



Fishing in Santa Monica Bay

Activities, Importance, Status
& Gaps in Understanding



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Background: The WHY, and WHY NOW?

- Spiny lobster FMP:
Commercial fishing in
the Bay?
- BRP Goal 4: Protect
Natural Resources,
including fished
stocks.
- Update BRP in 2013

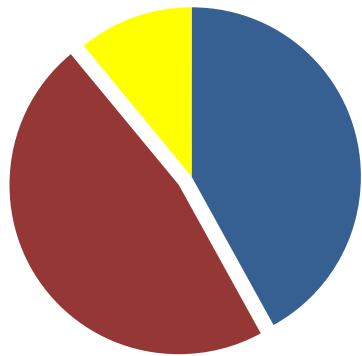


The Big Picture: Commercial Fishing

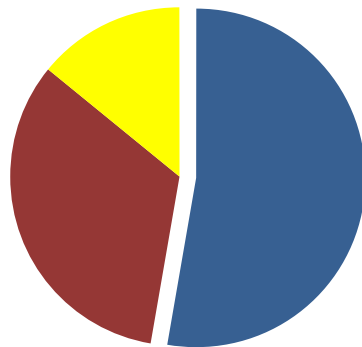
- Fishing related industries < 1% of California GDP

Economic Indicators for Fishing related Industries in Los Angeles County (2010)

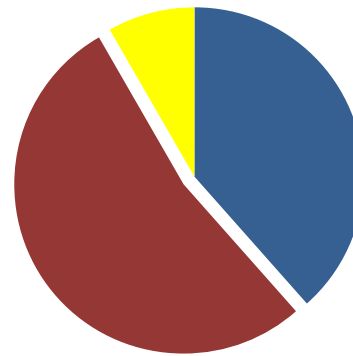
Wages (\$53 M)



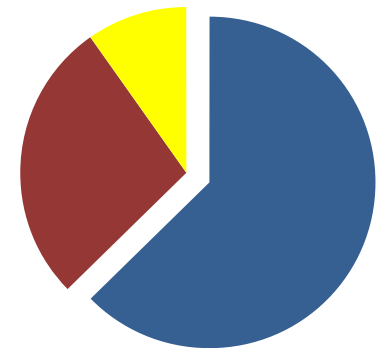
Employment



GDP



Number of Establishments

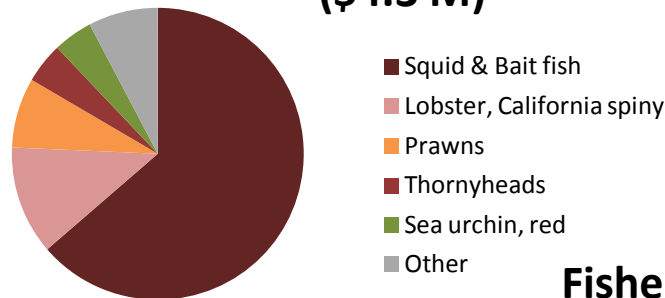


■ Commercial Fishing
■ Recreational Fishing
■ Scenic Water Tours

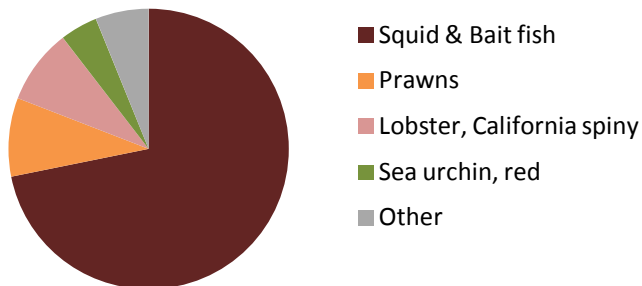
What is landed at LA Harbors?

- Port of LA is #1 (Pacific Coast) by weight; #2 by value (primarily squid & sardine)

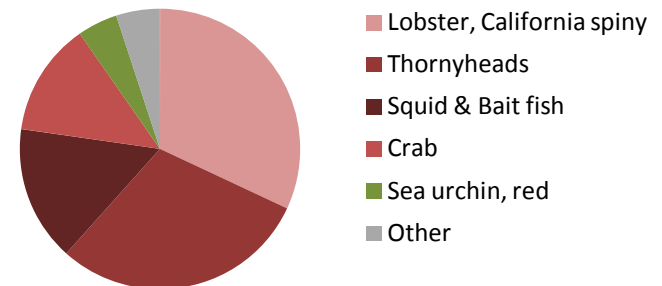
Fishery Value at All LA Harbors 2012
(\$4.3 M)



