PALOS VERDES SHELF SEAFOOD CONSUMPTION STUDY

November 7, 2013



5 Key Questions

- 1. What did we set out to do, and Why?
- How was the study carried out?
- 3. Who are our anglers?
- 4. Where, When, and What are they catching?
- 5. What is being consumed? And by Whom?

1. What did we set out to do, and Why?

Since the last Seafood Consumption Study...

Stations launched
Rise of the Internet

Dolly the Sheep cloned

DVDs came and went

Human Genome Project completed

Goal

To provide an up-to-date and representative sample of anglers who fish in and around the PV Shelf Superfund Site

Questionnaire and Objectives

- Characterize angler behaviors
- Determine fish being caught & consumed

Identify demographic & ethnic subgroups

Participant Questionnaire	Survey ID
COMPLETE BY SURVEYOR PRIOR TO INTERVIEW Surveyor Date Time	Next I'd like to ask you a few questions about health warnings regarding eating fish caught in this region. [MII]
Location	Q21. Heavy you have or hand not pleated warmings related to enting the leader of the property of the leader of the property of the leader of t
Now I'd like to ask you a few questions about the fish you or	3 Important? P RAPUSED Somewhat important?
20. During the past four weaks, have you eaten fish caught in this region 1000 (SKEP TO Q7)	Finally, I'd like to ask you a few questions about yourself. Remember that your auswers will be kept strictly confidential. Q22. What is your sip code? (ESSE) DON'T NOW (5000) REFUSED
S DON'T KNOW (SKIP TO Q7) P REFUSED (SKIP TO Q7) Q4. During the past four weeks, how many times have you	Q23. Including yourself, how many people are currently living in your household? [15] DON'T KONOW SAFETSED
eaten fish cought in this region! IIII Q5. What parts of the fish you catch do you usually est? What with you are What within you are What without you be a set of the set	OGA In what your was you form! Description Pastweet
IF MORE THAN ONE ASSIVER GIVEN FOR QS, ASK: QS. Which way do you set it most other? QS. Which way do you set it most other? QS. To fish caught in this region CEPU. Down much do you usually set it mor cast time set. compared to this model? ———————————————————————————————————	The state of the s
	You may be asked to do another survey in the future. If we can connect today's answers to your future answers it improves our education efforts. Giving us your initials and birth date allows us to connect the answers without identifying you. O27. What are the first ferms of your first and has means?
0 NO 1 YES (SKIP TO Q9) Q8a: May I ask why not?	Q28. What is your birth don? Q28. What is your birth don? [ESENSE] DON'T SOLOW [ESENSED] REPUSED
	Thank you for taking the time to do this survey.
TURN OVER AND COMPLETE FISH SURVEYS	TURN OVER AND COMPLETE BOTTOM SECTION

