

San Diego Bay Fish Consumption Study



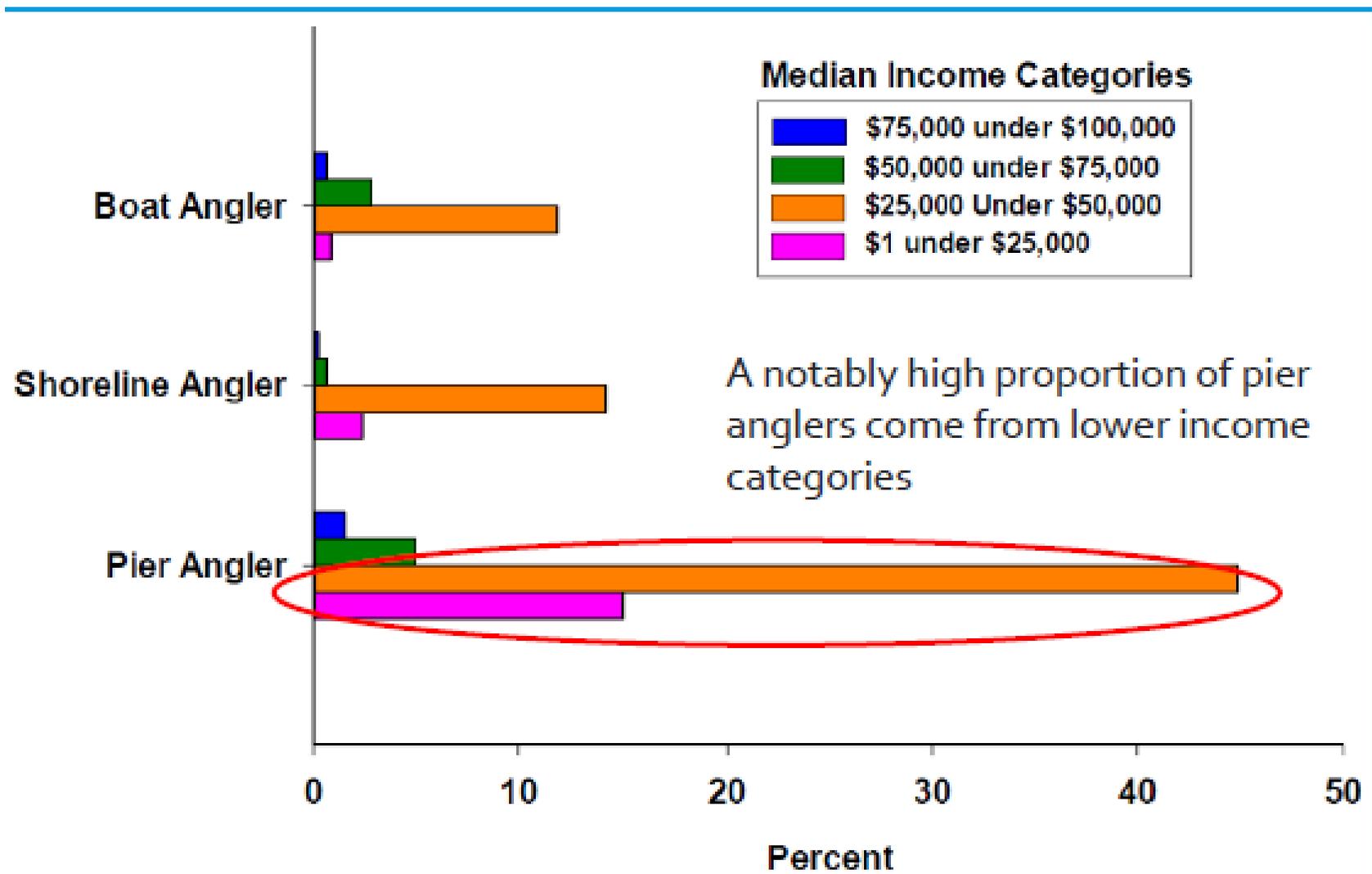
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Southern California Coastal Water Research Project