Fisheries Value at Ports of LA/LB, 2012 (\$3.7M)



Fisheries Value at SMB Harbors, 2012 (\$600k)



Fishing Regulations and The Bay

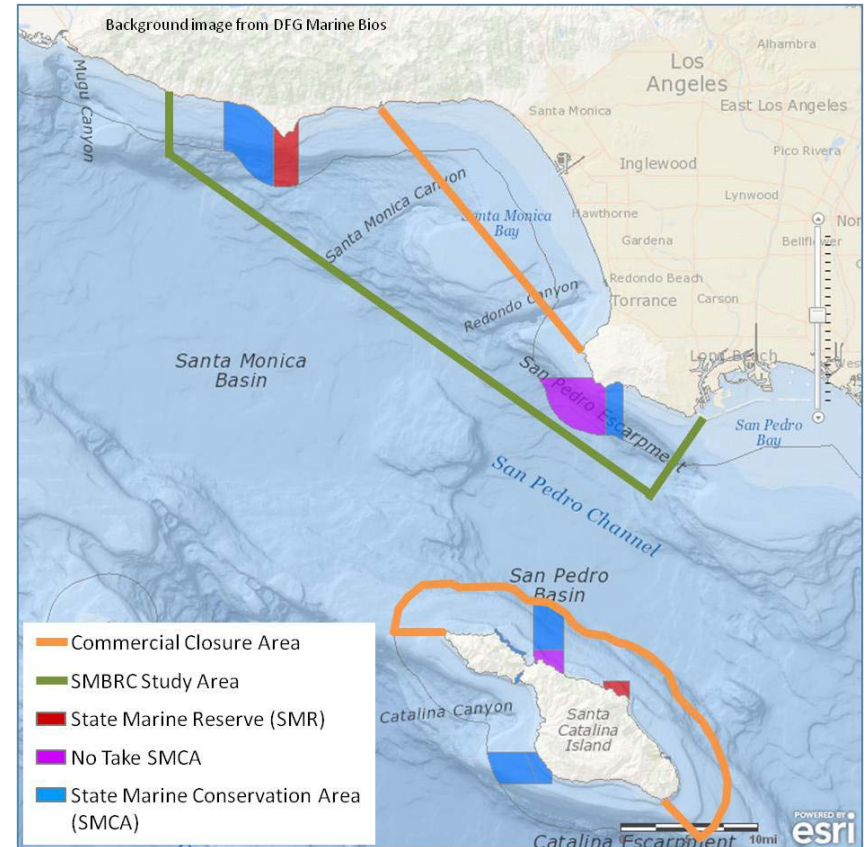
Commercial Fishing Activity

NOT ALLOWED

- Market squid, etc (for human consumption)
- Rock crab, lobster, and finfish (trap)
- Set and drift gill nets, trammel nets, trawl nets, slurp guns (Any Species)
- Abalone

ALLOWED

- Market squid, sardines, et (for BAIT)
- Urchin, Sea Cucumber (diver)
- Handlines, troll lines, set long lines
- Sablefish deeper than 350m (traps)
- Hagfish (bucket traps)
- Mollusks, sand crabs, shrimp (hand rake, etc)
- Skates, rays, sharks (spears, harpoons, bows & arrows)





A Disclaimer about the Data

Sources

- DFG Commercial Landing data
- DFG Commercial Passenger Fishing Vessel data
- California Recreational Fishing Survey (CRFS)
- DFG Recreational Lobster Card Data

- Ecotrust Survey

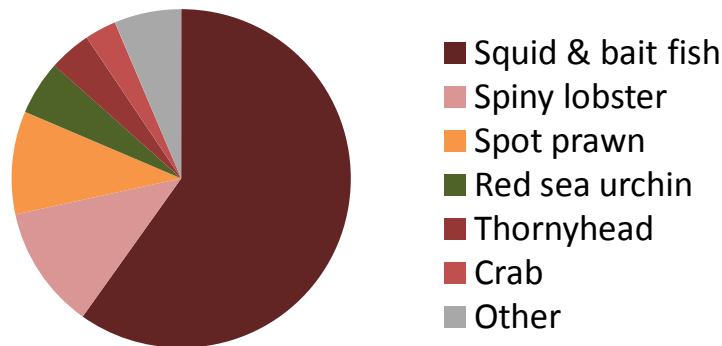
Disclaimer

- Block data are coarse
- Lazy reporting
- Purposeful misreporting
- Responses are low
- Whole groups are missed
- Numbers extrapolated
- Quality depends on surveyor

