




**Thriving oceans,
healthy fisheries,
prosperous
communities**



**“EDF won my trust and cooperation.
They understand that sustainability is
not just about conserving fish. It’s also
about families who have been fishing
for generations.”**

Geoff Bettencourt
Fisherman, Half Moon Bay, CA

RESTORING THE OCEANS TO ABUNDANCE

On a blustery August day, 30 miles off Monterey, CA, Capt. Joe Pennisi hauls up a net and dumps 5,000 pounds of chilipepper rockfish onto the deck. As crew members sort the fish, a biologist records unwanted species and notes their weight—a scant 40 pounds, or less than 1% of the catch. “This is a new day,” says Pennisi, a fourth-generation fisherman. “We’re totally accountable.”

Not long ago, trawl fishermen like Pennisi were blamed for this West Coast fishery’s collapse. “I’ll never forget the day when I saw a carpet of dead fish as big as a football field,” he says. “The culprit was senseless regulations.” Back then, if a fisherman caught too many of an

overfished species, he was forced to dump the excess in the ocean. “It made me sick,” Pennisi says. He lost pride in his job and sold his boat.

But then in 2011, regulators switched the fishery to a catch share model. This approach, which EDF helped develop, gives each boat a percentage of the overall catch. Observers are required on all boats, and if a fisherman catches more than his share, he can buy quota from others, still keeping the total catch within the scientifically determined limit.

“Unlike other management tools, catch shares reward fishermen for conservation,” says Shems Jud, EDF’s West

Coast fisheries director. “As the fishery recovers, the value of each share grows.”

Fishermen who once fiercely competed now share information to avoid overfished species. That was enough to get Pennisi back on the water. He partnered with EDF to design a light-trawl net that floats above the sea floor, allowing him to cut fuel costs and avoid sensitive habitat. Other fishermen also switched to more selective gear. The result: Pacific

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“If we protect habitats and offer fishermen a financial stake in the recovery of fisheries, we can bring the oceans back to life and revive coastal communities around the world.”

Amanda Leland
VP Oceans





65% of
fish landed by
commercial
fishermen in U.S.
federal waters are now under
catch share management.



Capt. Joe Pennisi (center) and his crew. Pennisi is hopeful because he can make a living from the sea while fishing sustainably. "This is a much better system," he says. "We're fishing smarter, not harder."

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groundfish stocks are rebuilding, revenue is up and the amount of discarded fish has dropped about 80%.

In August, the Monterey Bay Aquarium upgraded the sustainability rating of 21 of these species of rockfish, sole and other groundfish in its seafood guide. “Fifteen years ago they wrote the obituary for this fishery,” says Brad Pettinger, president of the Oregon Trawl Commission. “We’re showing we can be good stewards if given the right incentives.”



STARTING SMALL, THINKING BIG

William K. Bowes, Jr. / EDF donor

“**T**he world’s health is important to me,” says venture capitalist Bill Bowes, Jr., an EDF trustee who supports our oceans work because of EDF’s “rational and results-oriented approach.” A prime example of that approach is catch shares—EDF’s science-based solution to overfishing. “Fishermen can fish all year and get higher prices, and sure enough the fish population starts to

climb,” says Bowes. “Everyone is better off.” He praises EDF’s strategy of starting small, showing that catch shares work, and then scaling up the idea to the majority of the U.S. catch. “That’s what you want—to set a tidal wave going.” He adds, “What drew me to EDF was the motto, ‘Finding the ways that work.’ That’s a great message, because EDF really does that.”



“EDF finds practical solutions and gets astonishing results.”

