



FCEC Partners Meeting Palos Verdes Shelf Superfund Site

2 November 2022

1 PM – 3 PM

Hybrid Meeting



Agenda

- Welcome and Introductions Current and New Partners (15 min)
- EPA Update (5 min)
- Pier Angler Outreach Update (25 min)
- Enforcement Outreach Update (5 min)
- Break (10 min)
- Community Outreach Update (30 min)
- Open Forum (30 min)



Introductions

- Current and New Partners

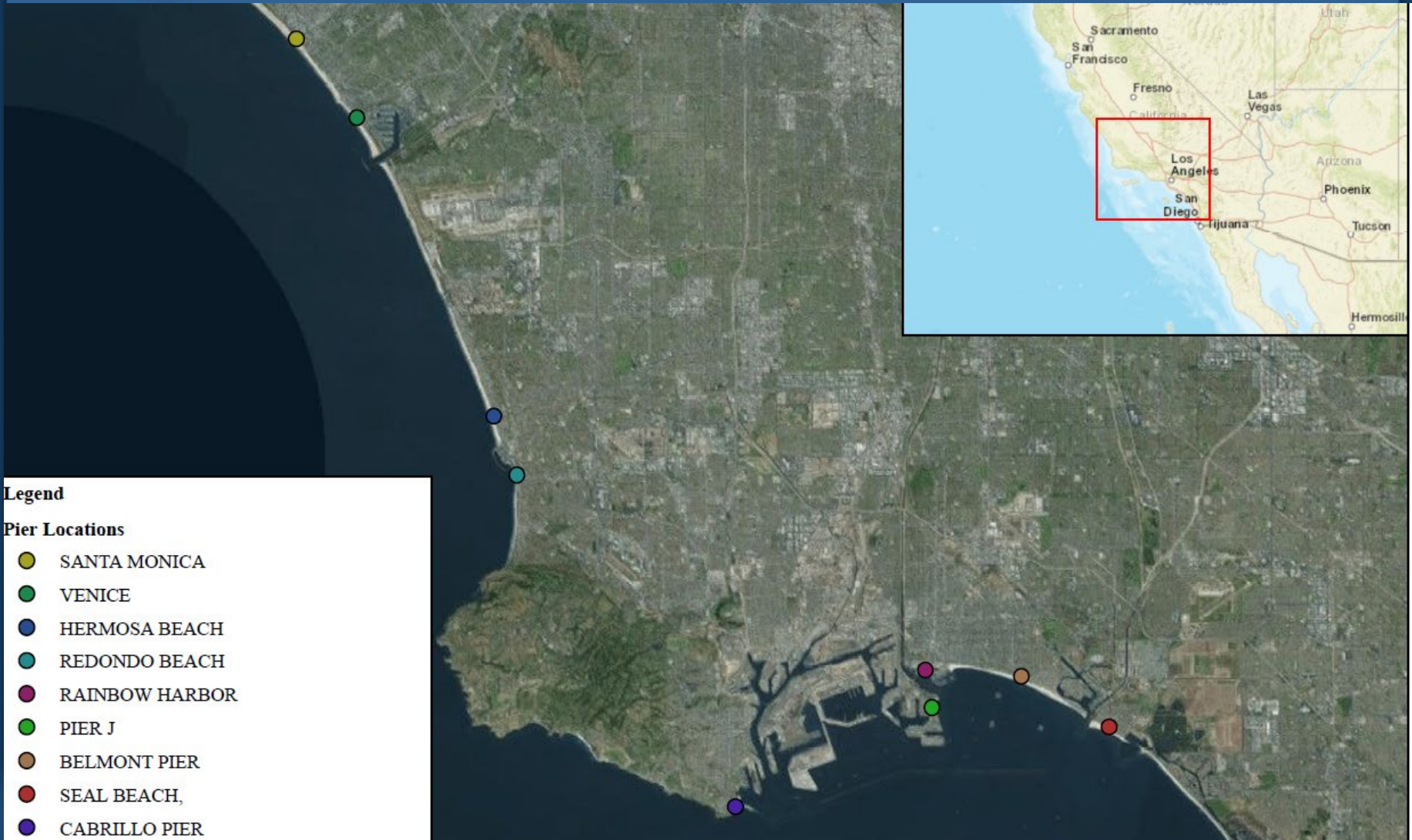


EPA Update

- EPA Update
 - EPA Region 9 Remedial Project Manager
 - Judy Huang
 - Renee Jordan Ward



Pier Angler Outreach Locations





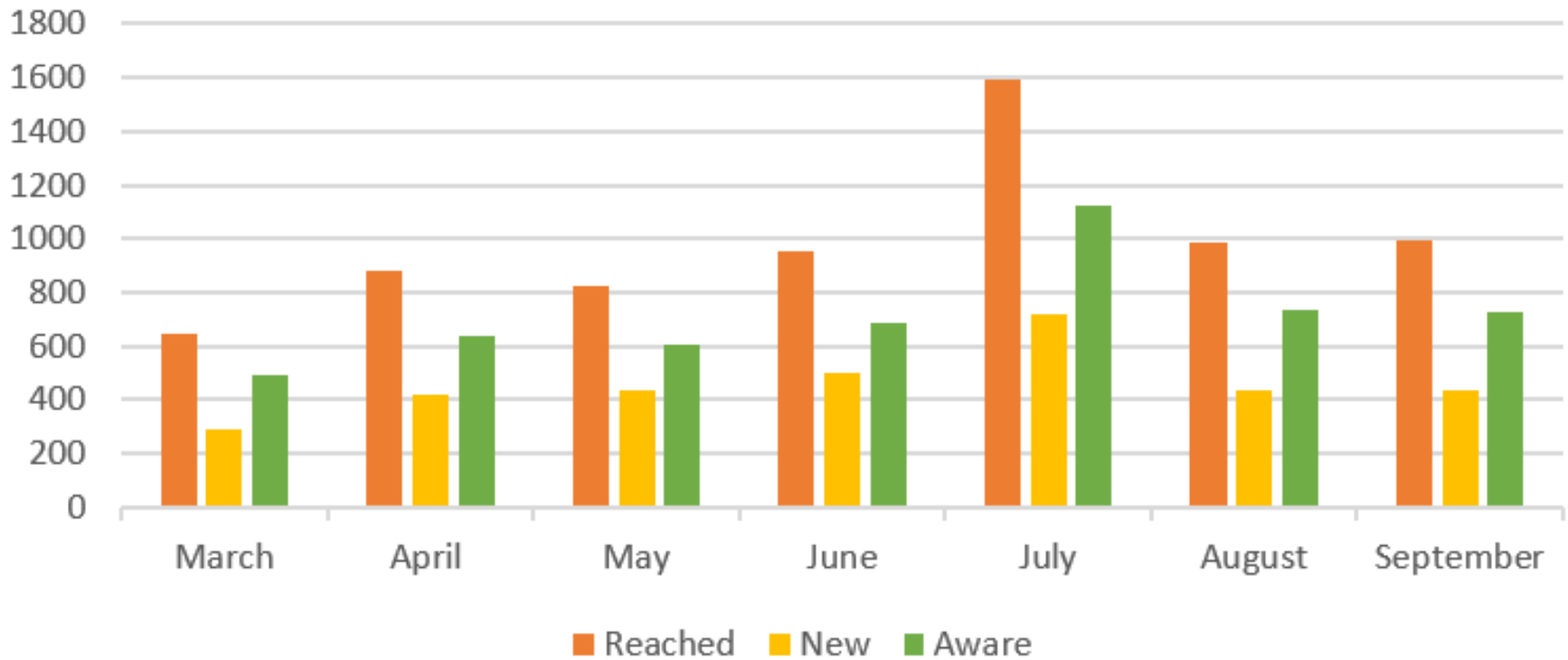
Pier Angler Outreach Summary

- Pier Angler Outreach – Heal the Bay and Cabrillo
 - March – September 2022
 - Angler outreach contacted ~6,904 people
 - ~3,254 were new (~47%)
 - ~5,027 were aware of contamination (~73%)
 - ~1,003 tip cards were handed out in English (871) and Spanish (132)
 - Awareness sources
 - DNC Pier Signage (42%)
 - Tip-cards (30%)
 - Angler Outreach (23%)
 - Internet, Media, Friend/Family, and Other (5%)
 - Community Events (0%)