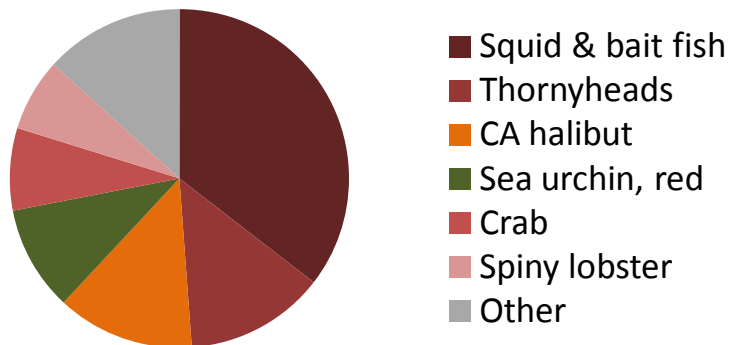
- Based on perception, rather than data

Valuable Commercial Species in the Bay

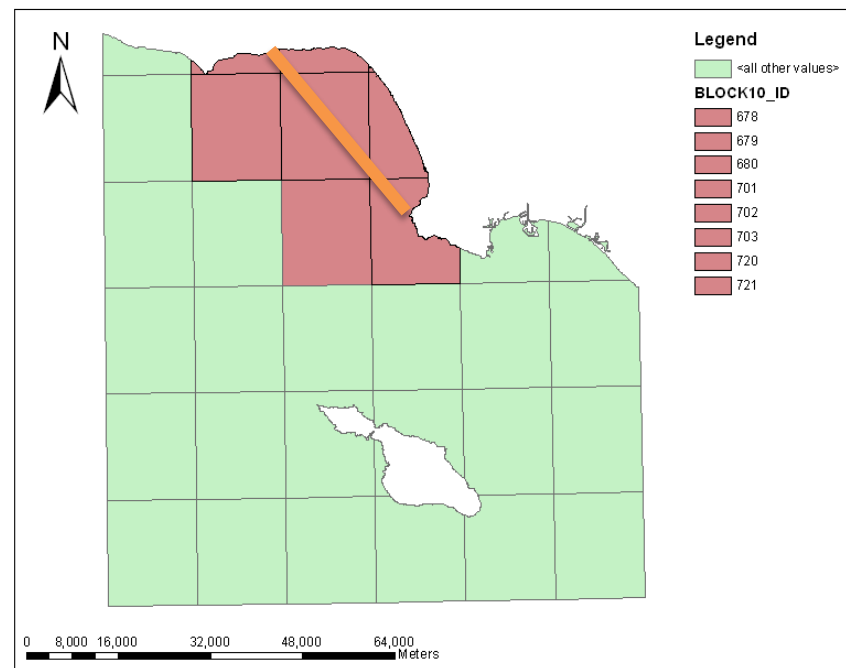
Value in LA area, 2012 (Total \$5 M)



Value in SMB, 2012 (Total \$1.4 M)



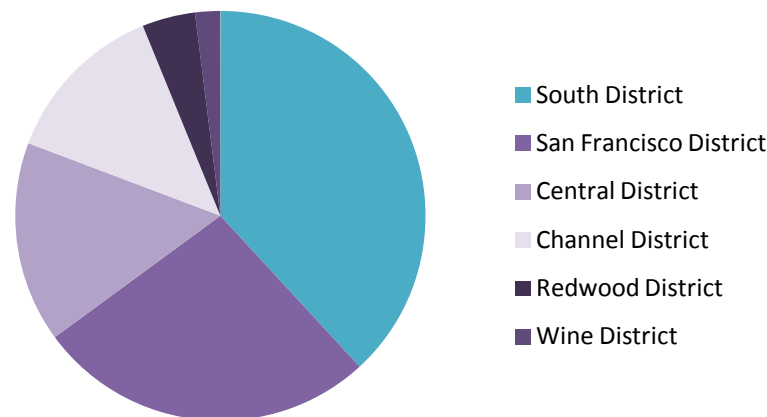
Fishing Blocks that Intersect with the SMB Closure



The Big Picture: Recreational Fishing

- ~ 1% of LA county residents buy fishing licenses
- ~ ¼ primarily ocean fishing
- LA County residents buy ~6% of all CA fishing licenses
- South District = almost 40% of all CA landings

Estimated Recreational Catch by District (2011)