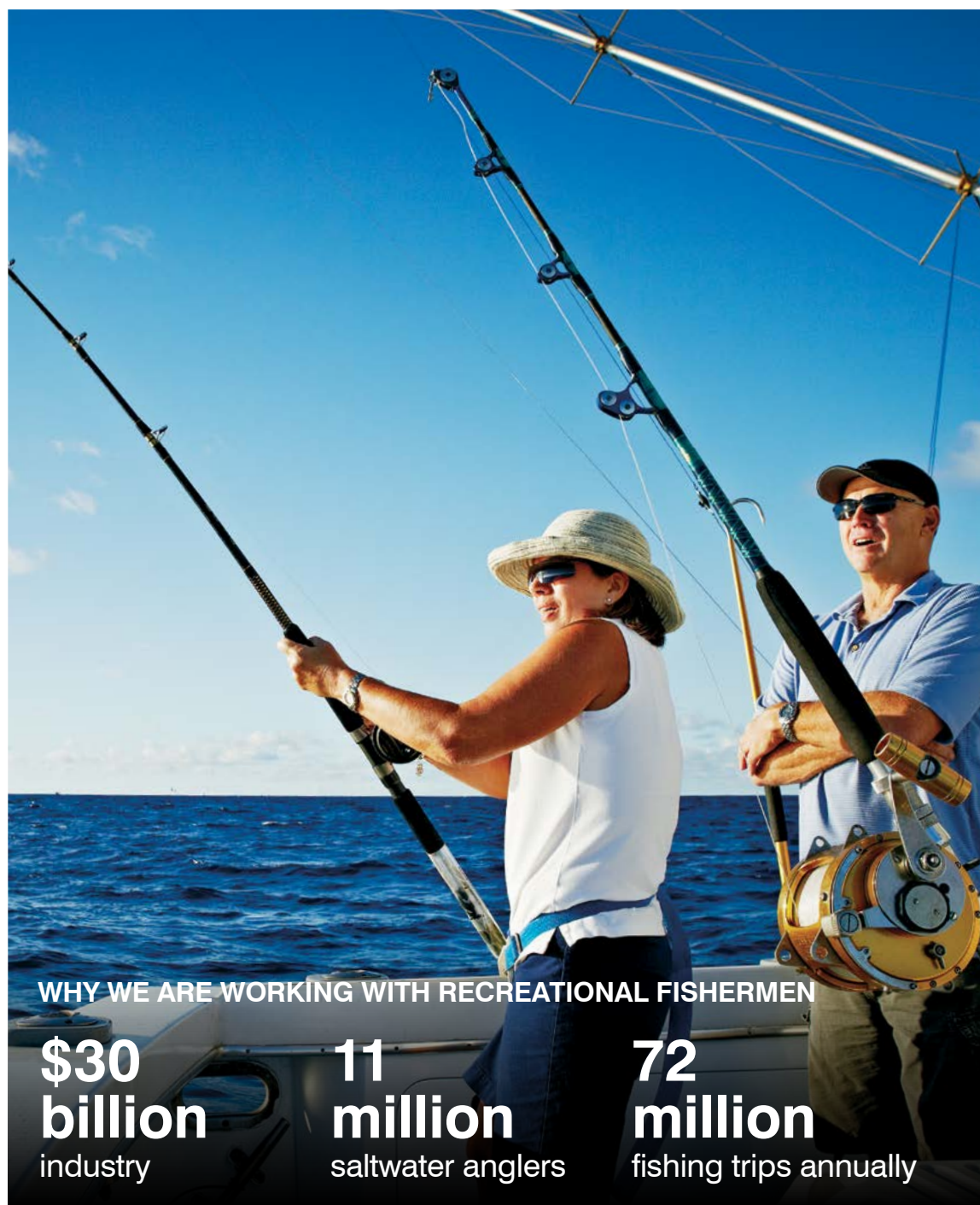
REFORMING RECREATIONAL FISHING

In the Gulf of Mexico, the commercial catch share program for red snapper, which EDF helped design, has been a huge success. Since the program began in 2007, the red snapper population has rebounded. But recreational fishing, which accounts for half the catch, is not part of the program and is poorly managed, leading to overfishing and large discards of fish. EDF helped win a legal victory requiring improved management.

