

**SAVING THE COLLAPSE OF THE FISHERIES
by amending the Magnuson-Stevens Fisheries
Conservation and Management Act**

**BY
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The Problem

The Fisheries Are Collapsing

The industrialization of commercial fishing, long lining, by-catch, shark finning and waste of the actual catch as well as pollution is destroying the wildlife in the oceans. Large predator populations have declined nearly 90 percent.¹ Although some studies predict we will run out of wild fish as food by 2048², it is happening much faster as the world's population is increasing at 80-100 million people per year.³ As the economies in the developing world grow, this increased economic activity will accelerate the decline of the fisheries.

Every year the commercial fishing industry discards 40 to 60 billion pounds of fish as by-catch because it was not the species that was being targeted.⁴ This is obviously not sustainable. It is also immoral. The entire planet is being adversely impacted by over fishing. When the catch is finally brought to shore, much of it is wasted. If a grocery store does not sell their seafood within days of the catch they dump it in the garbage. This waste leads to a cycle of further decimating the fisheries.

Since 1970 half of the world's wildlife and approximately 40 percent of the ocean life have been slaughtered.⁵ In this short 45 years the world's population has increased from 4 billion to over 7.4 billion.⁶ By 2050 the world's population is projected to increase to over 9 billion.⁷ Given the reality of population growth, increased economic activity in the developing world as well as the effects of wasteful by-catch if we do not stop this decimation, the oceans will be fished out of wild catch.⁸ However, we believe the collapse will occur much earlier. We have passed the tipping point. The fish stocks are collapsing. The public in the developed world does not understand the seriousness of this impending conservation and humanitarian disaster.

All of us in the environmental movement are aware of what shark finning, long lining, drift nets, by-catch as well as industrial commercial fishing is doing to the oceans. The real question is, what are we going to do about it **NOW**? We have learned that the oceans are not limitless.

Young people must be informed about this problem to ensure that they understand the tragedy and seriousness of the issue. It is their future that is at stake. They, like all of us, can't allow the fish stocks to be destroyed.

Despite the emergence of a Global Ocean Commission and the passage of numerous international agreements, and some close to shore marine preserves, these individual piece meal efforts are not working - the fish stocks continue to collapse at an ever increasing rate. Less than three percent of the ocean is off limits to industrial commercial fishing.⁹ To fight this impending disaster we are proposing the creation of a Global High Seas Marine Preserve to place 70 percent of the oceans off limits to industrial commercial fishing. This restriction is absolutely necessary to put nature and humans back in balance.

Approximately half of the population of the planet lives within 100 miles from the oceans.¹⁰ Over 1 billion people in the developing world depend on seafood for protein.¹¹ This major food source cannot be destroyed without serious political repercussions. The protein will have to be replaced. If the fisheries collapse, there will inevitably be mass starvation, violence and political turmoil in all of the affected areas. These people will become environmental refugees. Many large indigenous communities in Africa, Central and South America and Asia depend on the seas not only for food but for their livelihood.

Commercial Industrial Fishing

The global commercial production for human use of fish and other aquatic organisms occurs in two ways: they are either captured wild by [commercial fishing](#) or they are cultivated and harvested using [aquacultural](#) and [farming](#) techniques.

According to the [Food and Agriculture Organization](#) (FAO), the [world production](#) in 2005 consisted of 93.2 million [tons](#) captured by [commercial fishing](#) in [wild fisheries](#), plus 48.1 million tons produced by [fish farms](#). In addition, 1.3 million tons of [aquatic plants](#) ([seaweed](#) etc.) were captured in wild fisheries and 14.8 million tons were produced by [aquaculture](#). The number of individual fish caught in the wild has been estimated at 0.97-2.7 trillion per year (not counting fish farms or marine invertebrates).¹²

The major changes that have brought about the decline of the fisheries are population growth and the advent of massive industrial trawlers that can catch 200 to 500 tons of fish per day – fishing 24 hours a day for weeks at time.¹³ These trawlers have nets that are large enough to fit two 747 airliners. They kill everything in their path. They are the equivalent of hunting deer with an M1 tank. The fish don't stand a chance. Worse yet,

these trawlers are not profitable without government subsidies.



These industrial trawlers can empty out a fishery in relatively short order. Super trawlers are able to stay out at sea for weeks at a time and travel to any part of the planet. No fishery is safe from these killing machines. Some countries have denied licenses to these ships to fish in their waters. But this does not stop them from fishing in the high seas where nation states do not have control and there is no enforceable international law.