Popular Recreational Fish

CPFV

Data: Sholtz et al 2010, pp 26
CRFS Data, 2011

- Rockfish
- Sand bass / Kelp bass
- Offshore tuna
- Sanddab
- Other

Private Vessel

CRFS Data, 2011

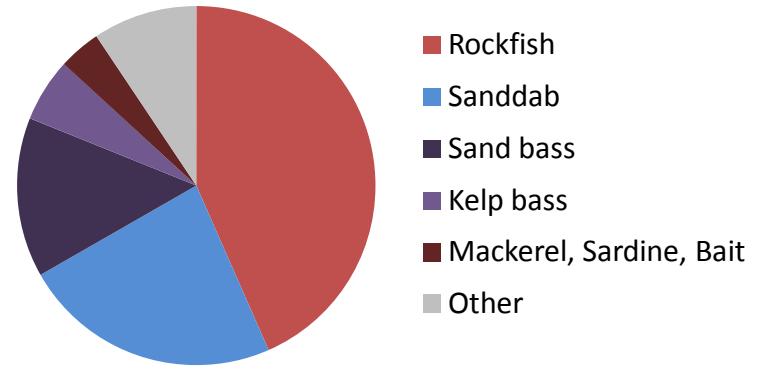
- Mackerel, Sardine
- Rockfish
- Sand bass / Kelp bass
- Sanddab
- Other (more evenly distributed)

Diver, Kayaker

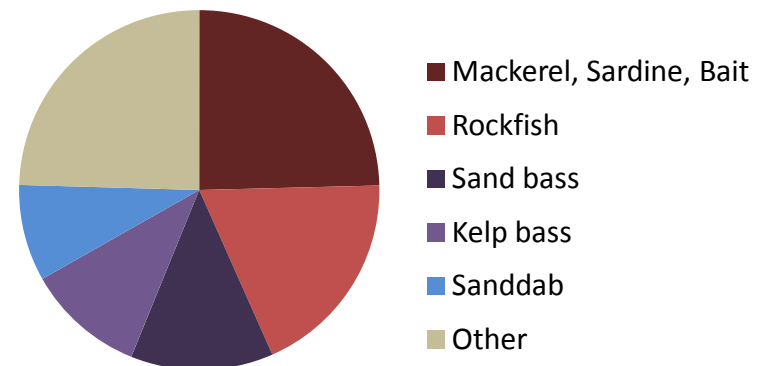
Data: Sholtz et al 2010, pp 26
Lobster Cards Report 2010-2011

- White seabass
- CA halibut
- CA spiny lobster
- Yellowtail

CPFV



Private Vessel



Status of Important Fish in SMB

Species	Mgmt	FMP	SA	Status	Limitations
CA Halibut	State		2011	14% of unfished biomass	Data poor
Rockfish	State & Federal	X	2011	~30% of unfished biomass, rebuilding	Based on landings, effected by RCA and CCC areas
Red sea urchin	State			Fully exploited, localized overfishing	Based on CPUE, % legal-size individuals, 2005 last available review
White seabass	State	X		Recovering, landings near pre-crash levels	Independent survey
Thornyheads	Federal	X	2005	63% - 71% of unfished biomass, above target	Age-size relationship uncertain, limited data south of Pt. Conception
Crab	State			Unknown	Very little data
Squid	State & Federal	X		Presumed stable	Based on CPUE
Spot prawn	State			Presumed stable	Based on participation
Yellowtail	State			Presumed stable	Based on landings and NGO report
Spiny lobster	State	IP	2011	Presumed stable	Based on landings, limited rec data
Sardine	State & Federal	X	2011	Healthy	

Summary

- Overall, fishing small but LA makes big contribution
- Locally important commercial species are:
 - squid, sardines, lobster, thornyhead, sea urchin, spot prawn, crab, & CA halibut
- Locally important recreational species are:
 - rockfish, sand bass, kelp bass, white seabass, tunas, CA halibut, yellowtail, & spiny lobster
- Management based on fishery-dependent data
- Mix of stable and borderline stock status