	, and	Behs							
FOR EACH FISH TYPE IN ANGLER'S BUCKET, ASK Q9 -Q15.									
In order to understand more about the types of fish caught in this area we would like to measure the length of the fish. Would that be okay with you?	A	В	С	D	E	F	G	H	1
Q9_FISH. NOTE NAME OF FISH TYPE IN BUCKET → →									L
Q9. Number of fish in possession.						_			L
Q10. Total length of fish (in inches). Q11. What to you call this fish? 1 - CORRECTLY IDENTIFIED IF Q11=2. NOTE INCORRECT NAME > > >									
Q12. In the past four weeks, how many times have you eaten this fish?						⊢			H
QL: It has place now where, now many union easy to be seen and man. [3] What do you exceed you will the fact. 2 — Give anny (SLEP to NEXT FISH TYPE) 3 — Throw back (SREP TO NEXT FISH TYPE) 4 — But (SREP TO NEXT FISH TYPE) 5 — Other (SREP) (SREP TO NEXT FISH TYPE) (SREP TO NEXT FISH TYPE)									
Q14. What parts of the fish you catch do you usually eat? 1 - Whole with guts 2 - Whole without guts 3 - As steaks or fillets without the akin									
4 – As steaks or fillets with the skin 5 – Other part(s) of fish (specify)									
Q15. How much of this fish do you usually eat at any one time compared to this model? ————————————————————————————————————									
4 - 19019 than twice the amount								_	
FOR EACH OF THE FISH TYPES ASK Q16 - Q20. SKIP FISH TYPES THAT WERE IN ANGLER'S BUCKET.			A. White Creaker	Sand Bass	B. Barre	C. Topund	D. Barracuda		Creaker
Now I have a few questions about specific types of fish.			Cer	Bass	ă.	*	cuda	.	CET
Q16. Do you ever catch (SHOW PHOTO)?		_		т	_			_	
Q17. In the past four weeks, how many times have you eaten this fish?									
Q18. What do you usually do with this fish? 1 - Ear than: 2 - Give away (F g1+-0, SKEP TO NEXT FISH TYPE) 3 - Throw back (F g1+-0, SKEP TO NEXT FISH TYPE) 4 - Bait (F g1+-0, SKEP TO NEXT FISH TYPE) 5 - Other (specify) 10 - Other (specify)	H TYPE								
Q19. What parts of the fish you catch do you usually eat? - Whole with guts 2 - Whole without guts 3 - As steaks or fillets without the akim 4 - As steaks or fillets without he skim									
5 - Other part(s) of fish (specify) Q20. How much of this fish do you usually eat at any one time compared to t mode? ###################################	žiis	1							
1 - Account mis amount 2 - About half this amount 3 - About twice this amount 4 - More than twice this amount									
TURN OVER AND COMPLETE SECOND COLUMN									

What will come of this study?

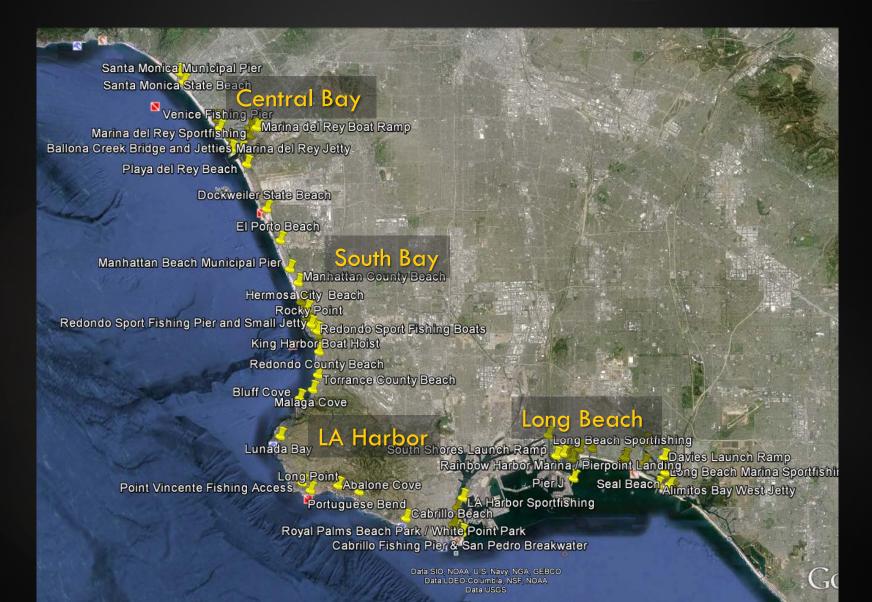


2. How was the study carried out?

Stratified Sample



Geographic Regions



Fishing Modes

Piers / Jetties



Jetties Private Boats



Charter Boats



Beaches / Intertidal Zones



Time

Season



Day of Week



Time of Day



1994	Curre	nt Study
99	128	days
29	61	fishing sites
2376	1449	anglers counted in census
1751	888	anglers approached
71%	78%	response rate
1243	693	completed responses