Piracy

Furthermore piracy with these trawlers exacerbates the problem. Piracy occurs where the trawlers fish illegal and do not identify or count the catch because it is transferred to other ships at sea. With no global enforcement piracy is difficult to detect and even more difficult to stop. A consumer can

never be certain the fish they are eating is caught in compliance with international law. If it is pirated fish and transferred to a legal ship, it is almost impossible to detect when the fish are sold in international markets. International law enforcement must be created and used to save the fisheries from collapse.

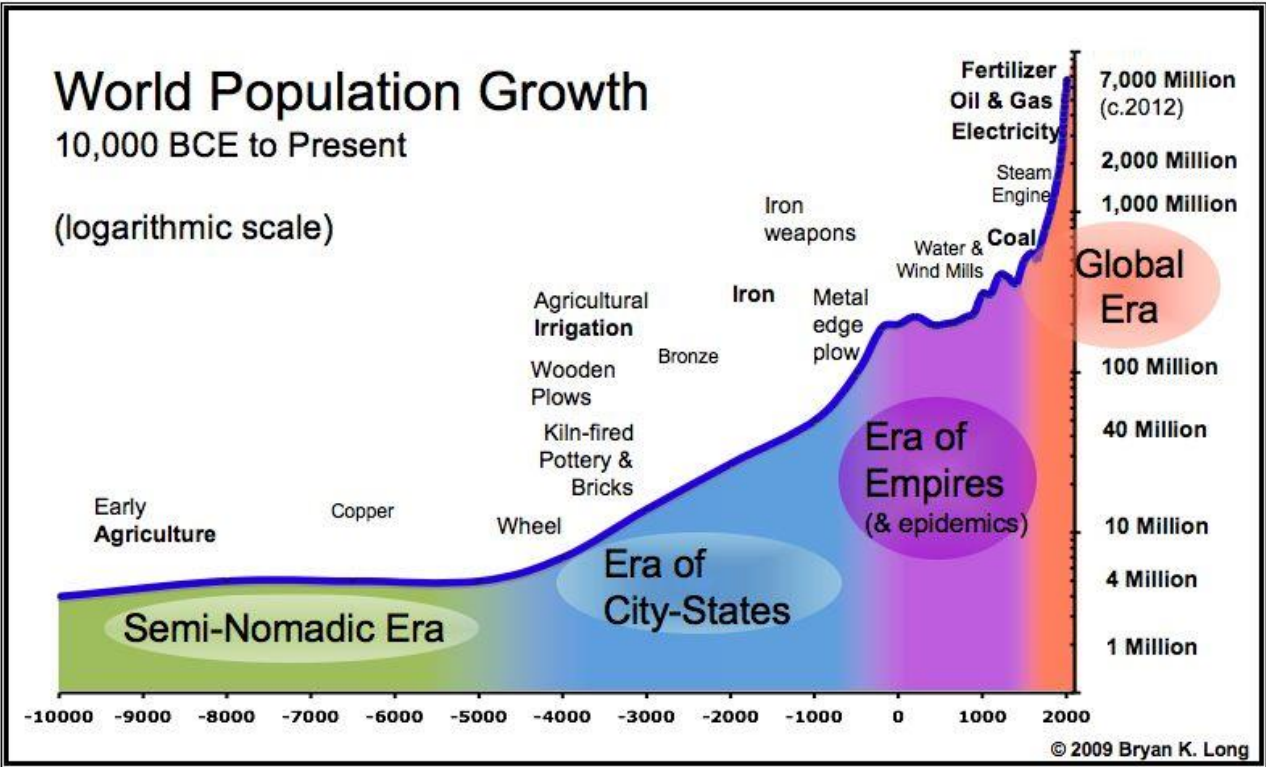
Population Growth

The global population explosion over the last 200 years, industrial fishing and pollution are at the heart of the collapse of the fisheries. Two hundred years ago, in the early 1800s, the ocean going vessels were made out of wood and used sails for power. Radar, sonar and spotter planes had not been invented yet. The use of fossil fuels for industry had not occurred as industrialization was in its infancy. Plastics had not been invented. Agriculture did not use industrial commercial fertilizers. The runoffs from rivers next to large human populations did not yet create dead zones in the oceans. Most people lived in rural agricultural farming communities. Megalopolis did not exist. Two centuries ago there were numerous places on the planet on land and at sea where wild game was abundant. The human population stood at approximately 1 billion.

In a short span of 216 years the planet's population has exploded to over 7.4 billion. Technology and population growth have decidedly tipped the scales against nature. Today, as rivers empty into the oceans, they create dead zones all over our now tiny planet. Consequently, the wildlife both on land and in the oceans has been decimated. From wild elephants to whales, from mountain gorillas to blue fin tuna, species are being hunted to extinction. Two centuries ago people ate what they were able to grow and wild meat added protein to their diets. Factory farming did not exist.