The Bay's Commercial Closure

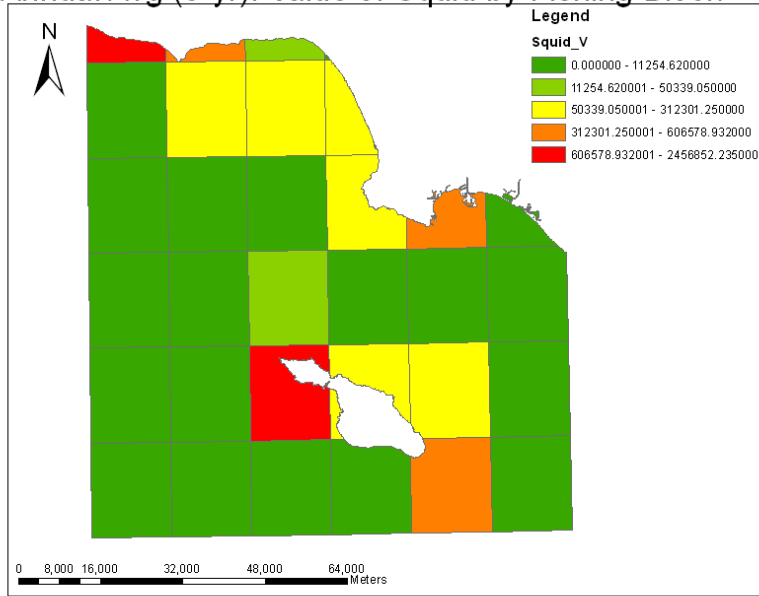
- Commercial lobster fishermen interested in fishing in the Bay
 - Lobster fishing?
 - All trap fishing?
 - All commercial fishing?



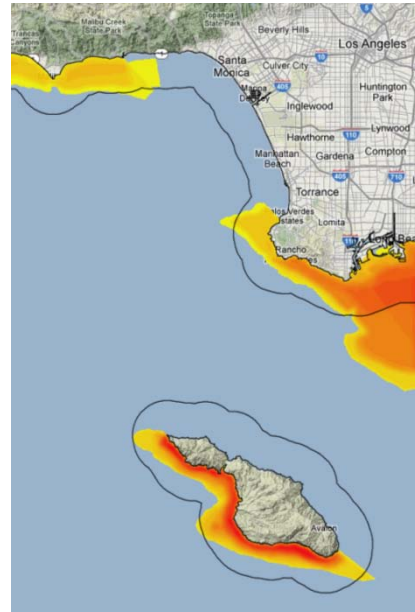
Will other fisheries be interested?

Squid

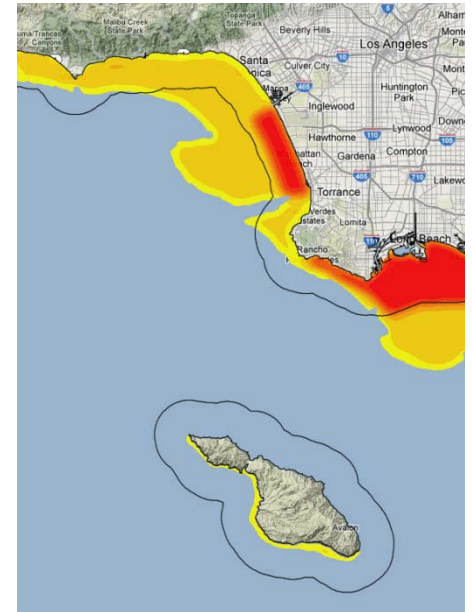
Annual Avg (5-yr). Value of Squid by Fishing Block



