



Fishing vs. environment: Have 5 years of restrictions off the coast helped sea creatures?

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Fisherman David Hansen has one pressing question: Will the waters off Laguna Beach ever open up to anglers again?

Five years isn't enough time to figure out if Marine Protected Areas have helped sea life flourish since select waters along California's coast had restrictions put in place in 2012. But experts have spent the last few years gathering data that will provide a benchmark for future comparison and ultimately help to determine if the restrictions are making a difference, officials said last week.

The meeting in San Clemente last week brought together various groups to speak about findings in the "State of the California South Coast," a recent report that provides a snapshot of what is happening in Marine Protected Areas, or MPAs -- from what's lurking in deep canyons off the coast to human activity and impacts.

In the south coast region, MPAs include ranges of classifications, each of which allow differing levels of take and other human activity. Locally, they include areas from Bolsa Chica and Crystal Cove, Newport's Back Bay, through Laguna Beach and into Dana Point.

While some areas have restrictions but still allow some fishing, others – such as Laguna Beach – are a "no take" zones, meaning nothing can be taken out of the ocean or from tide pools or beaches. There also are strict restrictions for fishing in areas off Palos Verdes, Channel Islands and Point Conception, with hopes that fish and wildlife will flourish in those untouched areas.

The entire MPA network makes up 124 locations from Oregon to the Mexico border, 15 special closures and collectively protects about 16 percent of state waters.

The limits still hit a nerve with some anglers who voice frustration about their livelihoods being negatively impacted by the restrictions.

"We're bleeding to death," said Hansen, of Dana Point, who provides private charters to anglers. "We took away a huge area of fishing. We're all here to find out – is it ever going to open again? That's the one question we have."

While many questions remain about whether protected ocean areas will actually work, officials and environmental groups hope their years-long studies will provide a baseline for years to come, documentation to allow for comparison in future decades.

The studies came from \$4 million in state funding to create the baseline reports. Another \$2.5 million has been approved for future studying for phase 2, aimed at long-term monitoring that will be compared to the baseline report, according to Steve Wertz, senior environmental scientist with the Department of Fish and Wildlife.

In total, 10 studies by various groups were done for the recent south coast report, which makes up the area from Point Conception to the San Diego/Mexico border.

This southern region makes up a large proportion of commercial fishing - with 68 percent of the state's landings here and 40 percent of the revenue coming from this area, according to Erin Meyer, senior scientist for California Ocean Science Trust.

Selena McMillan, regional manager for Reef Check California, presented findings volunteer divers tallied at about 90 sites. New data was compared against decades-old findings the group has collected.

"Because of our monitoring efforts, we've been able to capture things like the sea star wasting syndrome, we've been able to track the ebbs and flow of that and hopefully we'll see them coming back at some point," she said of the rapid die-off of sea stars in recent years.

The group also tracked the impacts of the Refugio Oil Spill, which deposited an estimated 142,800 gallons of crude oil at the Santa Barbara County beach in 2015. The group can compare data it had before the spill to see what impacts the disaster had on the coast.

While presenters were hesitant to say there's proof MPAs are working, the study showed that biodiversity was highest at sites within old MPAs, and the lowest at sites outside of MPAs.

At the 12 MPAs implemented at the northern Channel Islands in 2003, with another added in 2007, the average size of individual kelp bass and California sheephead was significantly larger inside the MPAs than outside. The abundance of spiny lobster, warty sea cucumber and red sea urchins was also higher inside the MPAs.

Spiny lobsters in a Laguna Beach study area exhibited a higher growth rate than at other sites, and males grew faster than females. The Laguna Beach area also had an unusually high number of larger lobsters, according to the report.

Laguna Beach resident Mike Beanan said he grew up in a fishing family, but the closures near his home were a necessary step to help the ocean replenish.

"There aren't any fish out there. We've taken all them out," he said. "You have to grow your

fish back, Laguna is one of the best places to grow your fish. You can't get your fish from Albertsons, you gotta grow them in the ocean and Laguna is one of the best places."

He said ocean conservation is happening not just in our local waters, but around the world.

"This is a global movement," he said. "We've overfished everywhere."

From 2012 to 2014, the number of MPA violations issued in the South Coast area increased from 80 to 252, as Fish and Wildlife officers transitioned from warning and education to enforcement. One of the biggest violations came in 2012, when officers caught divers with 47 California Spiny Lobsters from the State Marine Reserve. All the lobsters were returned to the ocean and the violators were cited.

Cyndi Dawson, a scientist from the Ocean Protection Council, was sympathetic to the anglers' frustration that years of study haven't provided clear-cut answers on whether the protected areas are yet thriving.

"It's looking for areas where we can try and holistically look at a whole ecosystem, and try to have as little impact on you guys as possible," she said. "I know we succeeded in some areas and failed in some areas. So now we're in a situation where we say, OK, we did this. What is the affect?"

The Ocean Protection Council is starting a collaborative fisheries research program that involves anglers to catch inside and outside of the MPAs to do comparisons "to find out what is going on in these spots," she said.

The North Coast report is expected to be released next year. Then, all the regions will be combined and collaborate on the next study process, with findings expected in 2022. "We're in it for the long haul," said Wertz.

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ABOUT MARINE RESTRICTED AREAS

The California Marine Life Protection Act was passed by the California Legislature in 1999 and directed the state to evaluate and design a system of Marine Protected Areas, which were broken up into four regions. In 2007, the Central Coast became the first region to implement MPAs, followed by the North Central Coast in 2010 and the South Coast in January 2012 and the North Coast the following December.

The Southern California marine protected areas stretch from Point Conception to the California-Mexico border and are the southernmost component of a statewide MPA network.

There are 50 MPAs in this region, covering about 356 square miles, or about 15 percent of Southern California state waters.

- The majority of non-consumptive coastal trips in the region occurred in Los Angeles

County and the fewest occurred in Ventura County, with beach going, scenic enjoyment and biking or hiking the most popular activities. The average survey respondent took 7 trips to the beach a year, spending about \$60 per trip.

- California Least Tern, an endangered species, utilizes MPAs encompassing estuarine habitat for breeding

- Reef across the South Coast region group into 17 kelp forest community clusters, each with its own unique combination of fish, invertebrates and algal species.

- The South Coast region has more than 800,000 ocean-dependent jobs and supports \$41 billion in ocean tourism each year. These same factors contribute to the enormous pressure faced by coastal and ocean ecosystems, and the species that inhabit them.

- In 2000, commercial fisheries reported a high of 428 million pounds landed. In 2015, there was a low of 70 million pounds landed.

- Sandy beaches make up more than a third of the South Coast shoreline and are among the most intensely used coastal ecosystem in the region. Key connections exist between sandy beaches and nearby kelp forests and rocky reefs - algae and surf grass wash ashore, forming "wrack." Wrack supports macroinvertebrates community, which in turn supports a large shorebird community.

More information: oceanspaces.org

<http://www.ocregister.com/articles/areas-747707-mpas-ocean.html>