

- The comic books and the fish ID cards were again the most popular outreach material at the aquarium. They attracted many families to the booth which initiated a conversation with families while children read the comic books and fish ID cards.
- Approximately 85% of local anglers spoken to did not consume the fish they caught.
- Approximately 90% of local anglers were aware of some sort of local contamination.
- Five individuals mentioned seeing signs posted on piers warning of contamination in the area.
- Sign-in Sheet is not popular and recommend adding QR code



# Community Outreach – DBS&A

- Anticipated Upcoming Events
  - Researching new events for 2023
- Partner Outreach Materials Inventory and Distribution
  - Partner outreach material inventory performed April 2023.
- Outreach Materials Condition
  - Booth in Box Fair condition
  - Fishing game broken fishing rods (2), ripped, torn, or faded fish (5)



### Community Outreach – DBS&A





## Community Outreach – BPSOS

- Completed Events
  - Abrazar Thank You For Being A
     Friend: A Community Event,
     November 18, 2022
    - 300+ attendees, 77 booth visits, tip cards English (10), Spanish (34) and Vietnamese (33). No awareness.
  - Spring of H.O.P.E Free Community
     Health Fair, March 17, 2023, 2022
    - ~400 attendees, 120 booth visits, tip cards Spanish (111), Chinese (5), and Vietnamese (4). No awareness.





## Community Outreach – BPSOS

#### Observations

- Children love the comic books.
   Recommend creating coloring books.
- The booth in box display board about the project information is outdated.
- The booth in the box and fishing game are in good condition
- Need "What's the Catch" comic books since they are popular with children at the community events.

#### Upcoming Events

Researching new events for 2023





## Community Outreach – CHCC

- Completed Events
  - Arcadia Asian Fall Festival, October 8-9, 2022
    - ~10,000 attendees, tip cards in Chinese (900) and English (200), ~5 attendees (~0.05%) aware of contamination.
       Awareness sources pier signs and friends.
  - 2023 San Gabriel Lunar New Year Festival, February 4<sup>th</sup>, 2023
    - ~8,000 attendees, tip cards in Chinese (550) and English (150).





### Community Outreach – CHCC

#### **Observations**

- Most event attendees were unaware of the contamination and interested in learning.
- Not many attendees fish in southern California.
- For those who fish in southern California claimed they had seen the warning signs at various piers, such as Seal Beach.
- Attendees found outreach materials informative, especially the tip-card and fish identification card.

#### **Outreach Material Condition**

- Booth in Box display board needs replacement
- Fishing Game fishing rod and fish replacement.

#### Anticipated Upcoming Event

Researching events for 2023.





## Community Outreach



Questions or Comments?



### **BREAK FOR 20 MINUTES**



### EA Updates

- FCEC Website
  - https://pvsfish.org/
  - Annual program reports
  - eNewsletter
- FCEC outreach materials inventory and update
  - What needs printed now and what should wait for updates?
- Booth in box and Fishing game updates
  - What's to come this year



# Outreach Material Redesign

- Prioritize outreach materials
  - Tip-card
  - FCEC sub-committee



Messaging goals

 What can we include to make this tip card more useful to anglers?

Educational opportunity







PROTECT THE HEALTH OF YOU AND YOUR CHILDREN
Join with other fishermen and follow the advice in this tip card

www.pvsfish.org

Printed May 2013







- Lacks information about DDT and PCB contamination
- Is the information current?
- Redesign the map
  - Not color-blind friendly
  - Lacks pier information
- QR code



# Open Forum





### Thank you!

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

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