Pier Angler Outreach

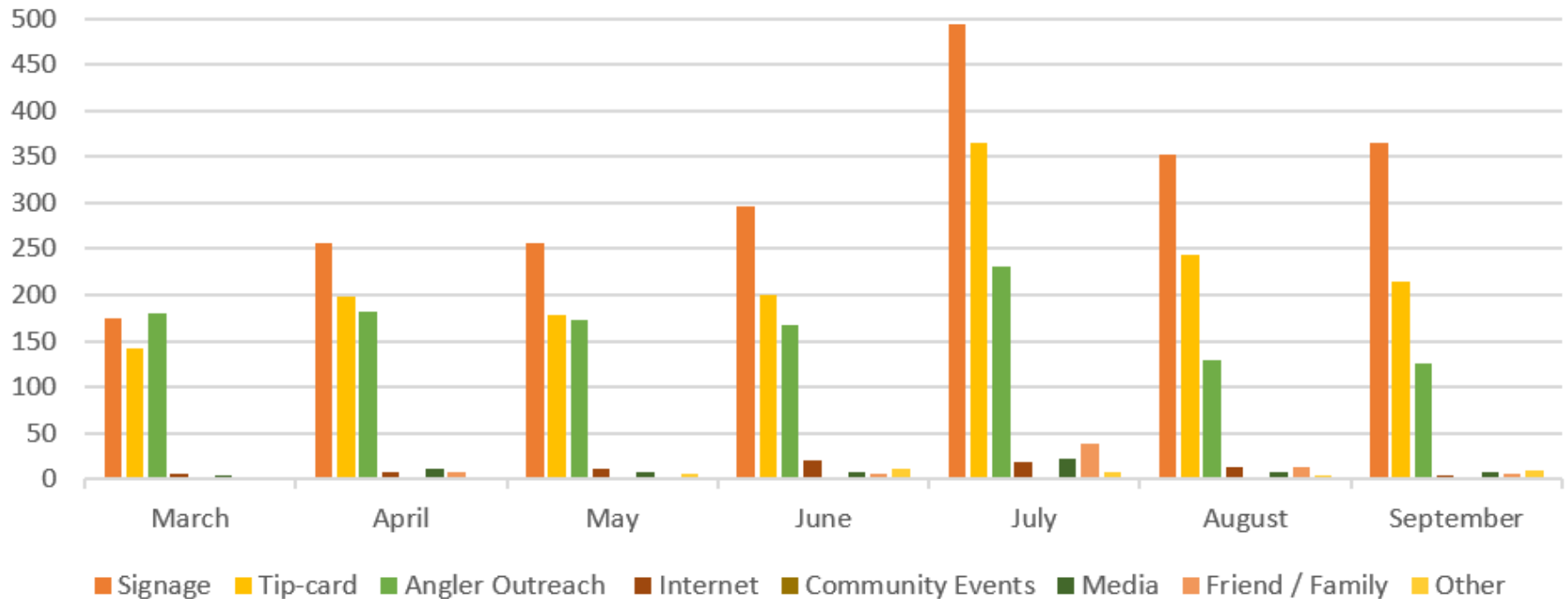
**Total Pier Anglers Reached March - September 2022
(Cabrillo and Heal the Bay Day/Night)**





Pier Angler Outreach

**Total Awareness Source March - September 2022
(Heal the Bay and Cabrillo)**





DNC Pier Sign Monitoring



DNC Pier Sign Monitoring

- Total of 69 signs, 18 piers
- Heal the Bay (8 Piers), June 2022
- Cabrillo (Cabrillo Pier), September 2022
- Heal the Bay for LACDPH/ City of Long Beach (10 piers), July 2022
- LA County Toxics Epidemiology reassigned to LACDPH through next year. No pier sign monitoring





2022 DNC Pier Sign Condition

Pier	Total (2020)	Total (2022)	Good/OK (2022)	Damaged (2022)	Missing (2022)
1 Santa Monica	6	5	5	0	1
2 Venice	6	5	4	1	1
3 Marina Del Rey/ Burton Chase Park	0	0	0	0	0
4 Ballona North Creek/ Play del Rey Jetty	4	2	1	1	2
5 Ballona South	4	0	0	0	4
6 Dockweiler Beach	1	0	0	0	1
7 El Porto/ El Segundo	1	1	1	0	0
8 Manhattan Beach	4	0	0	0	4
9 Rocky Point	1	0	0	0	1
10 Cabrillo	8	8	1	7	0
11 Hermosa Beach	5	4	2	2	1
12 Redondo Beach	6	6	3	3	0
13 Pier J	4	3	3	0	1
14 Rainbow Harbor	5	4	3	1	1
15 Belmont	5	5	5	0	0
16 Seal Beach	5	5	5	0	0
17 Torrance Beach	2	0	0	0	2
18 Royal Palms/ White Point	2	2	1	1	0
Total	69	50	34	16	19

-July 2020
69 total signs, 18 Piers

- July 2022
50 total signs, 12 Piers
19 missing, 11 Piers
16 damaged, 7 Piers

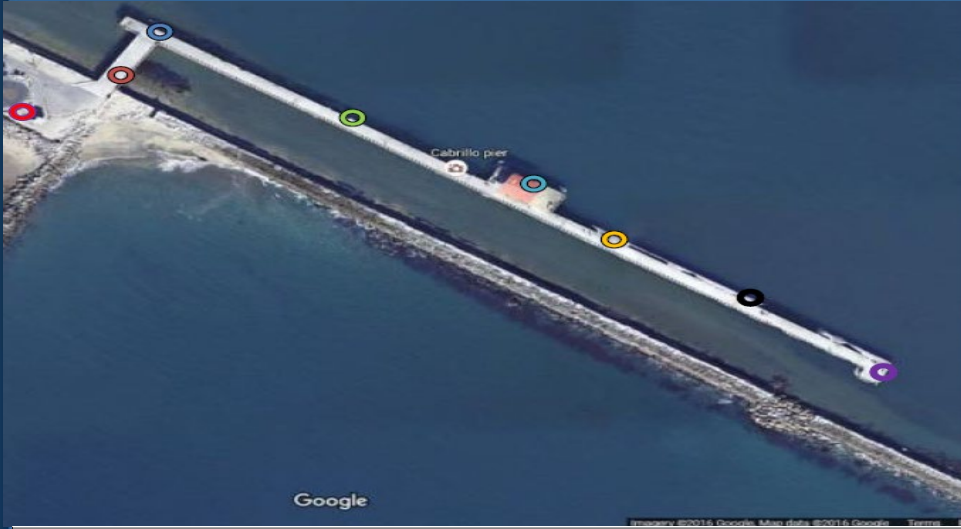


Pier Angler Outreach Cabrillo

- Pier Angler Outreach –Cabrillo
 - March – September 2022
 - Angler outreach contacted ~1,102 people
 - ~284 were new (~22.5%)
 - ~905 were aware of contamination (~82.1%)
 - ~203 tip cards were handed out in English (171) and Spanish (32)
 - Awareness sources
 - Angler Outreach (71%)
 - DNC Pier Signage (12%)
 - Internet (7%)
 - Friend/Family (6%)
 - Tip-cards (4%)
 - Media, Community Events, and Other (0%)



Cabrillo Pier Sign (8) Monitoring September 2022



1



2



3



4



5



6



7



8

CABRILLO BEACH PIER

Signs	Condition
1	Very bent and torn, with lots of peeling, but still readable. Some stickers.
2	Weather beaten, worn and starting to peel on the top and bottom. Still in fairly decent shape.
3	Some tagging residue, stickers, and paint torn off along the top. Mostly readable. Paint along the edges bubbling.
4	Very soiled and scratched with some tagging. Some bending and lots of weathering. Still mostly readable.
5	Stickered and tagged, but mostly readable. Some bubbling of paint along left side.
6	Mostly readable, but still scratched up. Some stickers and bending.
7	Appears to have been bent and straightened. Some tagging, but mostly readable.
8	Very weathered, cracked and rusted. Still very readable