Obviously urbanization and industrialization changed consumption habits. Today, consumers in rich countries have numerous food choices. From Thai to Mexican, to Japanese sushi, Indian food, or whatever the consumer is in the mood for, there are almost infinite choices. Fish from endangered stocks or declining fisheries does not have to be one of these food choices. Educating consumers on safe sea food choices will be the central focus of our marketing campaign. It will succeed because we will work to lower demand in the developing world for endangered non-sustainable sea food as a food choice. The infrastructure is there to accomplish this objective. Between social media and public discussions as well as careful use of advertising, this marketing campaign will succeed.

There is no reason for people in the developed world to consume endangered fish species for protein. We have plenty of protein alternatives. If people in the developed world were made aware of the damage they are doing to the oceans with their poor food choices, they would choose a food alternative. It is surprising how many people are completely unaware of the damage that is going on under the waves. We seek to change first world consumption habits through education.



Fish Consumption

According to the United Nation’s Food Agricultural Organization, “FAO”, fish and fishery products play a critical role in global food security and nutritional needs of people in developing and developed countries. Global food fish harvesting and production has grown steadily in the last five decades, at an average annual rate of 3.2 percent, outpacing world population growth (1.6 percent). Hence, average per capita availability of fish has risen. World per capita apparent fish consumption increased from an average of 9.9 kg in the 1960s to 17.0 kg in the 2000s and 18.9 kg in 2010, with preliminary estimates for 2012 pointing towards further growth to 19.2 kg. The driving force behind this unsustainable surge has been a combination of population growth, rising incomes, and urbanization

interlinked to the strong expansion of commercial fish production and modern distribution channels.¹⁴

The global increase in fish consumption tallies with trends in food consumption in general. Per capita food consumption has been rising in the last few decades. Nutritional standards have shown long-term trends, with worldwide increases in the average global calorie supply per person and in the quantity of proteins per person. However, many countries continue to face food shortages and nutrient inadequacies, and major inequalities exist in access to food. This is due mainly owing to very weak economic growth and rapid population expansion. The majority of undernourished people in the world live in Africa, Asia and along the Pacific Rim, with the highest prevalence of undernourishment found in Sub Saharan Africa.

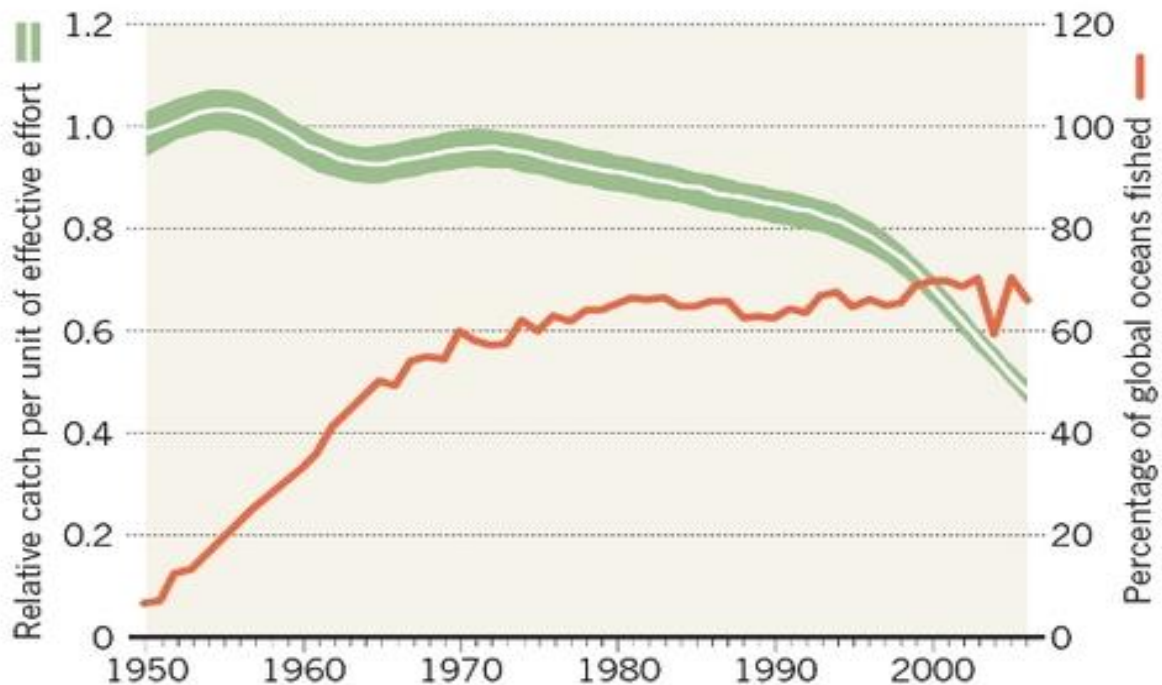
According to the World Watch Institute, since 1950, seafood consumption has jumped almost eight times. This rise in global catch and consumption comes even as wild seafood becomes scarcer. In 2006, scientists tracking historical changes in the world's major fish populations estimated that all major fish stocks could be commercially extinct—less than 90 percent of their historic levels—by the middle of this century if current trends continue. ***We believe this underestimates the problem.***