Fishing Modes

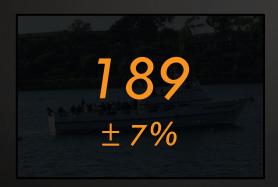
Piers / Jetties



Private Boats



Charter Boats



Beaches / Intertidal Zones

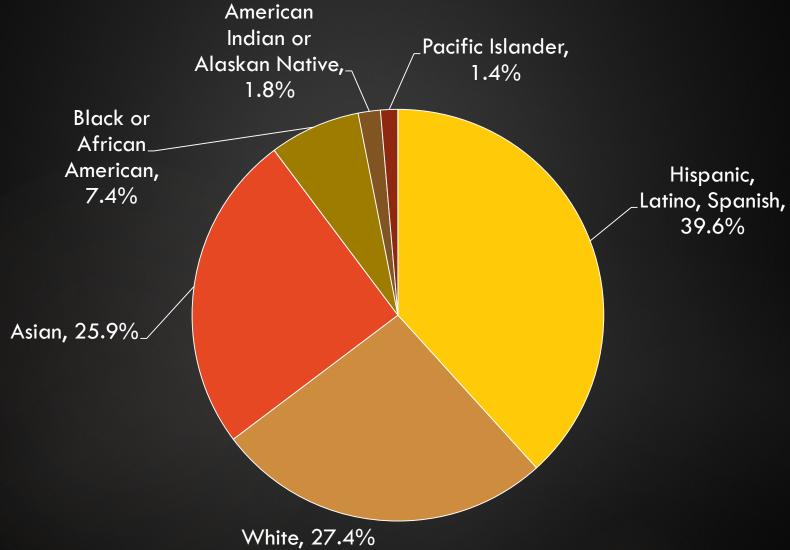


3. Findings: Who are our anglers?

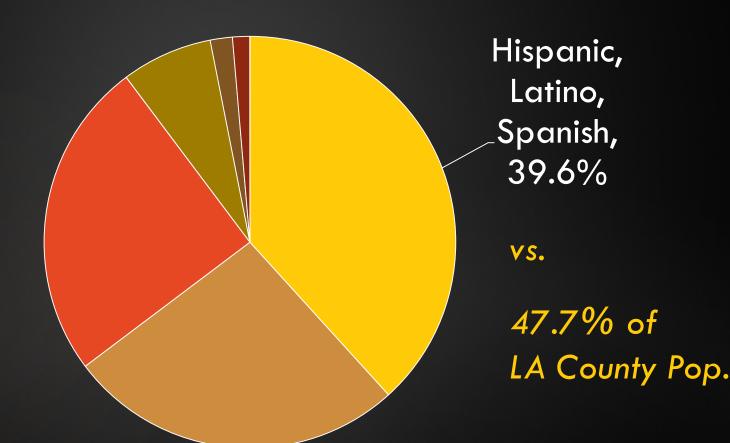
Gender, Age, and Fishing Experience

	Current Study Angler Pop.	1994 Study Angler Pop.
% Male	94%	93%
Age 21-40	40%	54%
Fishing 0-5 years	52%	46%

