

San Diego Bay Fish Consumption Study



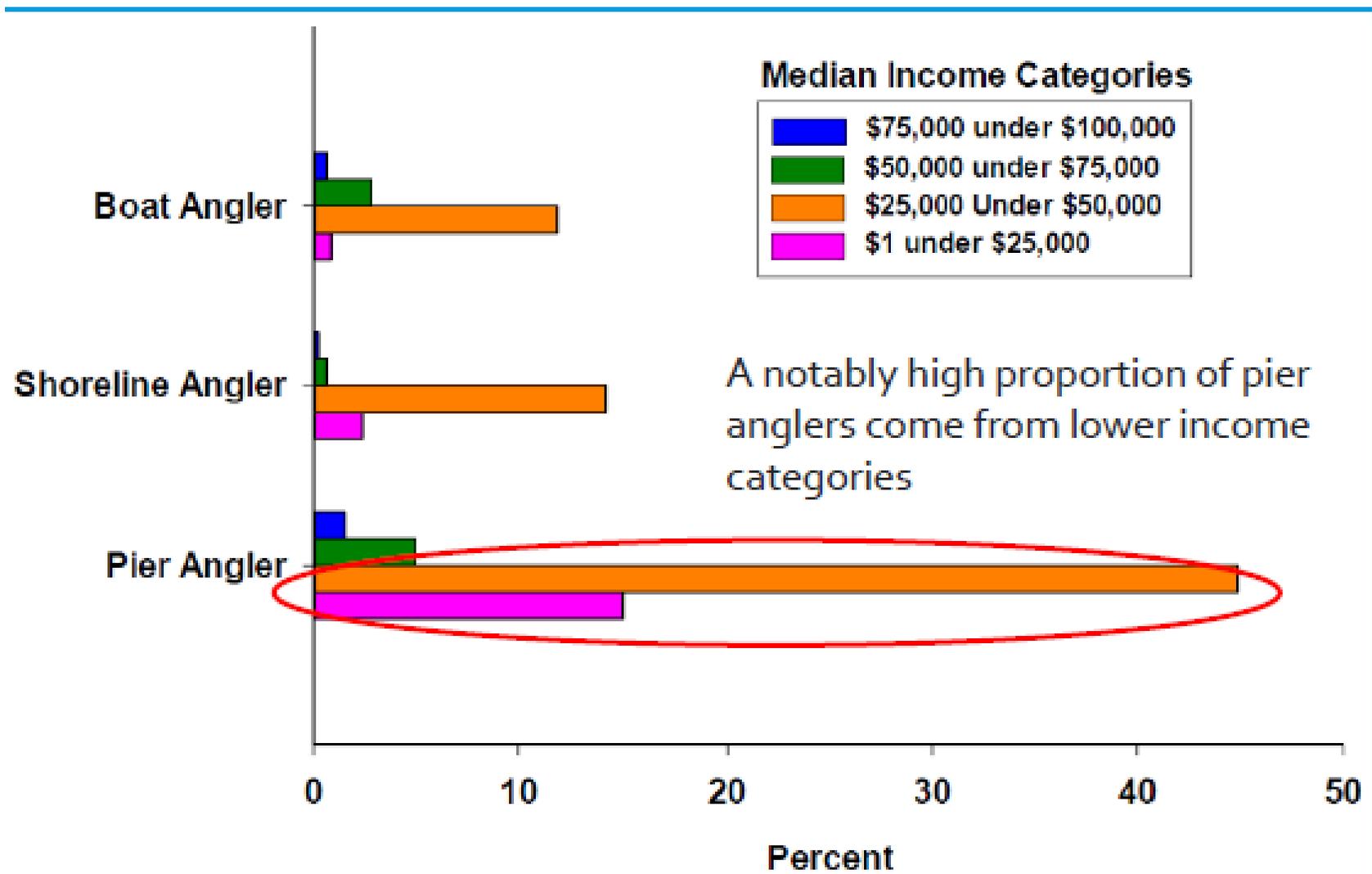
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Southern California Coastal Water Research Project

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

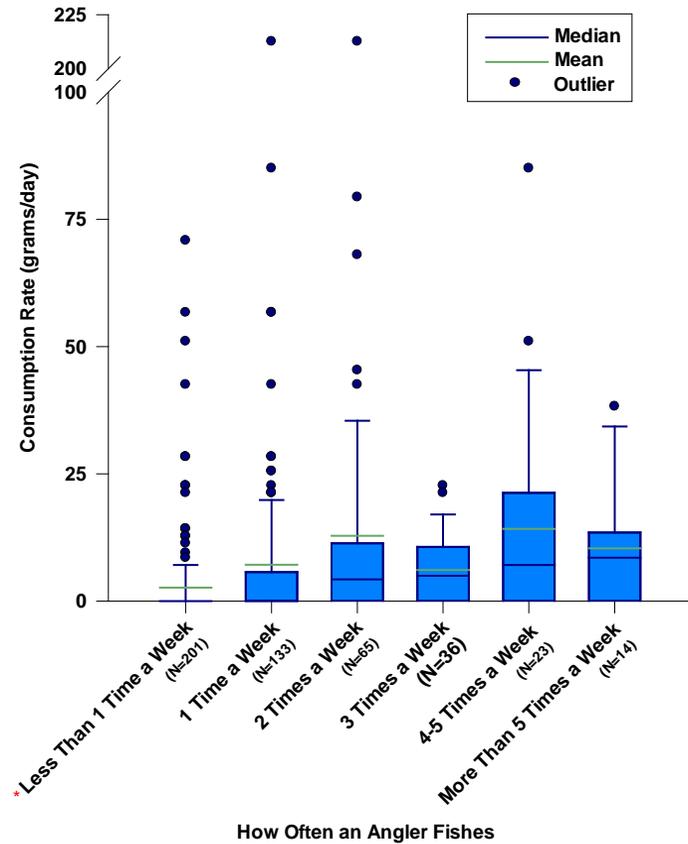
	SD Bay 2005 Pier Angler Survey - EHC	SD Bay 2017 Fish Consumption Study
Pier Anglers	109	706
		(74% of Surveyed Anglers)
All Pier Anglers Consuming SD Bay Fish	66 (61%)	311 (44%)
Pier Anglers of Color Consuming SD Bay Fish	63 (96%)	251 (35%)
Children of Pier Anglers Consuming SD	85	229

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. 2016-0011**

DIRECTING STAFF TO DEVELOP PROPOSED BENEFICIAL USES
PERTAINING TO TRIBAL TRADITIONAL AND CULTURAL, TRIBAL
SUBSISTENCE FISHING, AND SUBSISTENCE FISHING

2. As referenced in recital 12 in the accompanying resolution, **environmental justice representatives propose the following beneficial use:**

Subsistence Fishing: Uses of water that support the non-commercial catching or gathering of natural aquatic resources, including fish and shellfish, by individuals for the personal consumption by individuals and their households or communities, to meet fundamental needs for sustenance due to cultural tradition, lack of personal economic resources, or both.