Pier Angler Outreach – Heal the Bay

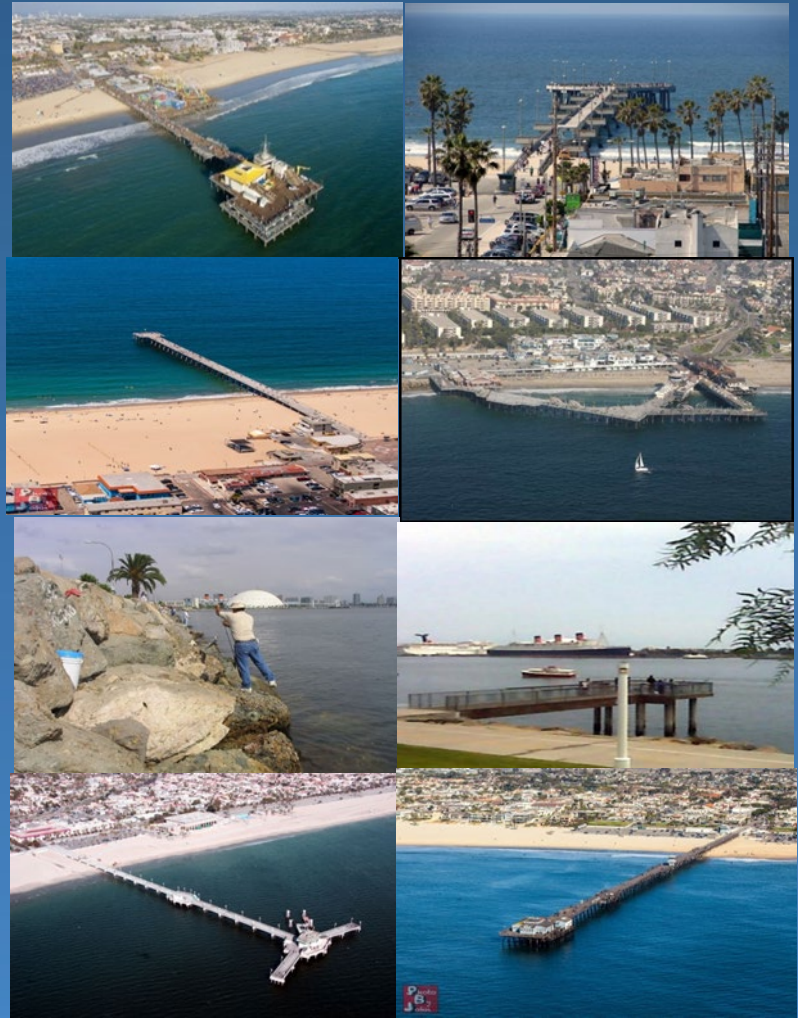
- The program's primary aim continues to be the education of pier and shoreline anglers on the risks of consuming DDT and PCBs-contaminated white croaker.
- Secondary goals are to educate anglers on other locally caught fish with regards to catch limits and consumption guidelines concerning DDT, PCBs,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





Program Overview

- Outreach on 8 piers: Santa Monica, Venice, Hermosa, Redondo, Pier J, Rainbow Harbor, Belmont & Seal Beach
- Educational Outreach
- Each pier visited by Angler Outreach Team 3x/week





Angler Outreach Team

Current Team:

- ▶ Crystal Barajas - Spanish
- ▶ Willian Quinteros - Spanish
- ▶ Benmin Sun - Chinese





Angler Outreach Tally Form



Educational Outreach Tally Sheet

EA USE: Form # _____
Last Modified August 1, 2021

Date: _____ Pier Location: _____ Outreach worker: _____ Day Outreach 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 agree to speak to you?	Was person aware of DDT/PCB* fish contamination advisories before this?	Is the person receiving outreach for the 1 st 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 $\frac{g}{g}$ (Y/N)	Species and Number of Fish Caught (make a note if the number is an estimate)	Zip Code	NOTES
1	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
2	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
3	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
4	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
5	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
6	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
7	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
8	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
9	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
10	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
11	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
12	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
13	<input type="checkbox"/> Adult <input type="checkbox"/> Child	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes	<input type="checkbox"/> No <input type="checkbox"/> Yes						
		Person		Date						
	Data Sheet Checked in Field									
	Data Sheet Entered Electronically									
	Electronic Data Checked									

*DDT/PCB = dichlorodiphenyltrichloroethane/polychlorinated biphenyls; AOP = Angler Outreach Program;

- Tally form includes anglers receiving outreach (new/repeat, awareness source, language spoken)
- Surveys conducted in the daytime 3 days/week
- **5,802 total anglers** interviewed across 8 piers from March 2022-September 2022



Angler Outreach Day/ Evening Participant Breakdown

Reporting Period: March 2022 – September 2022
8 Piers between Santa Monica and Seal Beach

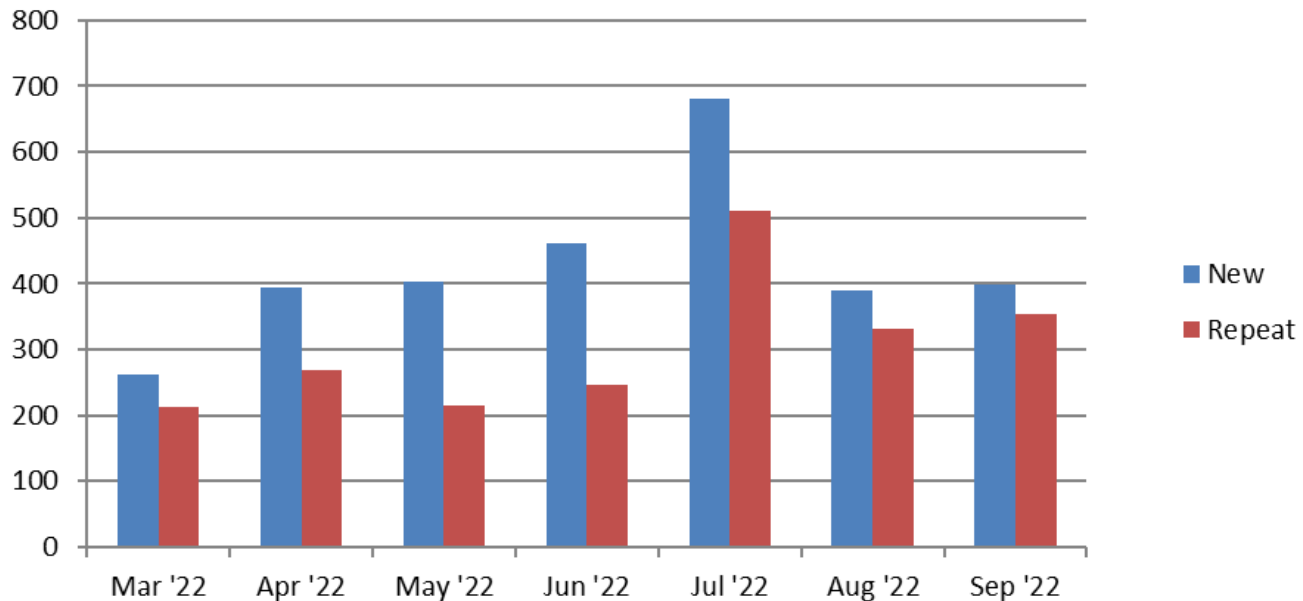
- ▶ New: 3,006 (52%)
- ▶ Aware: 4,122 (71%)

- ▶ Total: 5,802



Angler Outreach Total Day/ Night: March – September 2022

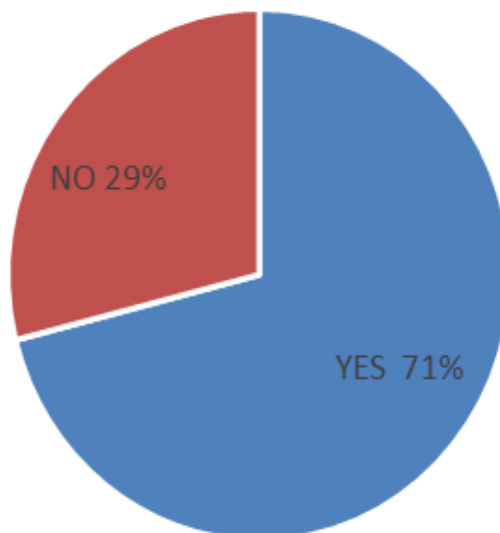
Total Anglers surveyed from Santa Monica through Seal Beach





