

45 Number of U.S. fisheries now overfished, including cod and flounder

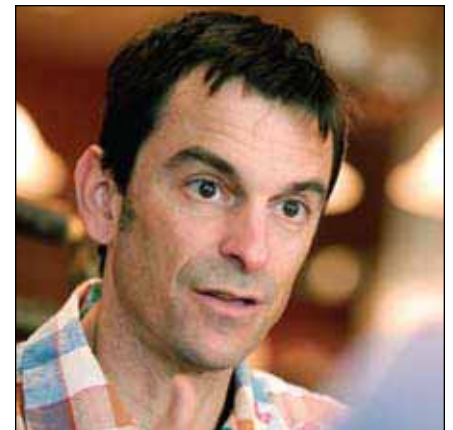
OCEANS



WHY WE WORK ON OCEANS

“By offering fishermen a financial stake in the health of fisheries, we can revive coastal communities and bring the resilient oceans back to life. The next president has all the tools he needs to end overfishing in his first term.”

David Festa
VP West Coast and Oceans



“Environmental Defense Fund looks for solutions rather than pointing fingers and placing blame.”

Rodney Avila

New England fishery council member and decades-long commercial fisherman

‘CATCH SHARES’ GIVE FISHERIES NEW HOPE FOR THE FUTURE

When John Steinbeck wrote *Cannery Row* in 1945, California’s coastline was dotted with thriving fishing communities. Today, the state’s fishing industry faces hard times, with working waterfronts giving way to T-shirt shops. The commercial catch has declined 70%, and similar failures are happening all over the world.

The old style of fisheries management – using tactics like ever-shorter fishing seasons – has failed to end overfishing and led to a dangerous “race for fish.” Particularly hard hit was the West Coast’s largest fishery – the 80 bottom-dwelling species collectively known as groundfish. In 2000, the fishery was declared a federal disaster.

Environmental Defense Fund offered a different approach. We helped persuade the Pacific Fishery Management Council to approve a plan to revive groundfish using “catch shares.”

Under this system, each trawler is assigned a percentage of the scientifically determined total allowable annual catch. Captains can fish sensibly to maximize the value of their take, rather than racing to catch fish as quickly as possible. That will give them the flexibility to avoid sensitive areas and reduce the accidental killing of other species. The plan, which we helped develop, also calls for observers on boats, eliminating the guesswork and lack of enforcement that have long plagued fisheries.

“As the fishery recovers, each catch share becomes more valuable, giving fishermen a long-term financial stake in the health of the system,” explains our Pacific Coast Oceans program director Johanna Thomas.

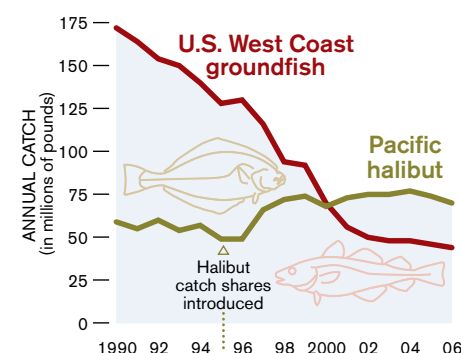
To provide fishermen the dollars they need to switch to sustainable fishing practices, we launched a revolving loan program called the California Fisheries Fund. The fund also will build markets for higher quality seafood products.

Our goal is to make catch shares the standard cure for ailing U.S. fisheries. In the Gulf of Mexico, the success of our catch share program for red snapper has led to its proposed expansion to include grouper. Now we are promoting catch shares for Gulf shrimp and New England scallops, and we’re exploring similar programs with recreational fishermen.

Brian Mose, a trawl fisherman in British Columbia, is hopeful. “Without EDF, I don’t think the fishing community would have learned about the science and economics of this great idea.”

▶ ONLINE: Watch how a key fishery was revived at edf.org/catchshares08

A TALE OF TWO FISHERIES



Catch shares have revived fisheries like Pacific halibut, while many fisheries without catch shares have collapsed. A recent study in *Science* found that “implementation of catch shares halts, and even reverses, the global trend toward widespread collapse.”