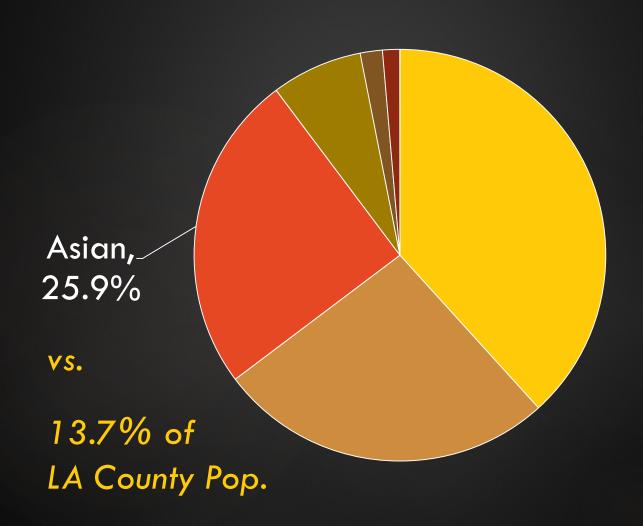
Angler Ethnicity



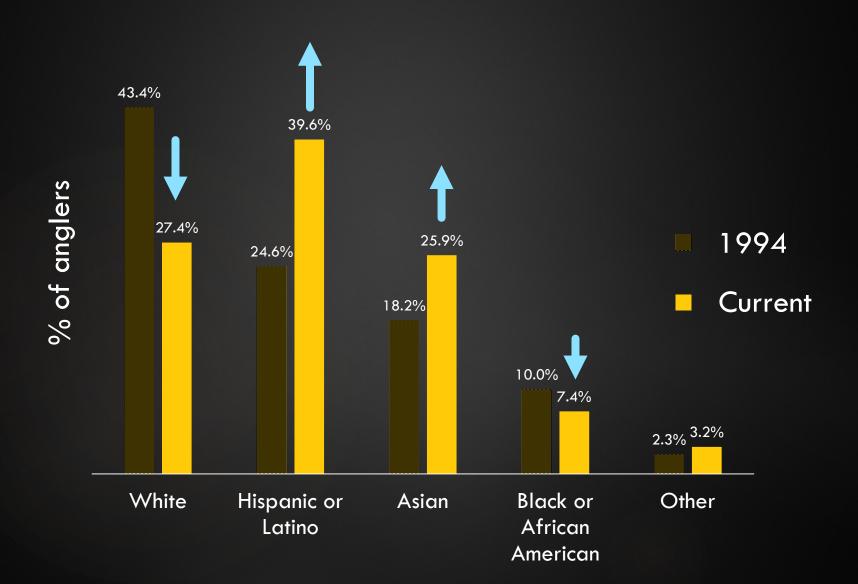
Angler Ethnicity



Angler Ethnicity

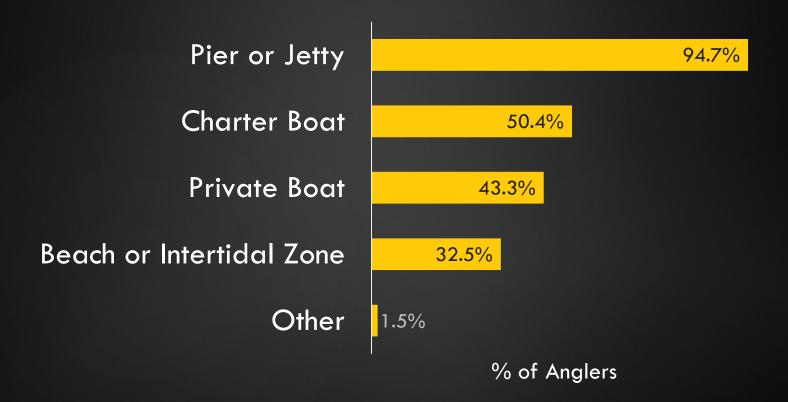


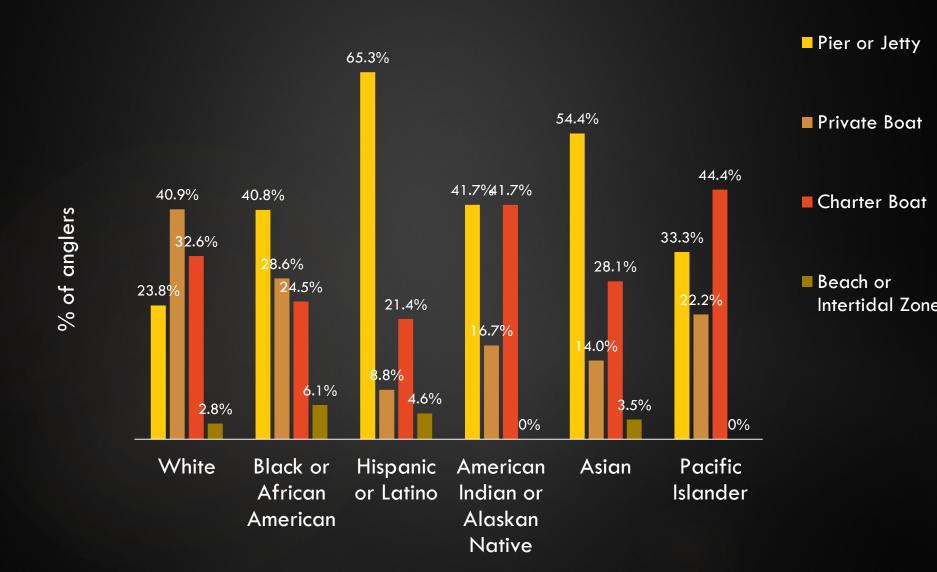
Population Change by Ethnicity

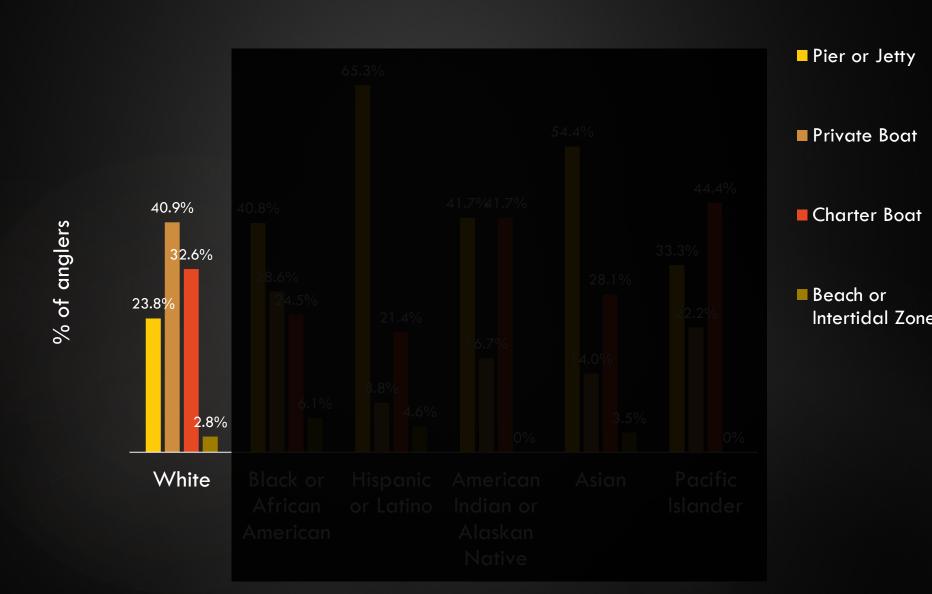


4. Where, When, and What are they catching?

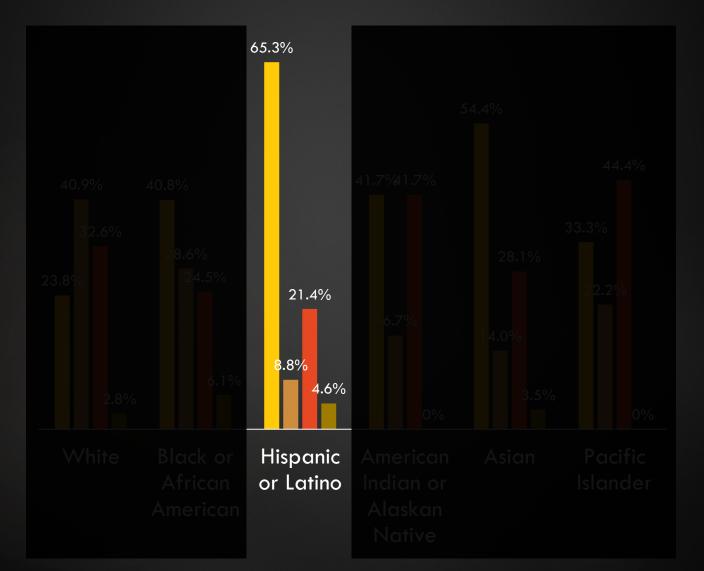