Seafood as a food choice in the developed world will undoubtedly spread to the developing countries as their economies continue to grow which will only increase the trend of declining fish stocks at a much faster rate. The devastation of our sea life will inevitably accelerate. Immediate action is required to educate the developed world's consumers and provide some hope for change.

On average, each person ate three times as much seafood in 2004 as in 1950 but the amount and type of seafood consumed vary widely.¹⁵ The Chinese consume about a fifth of the world's seafood, eating per person roughly five times as much seafood as they did in 1961. They are also the second largest economy on the planet. Total Chinese fish consumption has increased more than 10-fold in that time. Over the same period, U.S. seafood consumption jumped 2.5 times.¹⁶

DIMINISHING RETURNS ON FISHING

For each unit of fishing power expended by fleets, fish catches are half what they were fifty years ago.

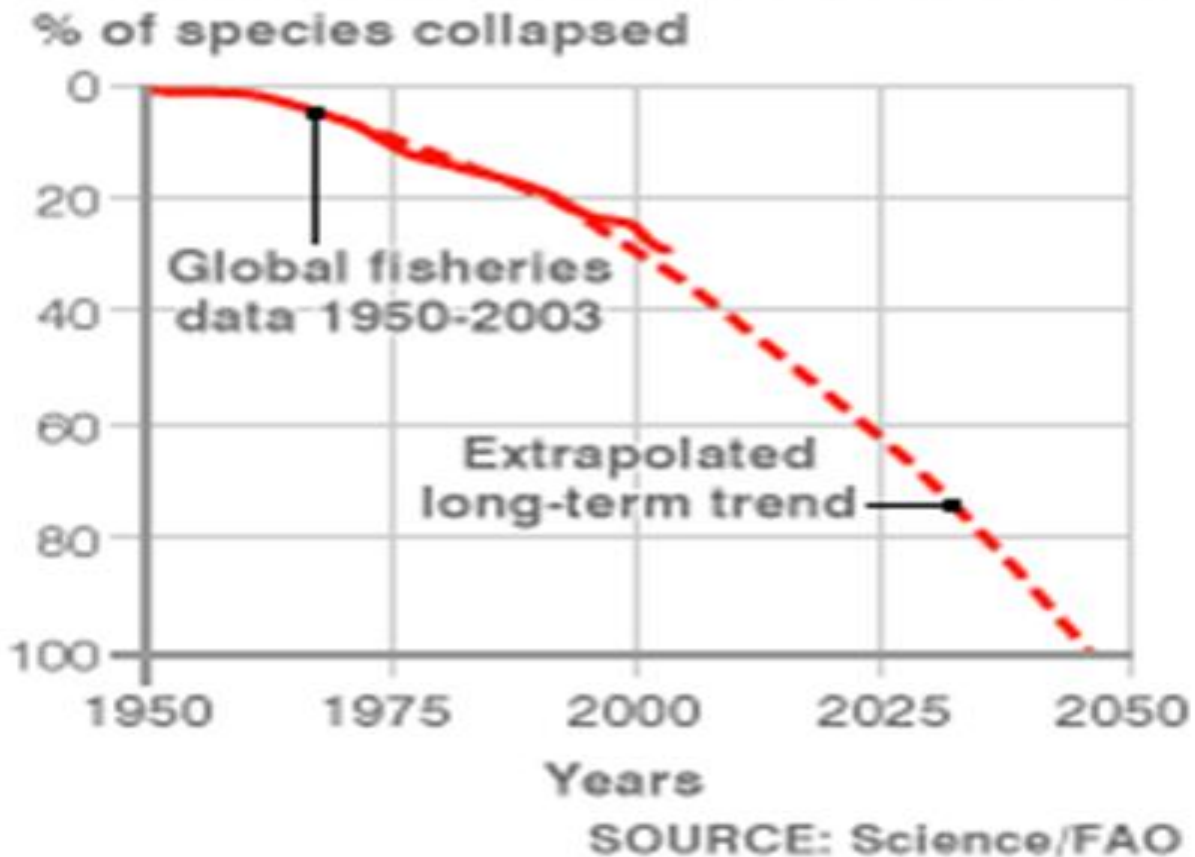


The Japanese consume the most seafood per person, about 66 kilograms each year. In Europe, the average person eats about 26 kilograms a year, slightly more than the average Chinese does.¹⁷ For people in wealthy nations, seafood is an increasingly popular health food option; given its high levels of fatty acids and trace minerals, nutritionists recognize it as essential to the development and maintenance of good neurological function, not to mention reduced risk of cancer, heart disease, and other debilitating conditions.