Angler Outreach Aware Day/ Night: March – September 2022

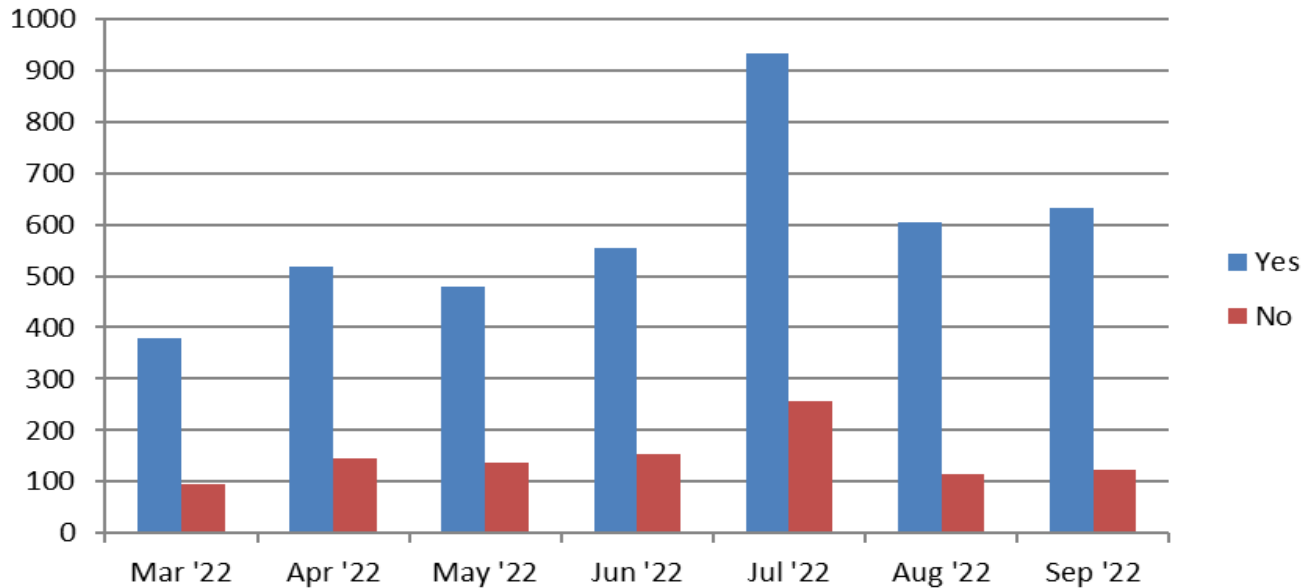
Total Anglers Aware of Fish Contamination
Advisories





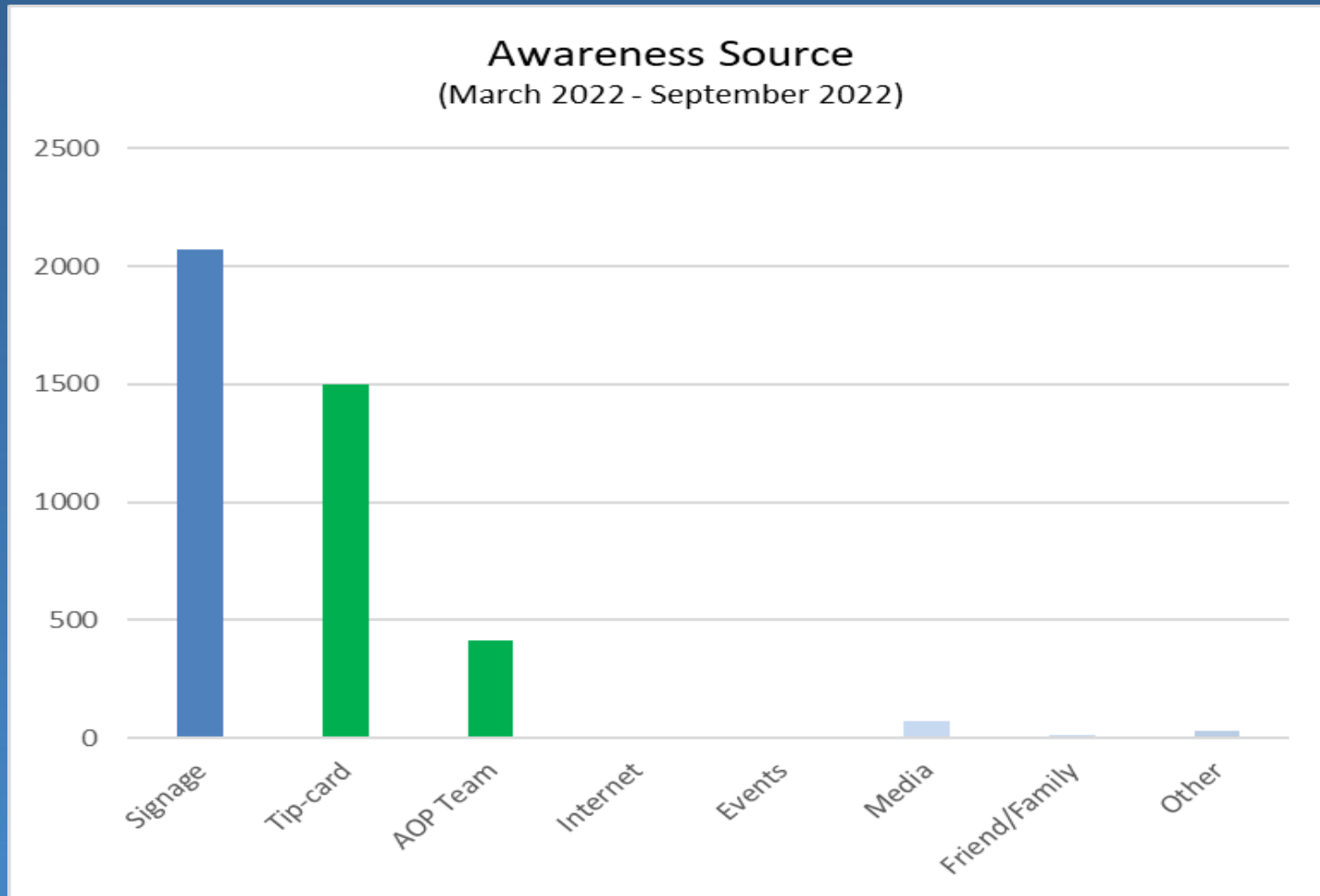
Angler Outreach Aware Day/ Night: March – September 2022

Total Anglers Aware of Fish Contamination Advisories





Angler Outreach Awareness Source Day/ Night: March – September 2022





Angler Outreach Night Participant Breakdown

Reporting Period: March 2022 – September 2022
Venice and Redondo Beach Pier

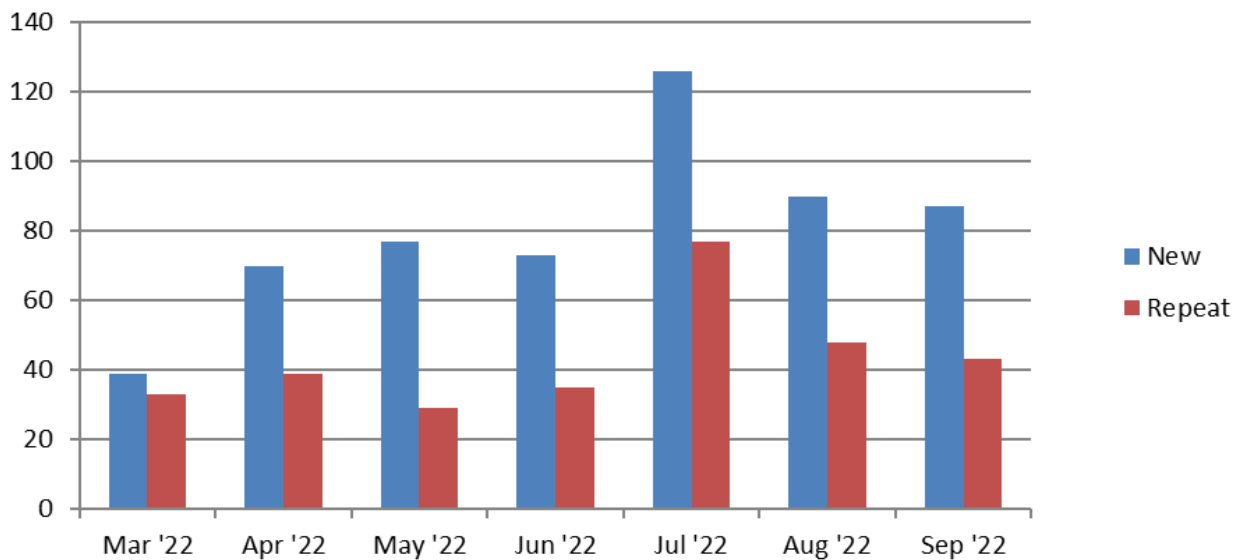
- ▶ New: 582 (55.7%)
- ▶ Aware: 785 (75%)