Where: Modes fished in the past year







% of anglers

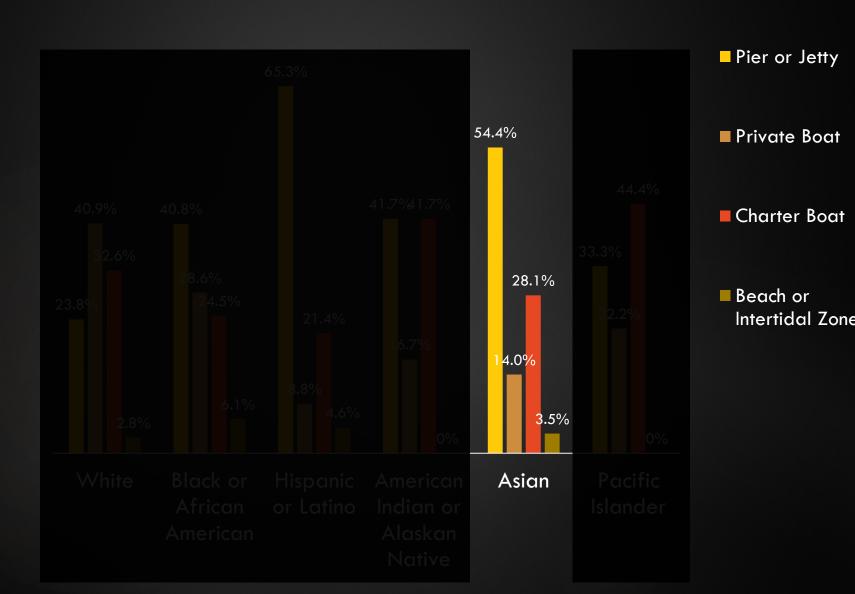


■ Pier or Jetty

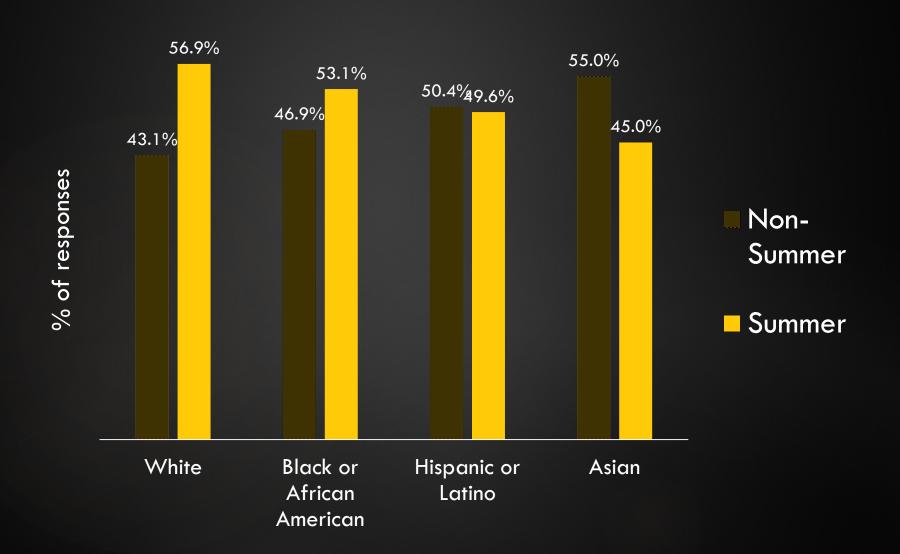
■ Private Boat

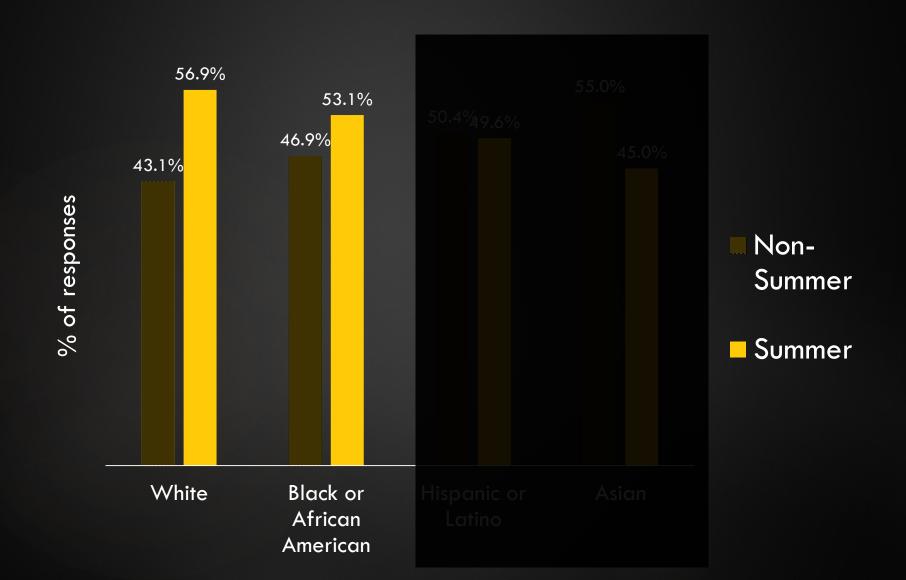
Charter Boat

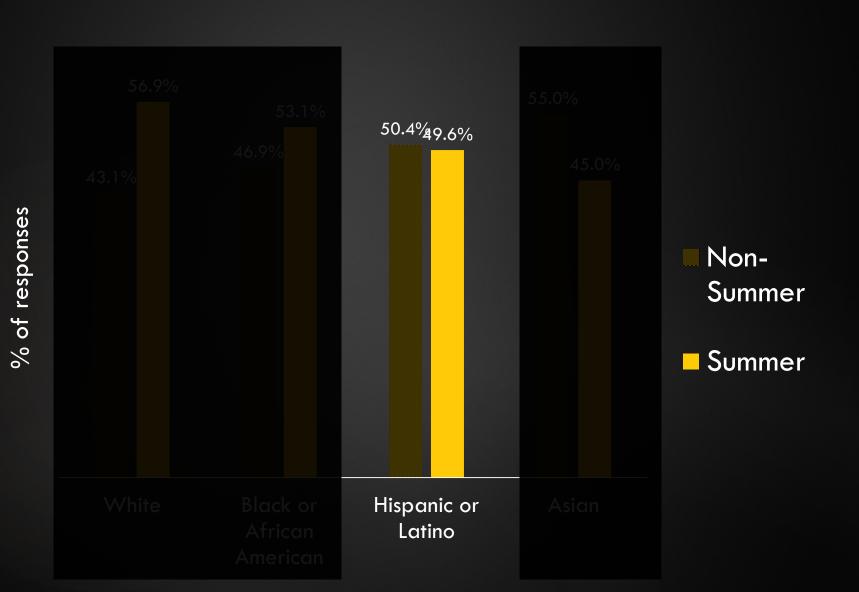
Beach or Intertidal Zone

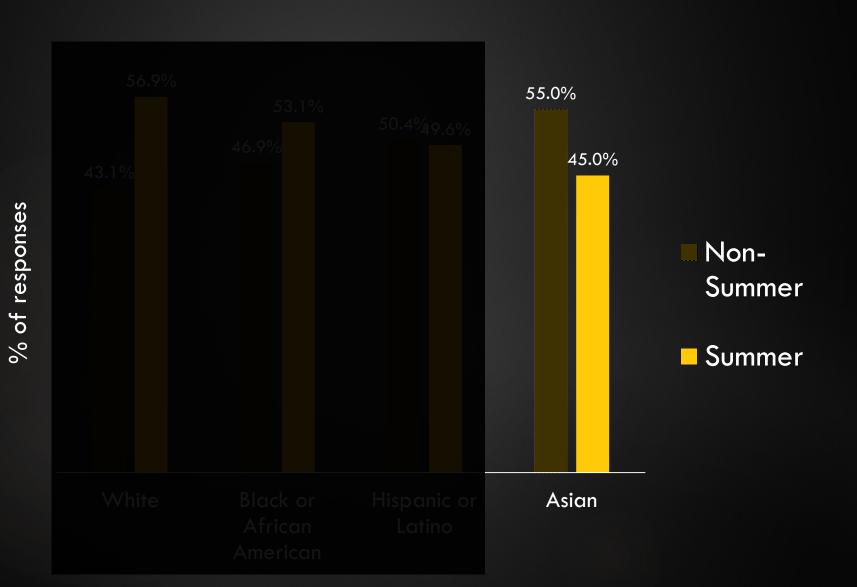


% of anglers









What: Fish caught by anglers



Most Commonly Caught