We also helped launch a two-year pilot catch share program for headboats, or large charter boats, which could be a model for managing recreational fishing. The results are promising, with 20 boats signed up for 2015. Member boats are able to take customers fishing year-round under strict catch limits, while those not in the program were only able to fish nine days in 2014.

“This has been one of our best years ever. We’ve stayed within our quota, made more money and have been totally sustainable.”

Capt. Randy Boggs
Pilot program participant
Reel Surprise Charters, Orange Beach, AL

A photograph of a man and a woman fishing on a boat. The woman, in the foreground, is wearing a white tank top, a straw hat, and sunglasses, and is holding a fishing rod. The man, in the background, is wearing a blue shirt, a baseball cap, and sunglasses, and is also holding a fishing rod. They are on a boat with a large yellow reel visible. The background shows a blue sky and the ocean.

WHY WE ARE WORKING WITH RECREATIONAL FISHERMEN

\$30 billion industry	11 million saltwater anglers	72 million fishing trips annually
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REVIVING FISHERIES AROUND THE WORLD

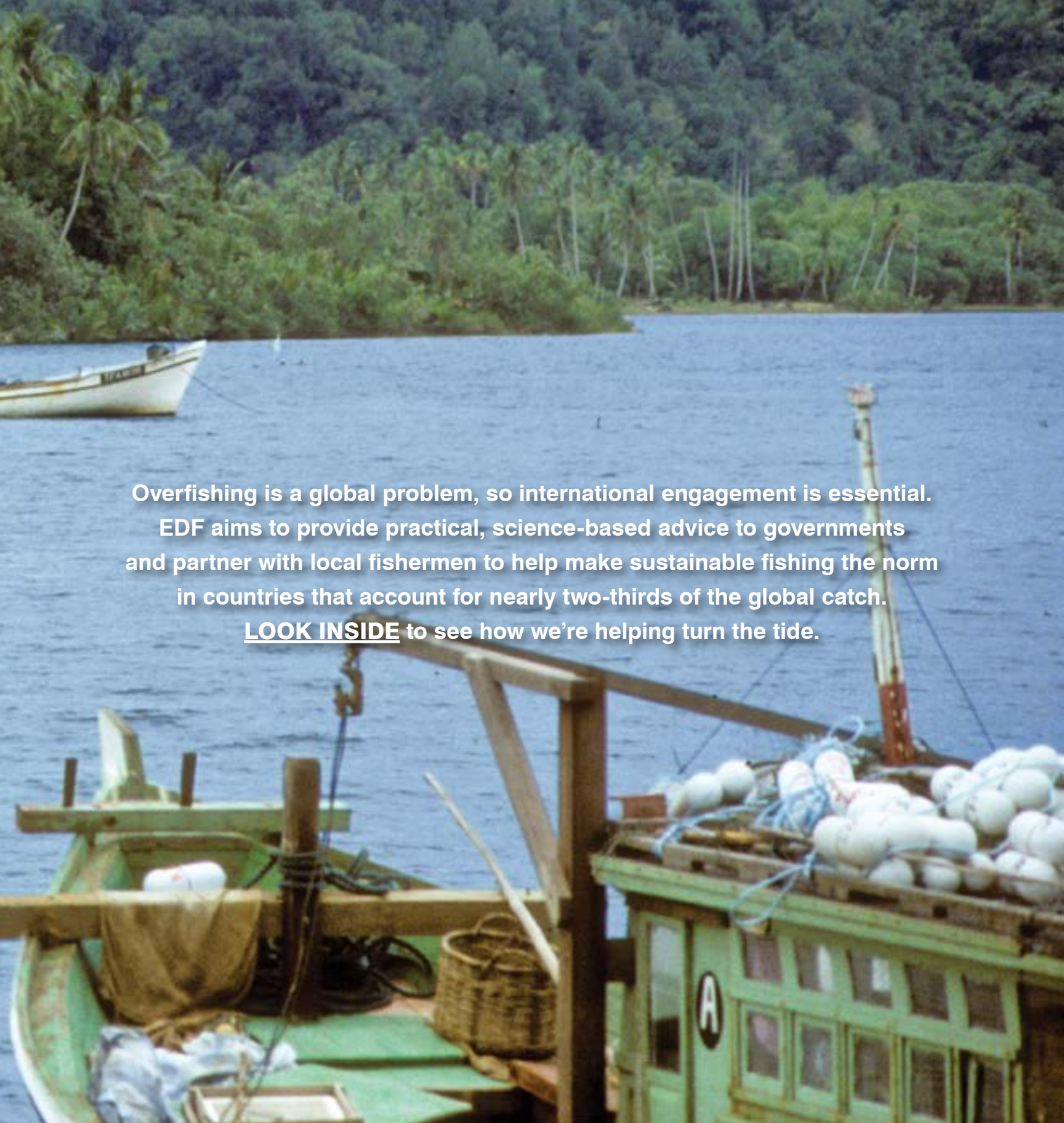


Philippines



European Union





Overfishing is a global problem, so international engagement is essential. EDF aims to provide practical, science-based advice to governments and partner with local fishermen to help make sustainable fishing the norm in countries that account for nearly two-thirds of the global catch. **LOOK INSIDE** to see how we're helping turn the tide.

PRESERVING A WAY OF LIFE IN MEXICO

On the first day of Lent, under a full moon, traditional fishermen head out in the Gulf of California to fish for curvina, a salmon-sized fish native to the area. It's a decades-old ritual that sustains local communities. The fishery is as large as the U.S. red snapper fishery, but overfishing has caused a perennial glut in supply, crashing prices and putting the survival of the species at risk. Historically, fishermen would land thousands of tons of these fish in just a few days.