SCCWRP Technical Report 976

A Second Alternative Analysis of the 2017
San Diego Bay Fish Consumption Study

Environmental Justice



2005 Pier Angler Survey & 2017 Fish Consumption Study

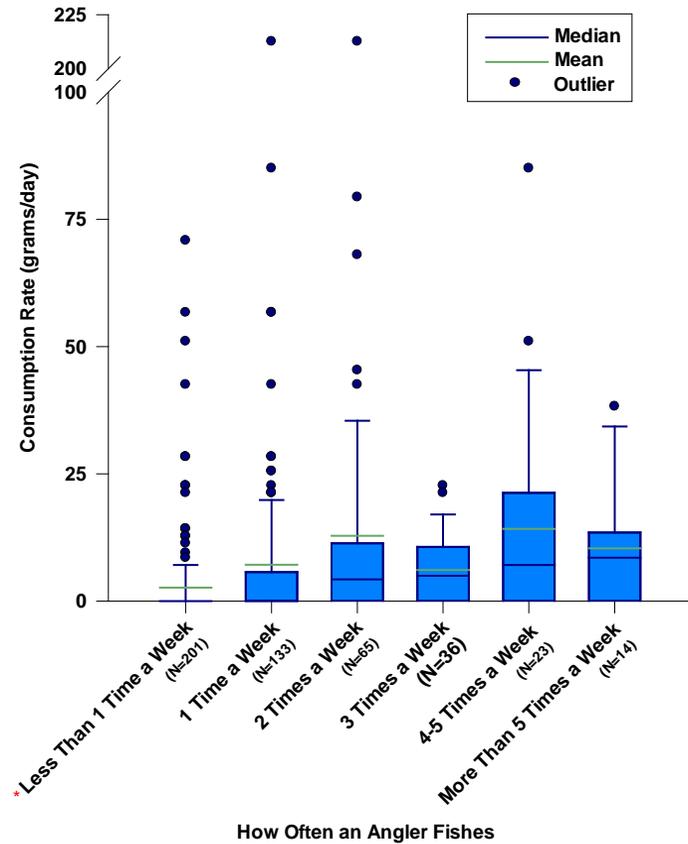
	SD Bay 2005 Pier Angler Survey - EHC	SD Bay 2017 Fish Consumption Study
Pier Anglers	109	706
		(74% of Surveyed Anglers)
All Pier Anglers Consuming SD Bay Fish	66 (61%)	311 (44%)
Pier Anglers of Color Consuming SD Bay Fish	63 (96%)	251 (35%)
Children of Pier Anglers Consuming SD	85	229

Table 1. Top ten fish reported caught in general and reported as kept in the week prior to being surveyed. Blue text indicates fish in common between the two lists and an asterisk (*) indicates inclusion on the fish consumption advisory guidelines for San Diego Bay.

Fish Reported Caught	
Fish Name	Percent
Spotted Sand Bass *	80
Pacific Chub Mackerel *	79
Round Stingray *	49
California Halibut	48
Topsmelt *	33
Bat Ray	33
Kelp Bass	30
Barred Sand Bass *	28
California Lizardfish *	26
California Scorpionfish	26

Fish Caught and Kept to Consume	
Fish Name	Percent
Pacific Chub Mackerel *	48
California Halibut	18
Spotted Sand Bass *	16
Bonito	12
Shortfin Corvina	8
Topsmelt *	6
Shovelnose Guitarfish *	6
Yellowfin Croaker *	6
Gray Smoothhound Shark *	5
Bat Ray	5

Subsistence Fishing ?



* 138 Anglers Fish 2-5 times per week
 * 73 Anglers Fish 3-5 times per week

Figure 1. Consumption rate (grams/day) by how often an angler fishes per week. Less Than 1 Time a Week was significantly different ($p < 0.001$) from the rest (red asterisk). The box boundaries indicate the 25th and 75th percentiles, the blue line within the box the median and the green line the mean. Whiskers (error bars) above and below the box indicate the 90th and 10th percentiles.
 N = 468

Evidence of Subsistence Fishing

In California, the 95th percentile rate of consumption from regional studies have been used by both the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB 2006) and the Central Valley Water Quality Control Board (CVRWQCB 2010) to protect fish consumers. This rate was established at 32 grams/day.

- 21 of 170 Pier Anglers reported fish consumption exceeding 32 grams/day
- 35 to 212 grams/day was the range of consumption for the 21 anglers
- 7 anglers reported consumption levels 2 X the 32 grams/day rate
- Consumption rates for children and women of child bearing age ?

- Contaminated fish in San Diego Bay remain an Environmental Justice issue for our low-income communities of color.
- We are in full support of approaches to limiting risk to anglers and their children, particularly item 1 highlighted below.
- *“ there are two approaches which may help to limit risk to anglers consuming fish from the bay: 1) take action to reduce the contamination levels in the fish by thorough clean-up of contamination sources; or 2) use targeted education programs directed to the most at-risk anglers, primarily in the Asian community, through direct interaction at the community level to ensure they are aware of the risk and can make informed decisions about their consumption.” San Diego Bay Fish Consumption Study, 2017*

STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2017-0027

Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions (Provisions) contains three new beneficial uses: Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB), and Subsistence Fishing (SUB).