1 billion People worldwide who rely on seafood for their protein



COMING TO YOUR TABLE: HEALTHIER FARMED SEAFOOD

Responding to a wave of consumer demand for healthy and sustainable seafood, leading natural foods retailer Whole Foods this year instituted strict new standards for farmed fish. Since roughly half the seafood consumed in the U.S. comes from fish farms, the standards could have a huge impact.

The new guidelines, developed with help from Environmental Defense Fund experts, ban the use of preservatives, antibiotics, hormones and other chemicals that can be harmful to humans yet

are typically used to promote growth in fish. The policy also avoids fish farmed in wetlands and limits the use of wild fish as feed.


“These are the most comprehensive aquaculture standards to date for a retailer,” says our seafood program manager Teresa Ish. “When a leading retailer like Whole Foods makes this kind of commitment, suppliers take notice.”

Whole Foods seafood coordinator Carrie Brownstein credits EDF with requesting tough criteria. Earlier, we

had partnered with Wegmans supermarkets to develop the first purchasing policy for farmed shrimp. Ninety percent of shrimp is imported, mostly from Southeast Asia and Latin America, where regulations often are lax and poorly enforced. Since Wegmans adopted stricter standards, its shrimp sales have accelerated.

We’re now working with retailers to strengthen independent certification of seafood, and we’ve expanded our popular Seafood Selector, a shopping guide for consumers, to include sushi. The guide shows best and worst choices and highlights health risks from mercury and other contaminants.

“By choosing safe and sustainably farmed or caught fish,” says Ish, “consumers can eat right and help guarantee that the bounty of our oceans is with us forever.”

 **ONLINE:** Find our pocket guide to healthy seafood and sushi choices at [edf.org/seafood08](https://www.edf.org/seafood08)

SEAFOOD AND HEALTH

“Not all seafood choices are equally healthy for people—or the oceans. We’re working to educate both individuals and corporate seafood buyers to recognize and demand the best choices.”

Diane Regas

Oceans program managing director



“EDF seizes unique opportunities, such as protecting the sensitive ocean ecosystems in Cuba and the far Pacific Islands, and inspires all parties toward innovative solutions.”

Dr. Steve Gaines

Director, Marine Science Institute, UC-Santa Barbara



Advancing ocean science with university partners

A few years ago, nobody was talking about mining the deep oceans – except the mining industry. Dr. Rod Fujita co-authored a paper in *Science* in 2007 raising concerns that ocean mining could become commercialized within five years, with or without needed protections. That spurred efforts in Papua New Guinea to ensure that attempts to mine deep sea vents do not damage these unique and valuable ecosystems.

Fujita’s efforts are part of our Ocean Innovations initiative to advance ocean science. We’re collaborating with Princeton, Stanford and UC-Berkeley on projects such as the future of ocean energy and an incentive-based plan to protect the Arctic Ocean as the climate warms.



Cuba: Creating a model for coastal conservation

Operating under a special license from the U.S. government, we are helping Cuban experts lay a legal and policy foundation for conservation as the island’s tourism and mining industries expand. Our efforts have led to a network of marine protected areas, safeguarding gems such as the Gardens of the Queen, once Fidel Castro’s favorite spearfishing spot.

We also co-authored a handbook that planners in Cuba are now using to ensure that coastal development does not damage mangroves, wetlands and other sensitive environments.



National treasure: Marine monuments in the Pacific

The Central Pacific Islands contain the most pristine shallow-water coral reefs in the world. Farther west, the Mariana Trench is an ocean canyon so deep it could hold Mt. Everest.

In 2008, President Bush set into motion a plan to protect these two unique habitats as national marine monuments. We had proposed monument status for the Central Pacific Islands and built key political and scientific support for restricting fishing and mining.

Together, the reserves will make up the largest protected area on Earth. They build on the Northwestern Hawaiian Islands marine monument, which we helped create in 2006. “With Indo-Pacific corals disappearing twice as fast as tropical rainforests, these protections truly matter,” says EDF Oceans program managing director Diane Regas.

▶ ONLINE: Watch the undersea treasures of the Central Pacific at edf.org/corals08