EDF teamed up with regional organizations to create a catch share program for curvina. By bringing together fishermen, government officials and buyers, the community developed an agreement in which each skiff was granted a per-tide allocation. The result? Fishermen are earning 23% more per pound of fish, and the catch is distributed across the entire



40%
OF GLOBAL FISHERIES
ARE IN DEEP TROUBLE

3 billion PEOPLE R
AS AN IMPORTANT SOU



SAVING SHARKS IN CUBA

EDF is working with Cuban scientists and fishermen to conduct the first in-depth survey of sharks in Cuba's waters. The research will inform Cuba's national plan of action for sharks, part of EDF's role as a key advisor to Cuban officials on how to safeguard these majestic creatures.

season. Catch shares have also reduced the total catch by half, ensuring long-term health of the population. EDF has now been asked by the hake industry to protect their fishery as well.



Indonesia



Mexico



Belize

ELY ON FISH
RCE OF PROTEIN

BIG PLAYERS, BIG OPPORTUNITIES

Europe's fisheries are in the worst condition of any in the developed world—75% are overfished. But the tide is turning. In 2013, we advised key officials of the European Union as they rewrote its fisheries law, committing Europe to end overfishing. And in 2014, the EU passed legislation to fund policies that will lead to more fish in the water and support communities making the transition to sustainable fishing. We're also working with fishermen in Spain, Sweden and the UK to improve the economic and ecological performance of fisheries. "EDF has a different approach," says Scottish fishing representative John Goodlad. "They seek solutions that chime with fishermen."



35 million PEOPLE MAKE THEIR
LIVING IN SMALL-SCALE FISHERIES



LOCAL ACTION: KEY TO GLOBAL RECOVERY

Nearly half the fish people eat are caught in small-scale fisheries, many of which are unmanaged and in serious trouble. EDF is partnering with UC Santa Barbara and Rare, a global leader in community-led conservation, in a collaboration called Fish Forever. Together we are providing fishermen with practical solutions to reverse overfishing, and are engaged in the Philippines and Indonesia as well as Belize, Brazil and Mozambique.



**"The best way to
revive oceans is to
empower fishermen with
rights, responsibilities
and rewards."**

Dr. Laura Rodriguez
*Oceans deputy director
EDF de México*