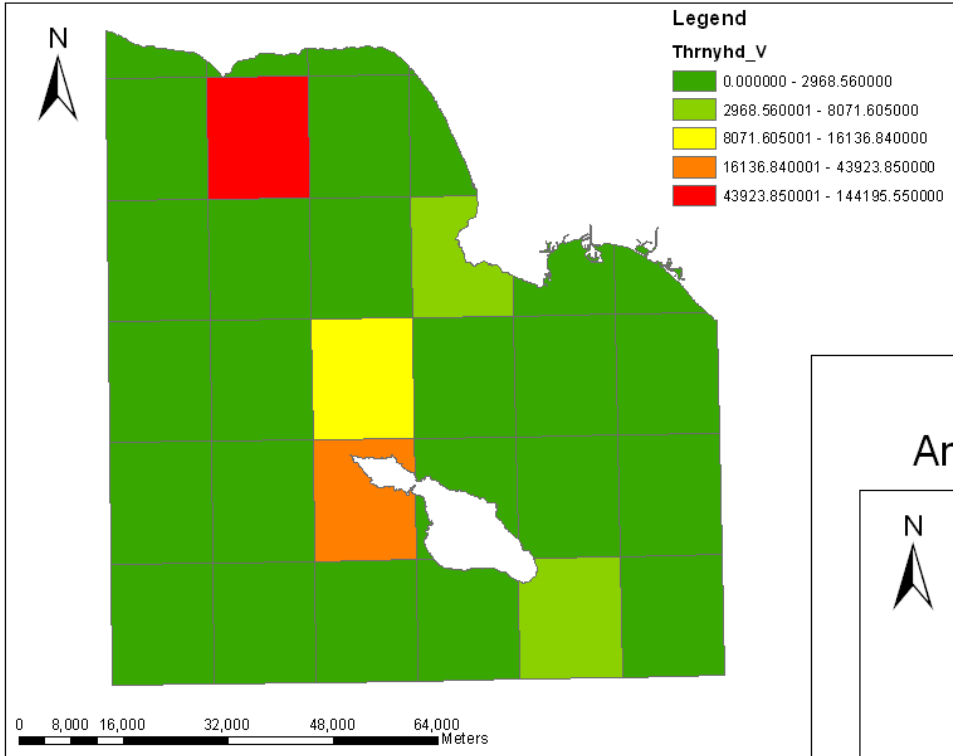
CPS, Seine



Live Bait

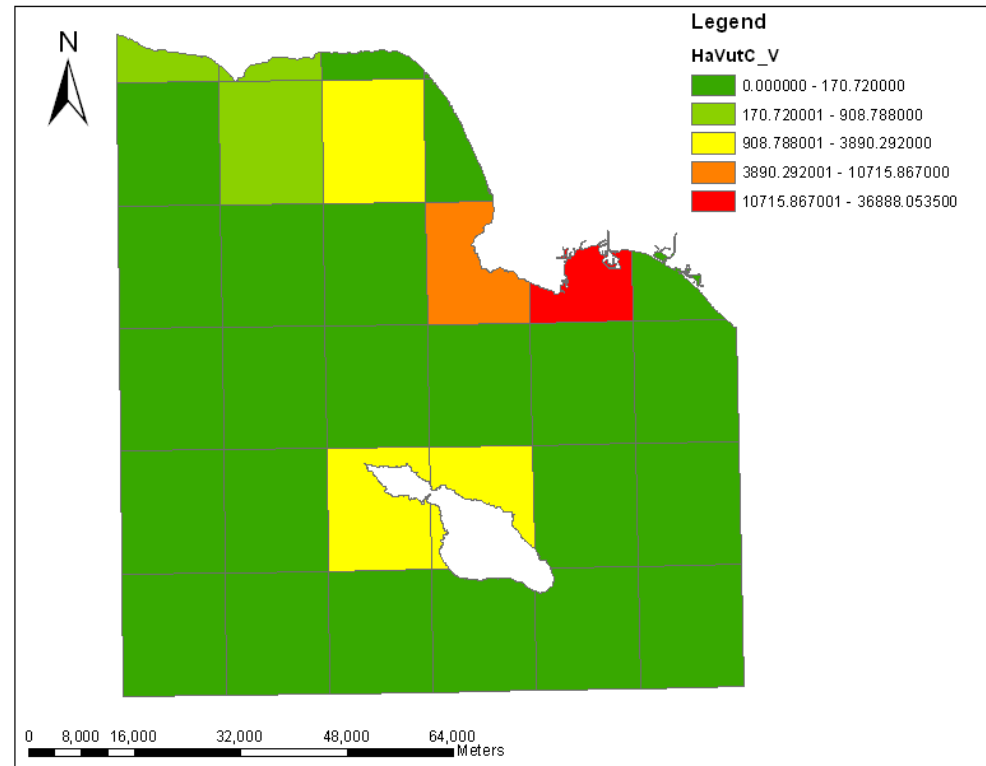


Annual Avg (5-yr). Block-Value of Thornyhead

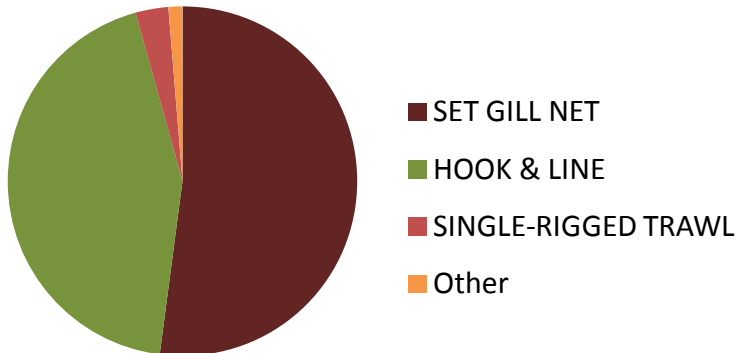


Thorny head Gear: Set Longline

Annual Avg (5-yr). Block-Value of CA Halibut



Gear Used to Catch CA Halibut



The Bay's Commercial Closure

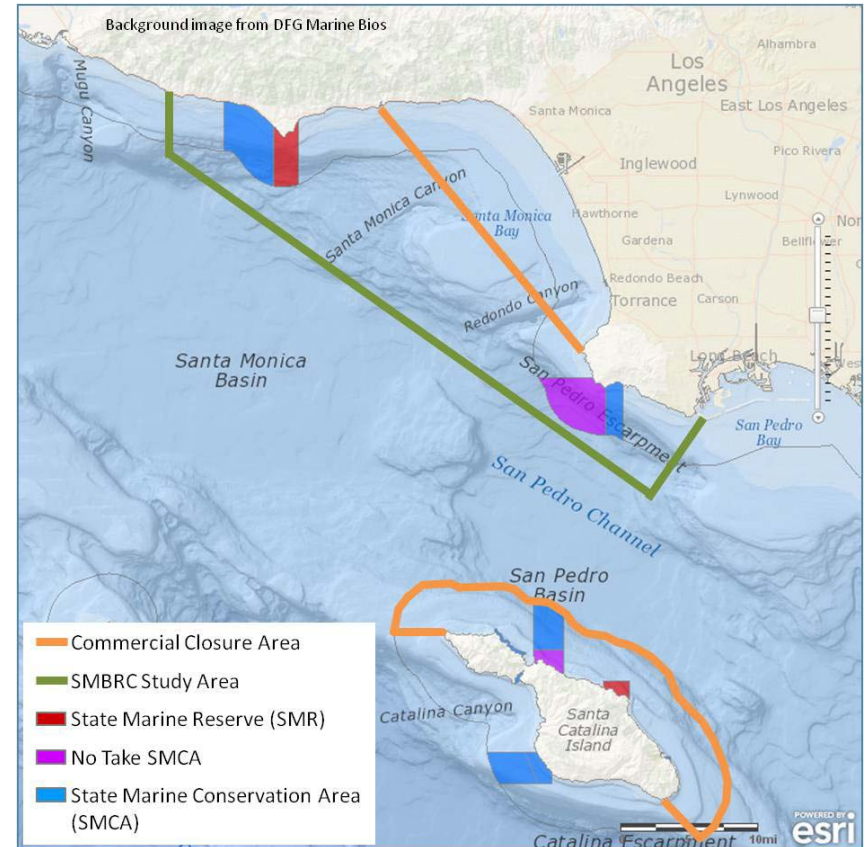
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Popular Recreational Fish

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- Other

Private Vessel

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- Other (more evenly distributed)

Diver, Kayaker