1. Chub mackerel



Pacific Bonito

2. Pacific sardine



Barracuda

3. Ocean Perch



Halibut

4. Topsmelt



5. White Croaker



5. Barred Sand Bass



Misidentification of DNC Fish

Common Name vs. Incorrect Names Used by Anglers

White Croaker Queen Fish, Corbina

Barred Sand Bass Calico Bass

Black Croaker --

Topsmelt Jacksmelt

Pacific Barracuda ---

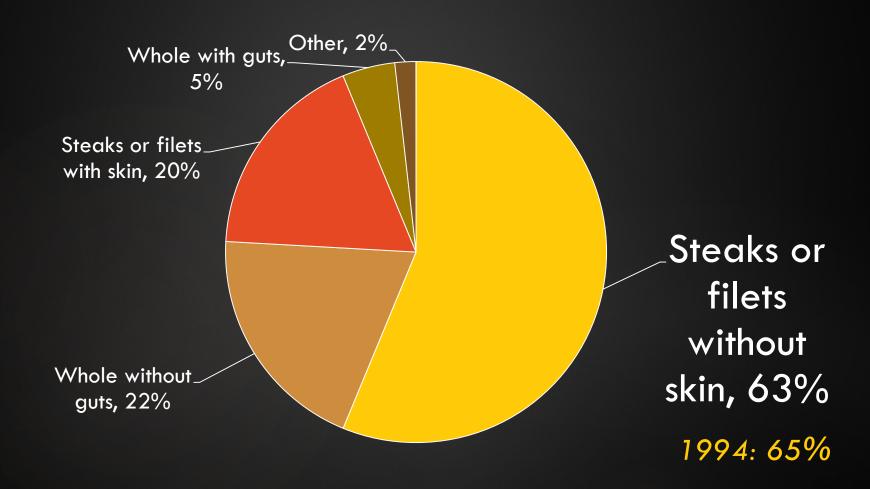


5. What is being consumed? And by Whom?

DNC fish kept for consumption

		Intentions		
		Eat	Give Away	
More often	Barred Sand Bass	41%	15%	
	Pacific Barracuda	40%	21%	
Less often	Black Croaker	24%	9%	
	White Croaker	15%	10%	
Least often	Topsmelt	7%	8%	

Parts of Fish Consumed – All Species



Consumption Amount

	1994	Current Study
U.C.L. 95%	30.7	21.7 g/ind/day
Median	21.4	10.7 g/ind/day

Greater than 50% Reduction Probable





Clarifying Questions?

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Strategic Discussion Questions

- 1. How does the Consumption Study information affect the PV Shelf work partners engage in?
- 2. How can we use the new Consumption Study information to be more effective in the work that's done?

LUNCH...munch...munch...

Resume at 1:00

Exciting things to come....