- 1) **Tribal Tradition and Culture (CUL)**: Uses of water that support the cultural, spiritual, ceremonial, or traditional rights or LIFEWAYS of CALIFORNIA NATIVE AMERICAN TRIBES, including, but not limited to: navigation, ceremonies, or fishing, gathering, or consumption of natural aquatic resources, including fish, shellfish, vegetation, and materials.
- 2) **Tribal Subsistence Fishing (T-SUB)**: Uses of water involving the non-commercial catching or gathering of natural aquatic resources, including fish and shellfish, for consumption by individuals, households, or communities of California Native American Tribes to meet needs for sustenance.
- 3) **Subsistence Fishing (SUB)**: Uses of water involving the non-commercial catching or gathering of natural aquatic resources, including fish and shellfish, for consumption by individuals, households, or communities, to meet needs for sustenance



Women
(18-45 Years)

Children
(1-17 Years)

2 TOTAL SERVINGS
A WEEK

OR

2 TOTAL SERVINGS
A WEEK

OR

1 TOTAL SERVING
A WEEK

0 DO NOT EAT

0 DO NOT EAT

Serving Size

A serving of fish is about the size and thickness of your hand. Give children smaller servings.

For Adults



For Children



Women
(46+ Years)

Men
(18+ Years)

7 TOTAL SERVINGS
A WEEK

OR

2 TOTAL SERVINGS
A WEEK

OR

2 TOTAL SERVINGS
A WEEK

OR

1 TOTAL SERVING
A WEEK

0 DO NOT EAT

A GUIDE TO EATING FISH

from *SAN DIEGO BAY*
(SAN DIEGO COUNTY)

Eat the Good Fish
Eating fish that are low in chemicals may provide health benefits to children and adults.



Avoid the Bad Fish
Eating fish with higher levels of chemicals like mercury or PCBs may cause health problems in children and adults.



Choose the Right Fish
Chemicals may be more harmful to unborn babies and children.



Pile Perch



Rainbow Surfperch



Diamond Turbot



Spotted Turbot



Black Perch



Round Stingray



Shovelnose Guitarfish



(California) Spiny Lobster



Sharks



Barred Sand Bass



Spotted Sand Bass



Pacific Chub Mackerel



Yellowfin Croaker



Shiner Perch



Topsmelt



California Office of Environmental Health Hazard Assessment

web www.oehha.ca.gov/fish

email fish@oehha.ca.gov

phone (916) 324-7572

Eat only the skinless fillet



Some chemicals are higher in the skin, fat, and guts.

Eat only the meat



Updated 07/2018

DANGER
STAY INSIDE
HANDRAILS
STAY OFF PILINGS

PELIGRO!
QUEDARSE DENTRO
DEL BARANDAL
QUEDARSE FUERA
DE LOS PILOTES

**NO
SWIMMING
OR
DIVING**
IN THIS AREA

SDUPD ORD 8.27

**NO
OVERHEAD
CASTING**

SDUPD CODE 8.22(h)(6)

GUIDE TO FISHING REGULATIONS AND RESTRICTIONS IN SAN DIEGO BAY

Stay safe, stay legal. It's important to know the rules of the game. This guide provides information on the rules of the game. It's important to know the rules of the game. It's important to know the rules of the game.

Women age 18-45 and children age 1-17		Women over 45 and men	
Up to 2 per week per fish	Limit per day	Up to 2 per week per fish	Limit per day
Black Rockfish	1	Black Rockfish	1
Blue Rockfish	1	Blue Rockfish	1
California Sheephead	1	California Sheephead	1
Chinook Salmon	1	Chinook Salmon	1
Crab	1	Crab	1
Flathead Rockfish	1	Flathead Rockfish	1
Green Sturgeon	1	Green Sturgeon	1
Halibut	1	Halibut	1
Jack Mackerel	1	Jack Mackerel	1
King Salmon	1	King Salmon	1
Longfin Mako	1	Longfin Mako	1
Parrotfish	1	Parrotfish	1
Red Rockfish	1	Red Rockfish	1
Shiner	1	Shiner	1
Spiny Tail Fish	1	Spiny Tail Fish	1
Striped Bass	1	Striped Bass	1
Whitefish	1	Whitefish	1

The recommended serving is the size and thickness of your hand. Give children smaller servings.

FOR MORE INFORMATION CONTACT:
CALIFORNIA OFFICE OF ENVIRONMENTAL HEALTH SAFETY AND ACCIDENT PREVENTION
1-800-952-2833