- White seabass
- CA halibut
- CA spiny lobster
- Yellowtail



Status of Important Fish in SMB

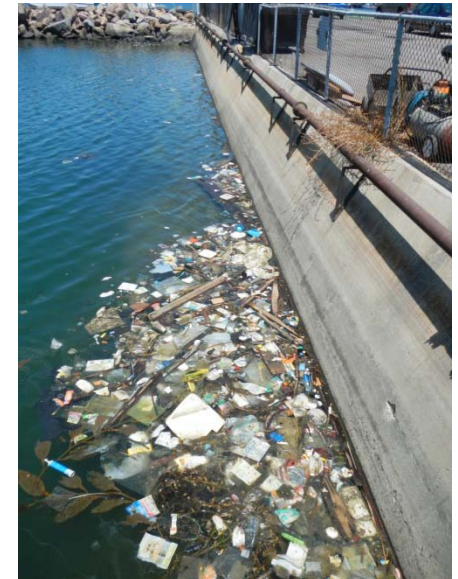
Species	Status
CA Halibut (H&L, Trawl)	● 14% of unfished biomass
(Set gillnet)	●
Rockfish, black (nearshore, H&L)	● ~30% of unfished biomass, rebuilding
Thornyhead (H&L, set longline)	● 63% - 71% of unfished biomass, above target
(Trawl)	●
Red sea urchin	● Fully exploited, localized overfishing
White seabass (H&L)	● Recovering, landings near pre-crash levels
(Gillnet)	●
Crab	● Unknown
Squid	● Presumed stable
Spot prawn	● Presumed stable
Yellowtail	● Presumed stable
Spiny lobster	● Presumed stable
Sardine	● Healthy