- ▶ Total: 1,044



Angler Outreach Total Night March – September 2022

Total Anglers surveyed from Venice and Redondo Beach Pier

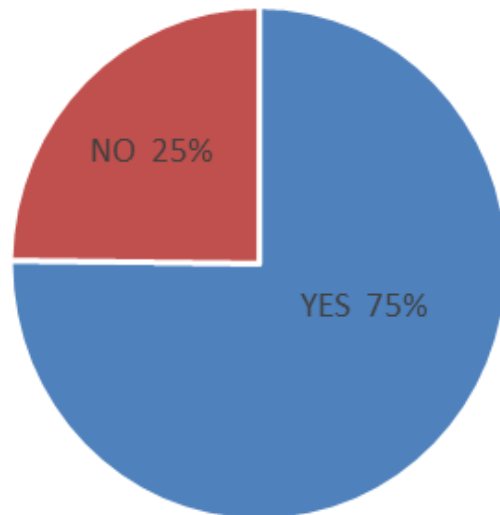


Outreach
activity 4 days
per month



Angler Outreach Aware Night March – September 2022

**Total Anglers Aware of Fish Contamination
Advisories during evening hours (4:00-8:00PM)**





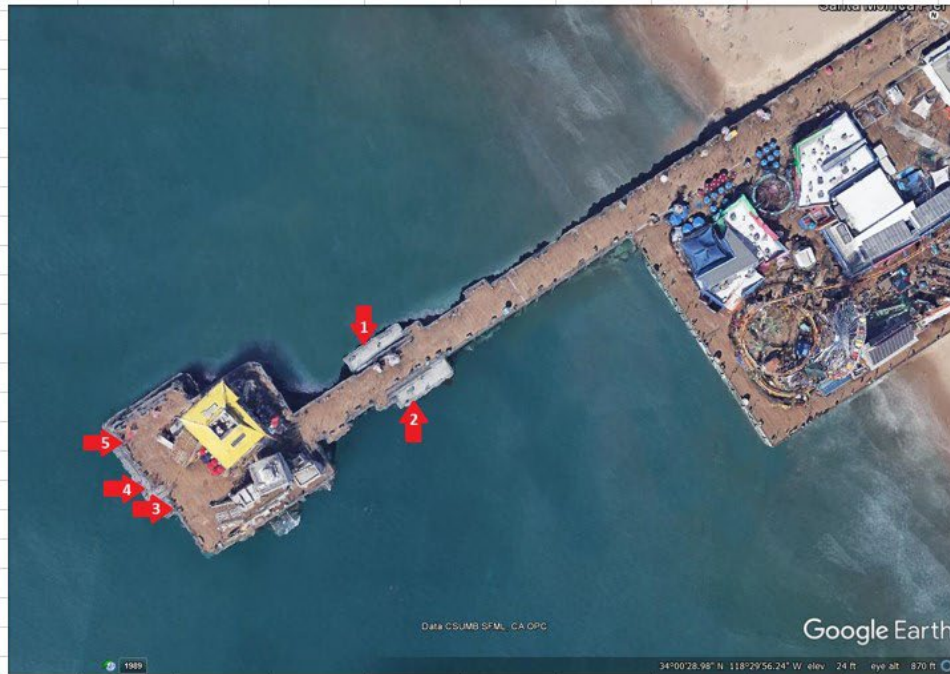
Pier Sign Tracking June-July 2022

▶ Total signs **42**

Santa Monica Pier5	Belmont Pier5
Venice Pier5	Seal Beach Pier5
Hermosa Pier4	Ballona Creek2
Redondo Pier6	El Porto El Segundo....1
Pier J3	Royal Palm.....2
Rainbow Harbor4	



Santa Monica Pier



1



2



3



4



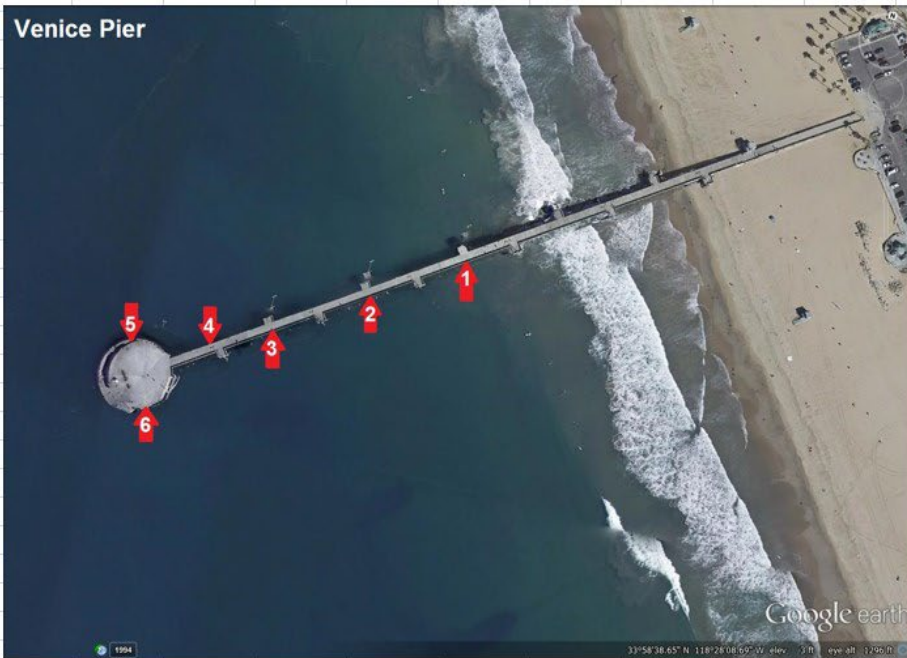
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SANTA MONICA PIER	
Signs	Condition
1	Good with few scrapes, small graffiti on top
2	Good
3	Good, few scrapes, rip on right bottom corner
4	Good, left upper corner chipped off
5	Good, graffiti all over, couple of labels



Venice Pier

Venice Pier



1



2



3



4



5

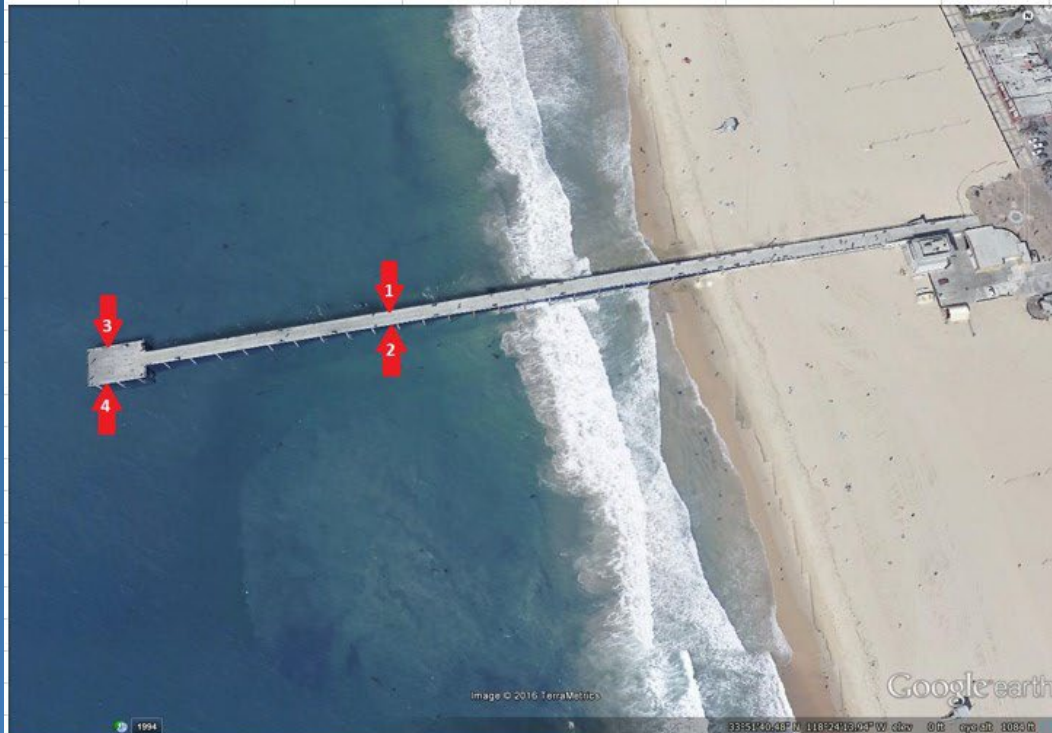


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VENICE PIER	
Signs	Condition
1	Missing
2	Good
3	Good
4	Good
5	Bad, a lot of graffiti, can't read the sign at all, bend, sticker on top right corner
6	Good, some light graffiti on upper right corner



Hermosa Beach Pier



1



2



3



4

HERMOSA BEACH PIER

Signs	Condition
1	Good, a bit of cracking, fading a bit
2	Good, a bit cracking
3	Poor, lot of graffiti, torned and chipped at the bottom, needs to replace
4	Poor, torned on top, severe fading, chipped and cracked on bottom



Redondo Beach Pier

Redondo Beach Pier



1



2



3



4



5

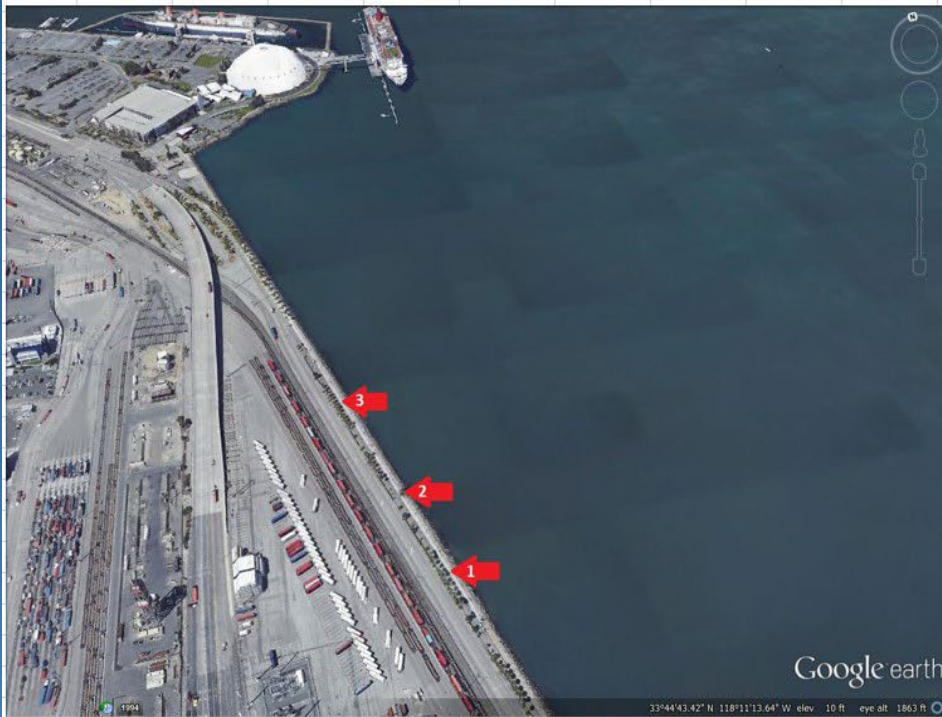


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REDONDO BEACH PIER	
Signs	Condition
1	Good, a bit dirty
2	Very weathered, cracked, scrapes all over, chipped on the bottom
3	Fairly good condition, small graffiti on top, a bit dirty, info peeling on lower right corner
4	Fairly good, chipping on top and lower right corner
5	Poor, a lot of graffiti, chipping on top and bottom, weathered
6	Poor, graffiti all over



Pier J



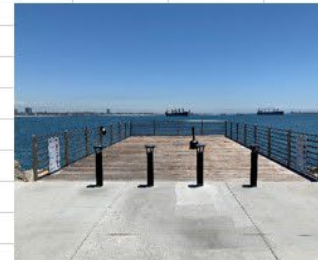
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2



3



Pier J (north of sign #3)

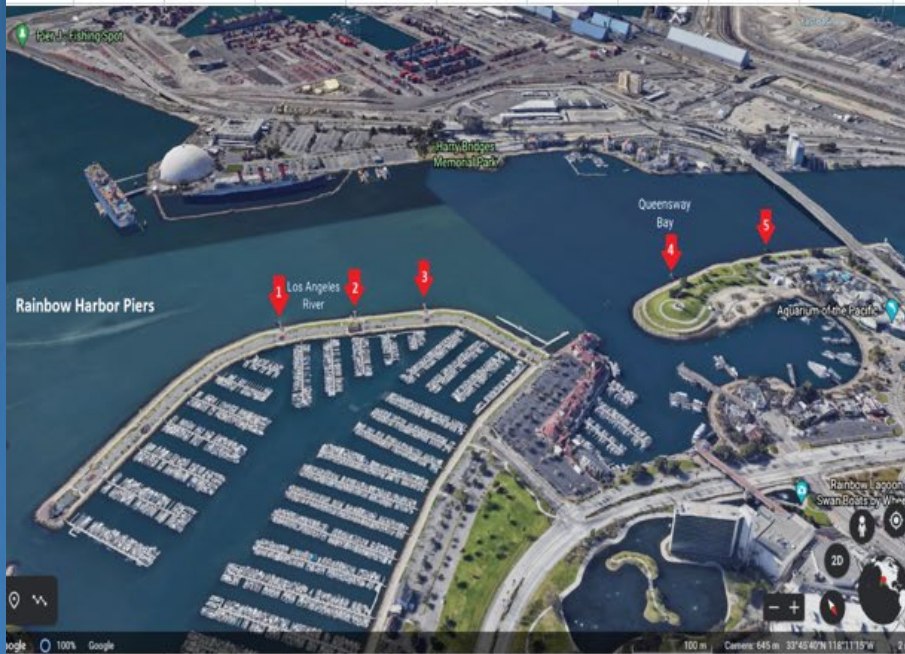


Pier J (south of sign #1)

		PIER J
Signs		Condition
1	Good	
2	Good	
3	Good	



Rainbow Harbor Pier



1



2



3



4



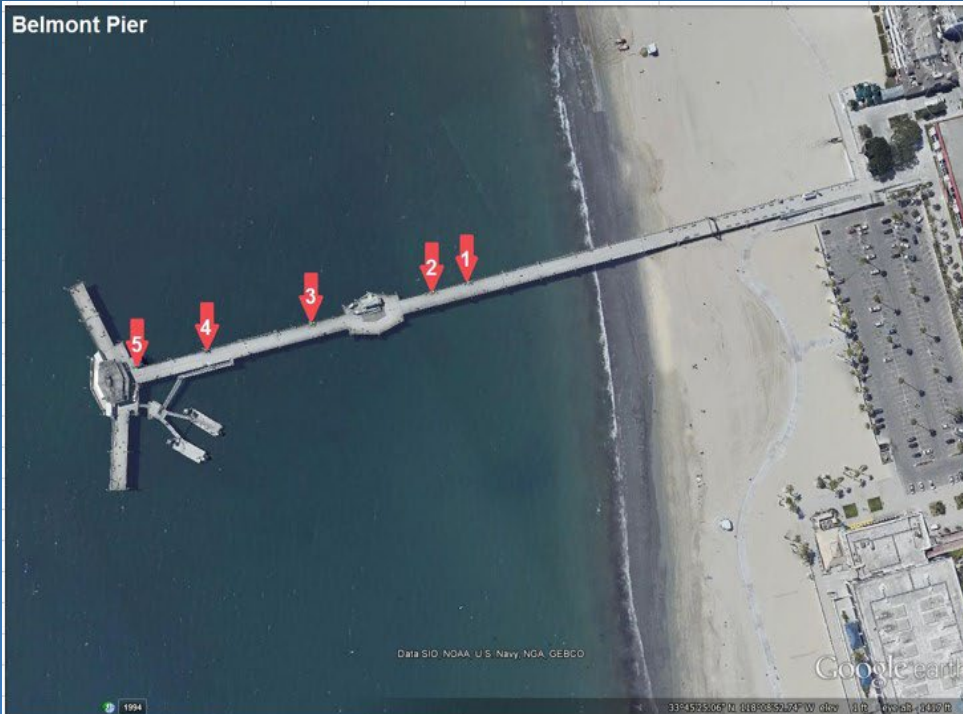
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RAINBOW HARBOR	
Signs	Condition
1	Dirty, some graffiti, decal on top, peeling on bottom right corner
2	Good, decal on exclamation point
3	Missing
4	Fair slightly dirty
5	Bad, illegible, needs to be replaced