COMMERCIAL CLOSURE SUMMARY

- Commercial fisheries that would gain fishing grounds are:
 - Squid, sardine, and other “bait fish”
 - Spiny lobster, nearshore finfish
- Effect of closure on fish populations in the Bight unknown
- Bay closure is opportunity to study localized effects of recreational fishing
- Enforcement is relaxed

Cumulative impacts in the Bay

- Habitat loss
- Storm water, trash, etc.
- Shipping
- Ocean intake pipes
- Oil spills

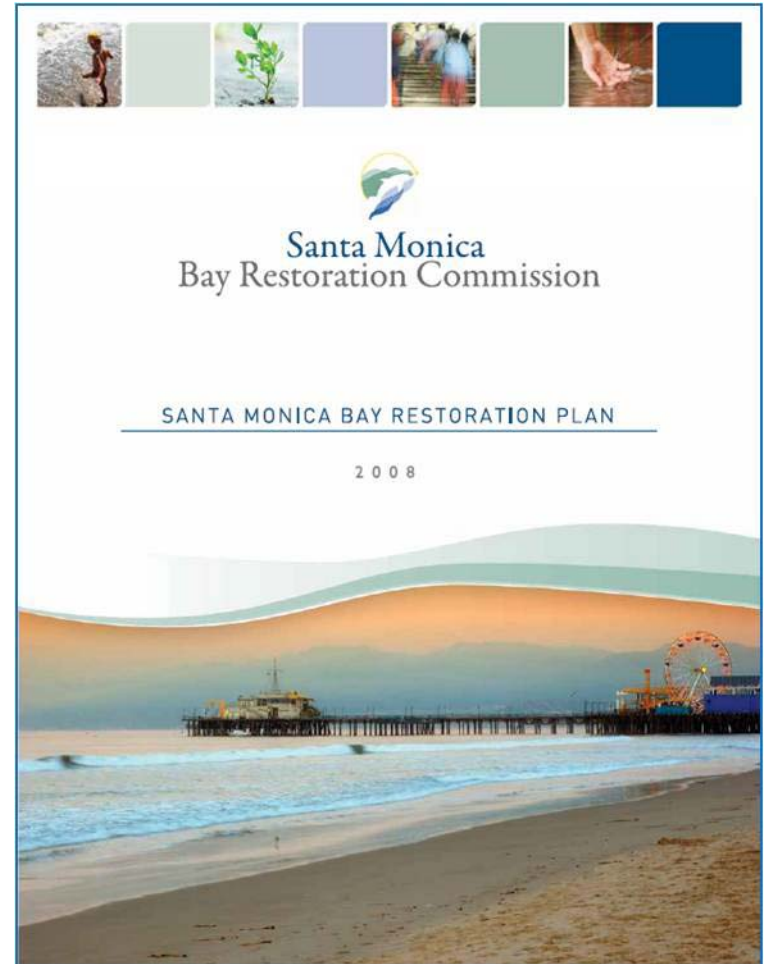


Additional Questions

- Do fished species benefit from the SMB closure?
- Are the improvements in WW treatment benefiting fishing?
- What are the benefits of the new MPAs?
- Are there important/sensitive areas that should remain closed (ie the submarine canyons, Malaga Cove, Sunset Beach)?
- How would seafood contamination concerns be affected?
- Is there a place for local, artisanal, commercial fishing in the Bay?

What Can SMBRC Do?

- Revise and Pass Resolution supporting the status quo – or – Let the Lobster FMP process play out
- Develop goals, actions & milestones in 2013 BRP Update to inform future decisions and actions.





Parting Shot

Sources

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Stock Status Sources

CA Halibut: Maunder et al 2011

CA Spiny Lobster: Neilson 2011

Crab: Parker 2003, Culver & Kuris 2003

Jack mackerel: PFMC 1998

Jacksmelet: Gregory 2001

Market squid: CDFG 2005

Northern Anchovy: NOAA FishWatch, 2012

Pacific sardine: PFMC 2011

Red Sea Urchin: Kalvass et al 2003, MBAQ 2008

Rockfish: PFMC 2011 (*greenspotted*), MacCall 2005 (*vermillion*), Wallace 2011 (*canary*)

Spot prawn: MBAQ 2011, Larson & Reilly 2007

Thornyhead: Rogers et al 1997, Fay 2005, Hamel 2005, Barnes et al 2005

Topsmelet: Gregory 2001

White seabass: Allen et al 2007, Crooke & Louie 2006

Yellowtail: MBAQ 2011