Belmont Pier

Belmont Pier



1



2



3



4

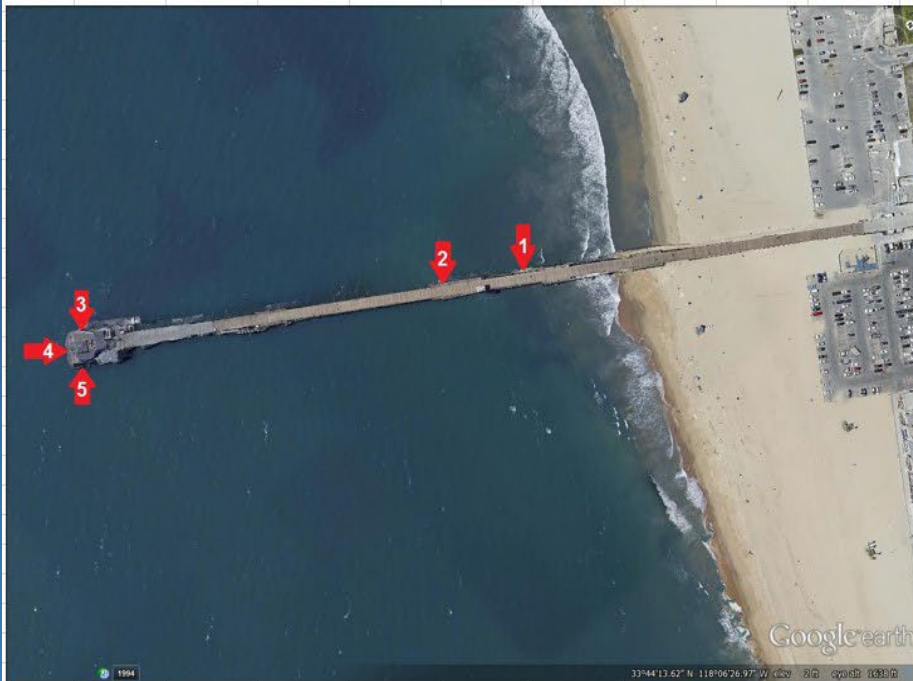


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BELMONT PIER	
Signs	Condition
1	Good, scrapings all over, cracked, old sticker
2	Good, a bit dirty, scrapings all over, decal on bottom right hand side
3	Good, a bit dirty, scrapings all over, fading
4	Good, scrapings all over, more decals on upper right hand side
5	Good, few scrapes, cracked



Seal Beach Pier



1



2



3



4

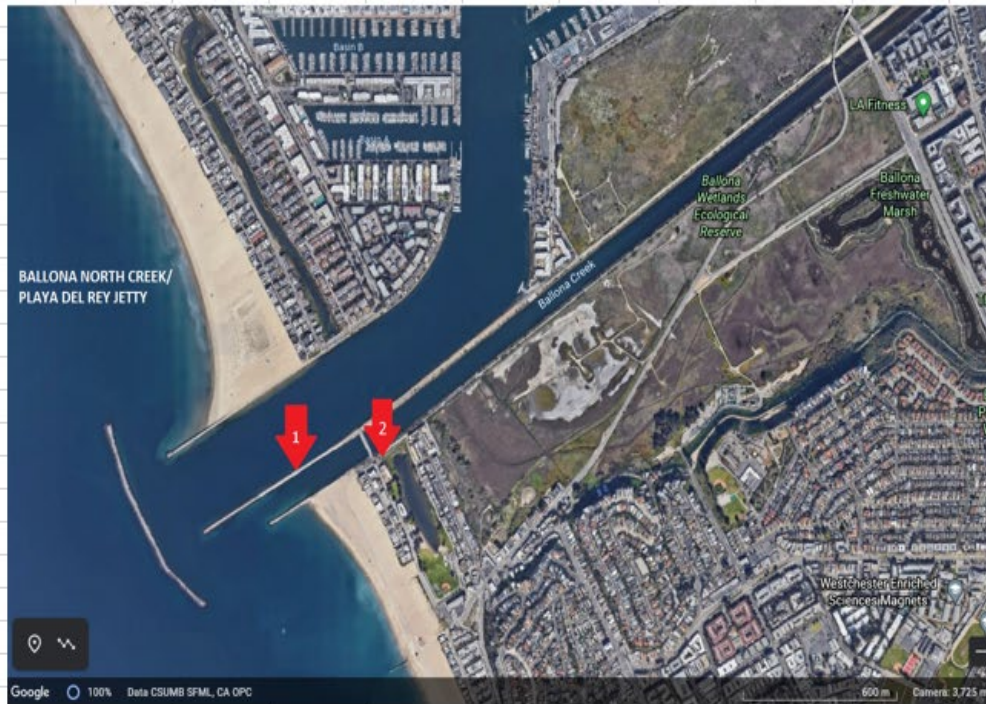


5

SEAL BEACH PIER	
Signs	Condition
1	Good
2	Good
3	Good
4	Good, scrapes, knife marks
5	Good, a bit dirty, some knife marks



Ballona Creek-Playa del Rey



1

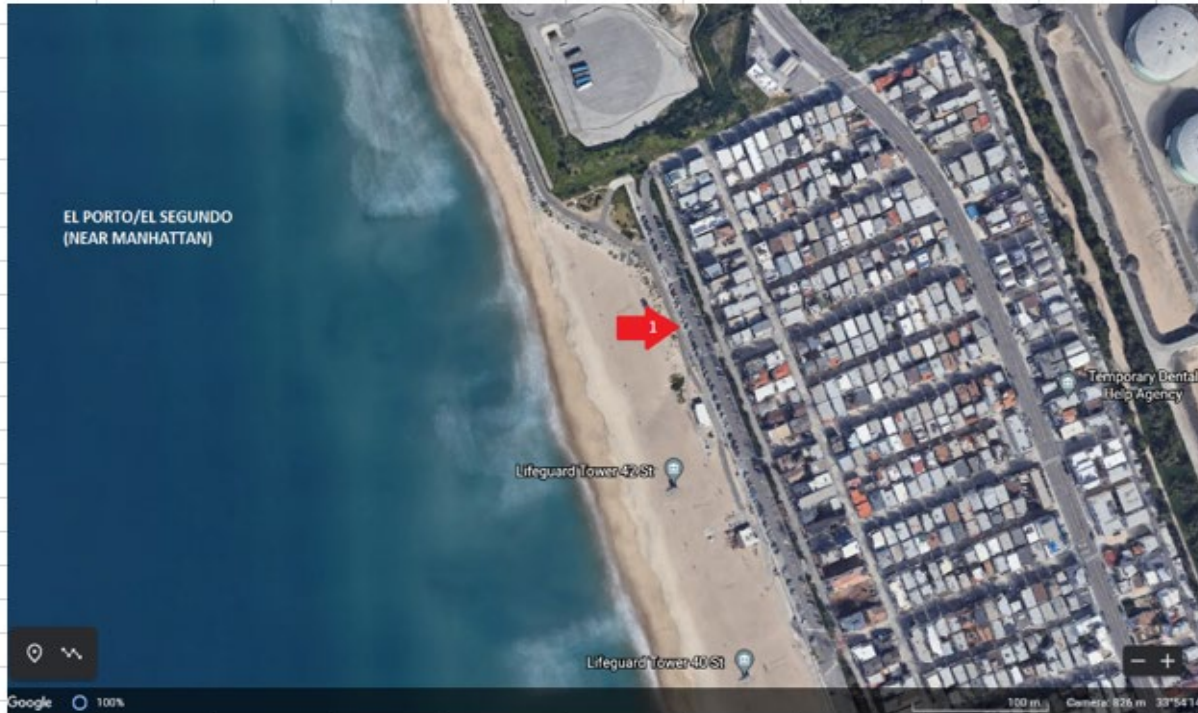


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BALLONA NORTH CREEK/PLAYA DEL REY JETTY	
Signs	Condition
1	Fair, but dirty
2	Bad, illegible, needs to be replaced



El Porto – El Segundo

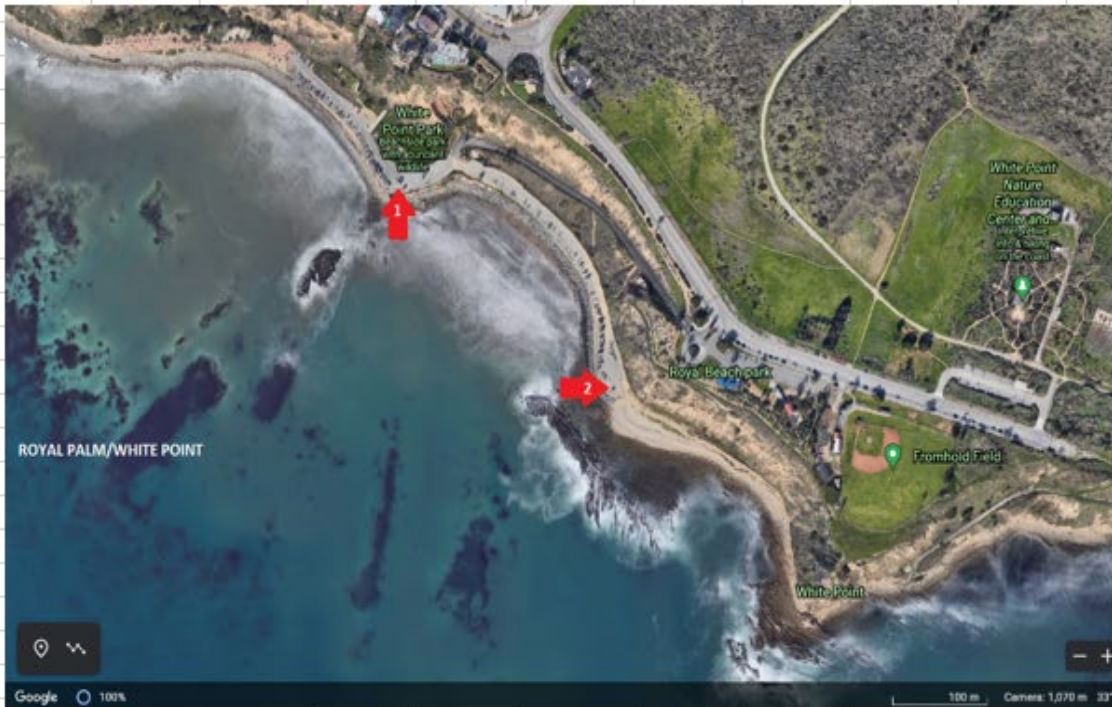


1

EL PORTO/EL SEGUNDO (NEAR MANHATTAN)		
Signs	Condition	
1	Good	



Royal Palm-White Point



1



2

ROYAL PALM/WHITE POINT	
Signs	Condition
1	Fair, dirty, scratches
2	Good, minor sticker



Zip Code Analysis Where Anglers Come From

Heal the Bay Angler Outreach Program
2018 Angler Zip Code Data



Heal the Bay Angler Outreach Program
2019 Angler Zip Code Data



- Recommendations on future outreach and educational areas to target
- Examine whether the angler community has shifted over time



Questions?

FRANKIE ORRALA: FORRALA@HEALTHEBAY.ORG





Enforcement Outreach

- California Department of Fish and Wildlife January-September 2022
 - 91 Recreational Fishing, 1,830 reached, 1 Citation White Croaker over limit, 35 White Croakers seized, 85 observed possession
 - 4 Commercial Businesses, No violations
 - Updated Tally Sheet Fall 2021 tip card distribution and awareness source
 - Tip cards English (260), Spanish (61), Chinese (9), and Vietnamese (16)
 - Awareness source pier signs and tip cards
 - White croakers mainly observed at San Pedro, Seal Beach, and Belmont piers
 - Recommend expansion area north to Santa Monica and south to Huntington piers
 - Increase geographic area and increase outreach and awareness
 - Catches observed in Bolsa Chica, Huntington Harbor, and Huntington Beach
 - City of Long Beach – Grant expired 2019
 - No fish market/restaurant inspections or DNC pier sign monitoring/maintenance
 - Los Angeles Department of Public Health – Grant expired February 2022
 - No fish market/restaurant inspections performed



BREAK FOR 10 MINUTES



Community Outreach Summary

Total community events DBS&A, BPOS, CHCC

- 44,501 Total event attendees
- 3,644 Total tip cards English (894), Spanish (521), Chinese (1,762), Vietnamese (467)
- 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 Noche de Estrellas, March 4, 2022
 - ~4,000 attendees, tip cards in English (20) and Spanish (10), No awareness
 - Aquarium of the Pacific 17th Annual International Children’s Festival, March 19-20, 2022
 - ~14,000 attendees, tip cards in English (60), Spanish (15), Chinese, (5), Vietnamese (10) , No awareness contamination
 - Deane Dana Friendship Park A Day in Nature Festival, August 13, 2022
 - ~500 attendees, tip cards in English (10), Spanish (8)
 - Aquarium of the Pacific Baja Splash Festival, September 24-25, 2022
 - ~13,600 attendees, tip cards in English (74), Spanish (8), Chinese (2), 12 people (0.09%) aware contamination



Community Outreach – DBS&A

- Observations/Recommendations
 - LAUSD
 - Elementary, middle, & home-school teachers take curriculum guide and comic book to use in classrooms
 - Aquarium Pacific High school volunteers interested in FCEC
 - Los Angeles County Zoo interested collaboration w/FCEC on Storyboard/ Film for Aquarium of Pacific
 - Aquarium of Pacific interested collaboration w/FCEC on permanent exhibit with regular distribution of outreach materials
 - Fishing game attracts children
 - Outreach Materials
 - Popular curriculum guide , comic book, fishing game
 - Interest in digital materials using a QR code
 - Popular (in order) English, Spanish, Vietnamese, Chinese
 - Sign-in Sheet not popular, recommend add QR code
 - Chinese patrons expressed concern about contaminated fish in markets



Community Outreach – DBS&A

- Anticipated Upcoming Events
 - Nov. 13th - Autumn Festival (Aquarium, of the Pacific - Long Beach)
 - No LA County Parks & Recreation events due to COVID-19
- Partner Outreach Materials Distribution
 - Jul. 1st - Heal the Bay: Tip Cards English (3,000) and Spanish (1,500)
 - Jul. 21st - BPSOS: English “What’s the Catch” Comic Books (300)
 - Oct. 19th - CCHC: English Tip Cards (250), English Pamphlets (250), English Fish ID (500)
 - Nov. 9th - BPSOS: English “What’s the Catch” Comic Books (300)
- Outreach Materials Condition
 - Booth in Box – Fair condition
 - Fishing game – broken fishing rods (2), ripped, torn, or faded fish (5)



Community Outreach – DBS&A

Modified Bait Shop Outreach

- Telephoned 37 bait shops
- August 2022 delivered to 9 of 37 bait shops
- Tip-cards in English (450), Spanish (450), Chinese (175), and Vietnamese (175)
- Upcoming deliveries in late December 2022
- Need to replace 3 shops that have gone out of business or no longer sell bait





Community Outreach – BPSOS

- Completed Events
 - City of Westminster Bunny Hop, April 9 and 16, 2022
 - ~31 attendees, tip cards English (7), Spanish (10) and Vietnamese (14). No awareness.
 - UCLA Vietnamese Community Health Fair, April 24, 2022
 - ~70 attendees, tip cards Spanish (2) and Vietnamese (68), No awareness.
 - Anaheim Community Health and Resources Fair, July 9, 2022
 - ~200 attendees, tip cards English (3), Spanish (17), and Vietnamese (180), No awareness.
 - City of Westminster 65th Annual Fall Festival, September 24, 2022
 - ~500 attendees, tip cards 1 Spanish and 20 Vietnamese, 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
 - City of Industry Chinese New Year Fair, January 22-23, 2022
 - ~1,000 attendees, tip cards in Chinese (385) and English (50), 10 attendees (1%) aware of contamination. Awareness source pier signs.
 - San Gabriel Walkathon & Carnival, June 18, 2022
 - ~600 attendees, tip cards in Chinese (295) and English (20), No awareness contamination.
 - 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.





Community Outreach – CHCC

Observations

- Most event attendees were unaware of the contamination and interested in learning.
- Not many attendees fish in Southern California.
- Attendees found outreach materials informative, especially the tip-card and fish identification card.
- The Fishing Game helped draw attention by families with children.

Outreach Material Condition

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

Anticipated Upcoming Event

- Chinese New Year Fair in San Gabriel Valley in 1st quarter of 2023.





Open Forum Discussion Topics

- Annual program reports update
- Community event sign-in sheets, track awareness
- Booth in the Box updates
- QR codes (e.g., outreach materials, to FCEC website)
- DNC pier sign monitoring and maintenance
- Enforcement Restaurant and Market Inspections
- FCEC website and social media
- FCEC Outreach materials inventory and updates
- LAUSD, African American, and Latin community outreach
- Other topics



Thank you!

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

Judy Huang

US EPA Region 9

Huang.Judy@epa.gov

(415) 972-3681

Laura Levine

EA Engineering (contractor)

llevine@east.com

510-545-4441

Renee Jordan Ward

US EPA Region 9

JordanWard.Renee@epa.gov

(415) 972-3129