In poorer nations in Asia, Africa, and Latin America, people are also eating more fish. If they can afford it or can fish for it themselves more fish are being consumed. For more than 1 billion people, mostly in Asia, fish supply 30 percent of the protein they consume, compared with just 6 percent worldwide.

Consumers in Europe, the United States, and Japan favor larger, predatory fish, like tuna and cod, the populations of which are the most endangered. Most salmon and shrimp, two other popular items, are now raised in aquaculture. Farm raised salmon is an environmental disaster as it spreads diseases to the wild stocks.¹⁸

GLOBAL LOSS OF SEAFOOD SPECIES



In contrast, poorer people tend to depend on smaller fish that are lower on the food chain, including herbivorous farmed fish like catfish, carp, and tilapia, as well as oysters, clams, mussels, and sea vegetables. In China, which raises 70 percent of the world's farmed fish, fish farming accounts for nearly two thirds of total fish consumption and is dominated by such herbivorous species.¹⁹

Things are drastically getting worse

The results of over fishing are alarming, because the pressure on fish populations has been escalating for years. According to the current State of the World Fisheries and Aquaculture (SOFIA) Report, the proportion of overexploited or depleted stocks has increased from 10 per cent in 1974 to 29.9 per cent in 2009. After temporary fluctuations, the proportion of fully exploited stocks rose during the same period of time, from 51% to 57%. The proportion of non-fully exploited stocks, in contrast, has declined since

1974 from almost 40% to only 12.7% in 2009. A clear trend is emerging: as far as overfishing and the intensive exploitation of the oceans are concerned, the situation is steadily deteriorating.²⁰

Proposed Solution: Amend the Magnuson-Stevens Fisheries Conservation and Management Act

This amendment to the Magnuson-Stevens Fisheries Conservation and Management Act will help save the fish stocks worldwide. By not allowing foreign countries to sell their fish in our market, profit from the large scale destruction of the global fisheries will stop.

TITLE II -- FOREIGN FISHING AND INTERNATIONAL FISHERY AGREEMENTS

SEC. 201. FOREIGN FISHING 16 U.S.C. 1821

95-354, 99-659, 102-251, 104-297

(a) IN GENERAL.--After January 1, 2018, no foreign fishing is authorized within the exclusive economic zone, [within the special areas,]* or for anadromous species or Continental Shelf fishery resources beyond the exclusive economic zone [such zone or areas]*.

sec. 205. IMPORT PROHIBITIONS 16 U.S.C. 1825

101-627

(a) No fish products from any foreign nation shall be allowed to be sold in the United States.

Sec. 206. RESTRICTIONS ON FOREIGN FISHING IN US WATERS

(a) No foreign vessels shall be allowed to fish in US waters.

CONCLUSION

American grocery store sell seafood products from all over the world. This is inexcusable. Not all fisheries are not properly managed and many are over fished. By closing off one of the largest markets to other nations, it will take the profits out of over fishing. It will help stop piracy and more important it will educate the consumer about a global problem that must be solved.

“Can the Oceans keep up with the Hunt?” is the question asked by Monterey Bay Aquarium in their video that seeks to educate conservation partners. No, they cannot. Industrial fishing, long lining, shark finning, drift nets- all have to be stopped immediately. The developed world’s governments have failed to protect the oceans. Politicians are not going to act until their constituents force them. The voters will not do anything until they are educated about the problem. Since they can’t see the problem, the voters are unaware of the damage that is being done to the oceans.

Time is running out. We stand at a crossroads of history. Either we will educate the developed world’s fish consumers or the fisheries will collapse. Fish simply cannot reproduce quickly enough to keep up with the hunt. Now we are fishing lower on the food chain.

The by-catch is a disaster. Those in the environmental movement understand the problem. The public in the developed world does not understand the magnitude of the slaughter. There are successful methods to harvest fish. But aquaculture is not a good solution as fish farming salmon and Bluefin tuna creates more problems than it solves.

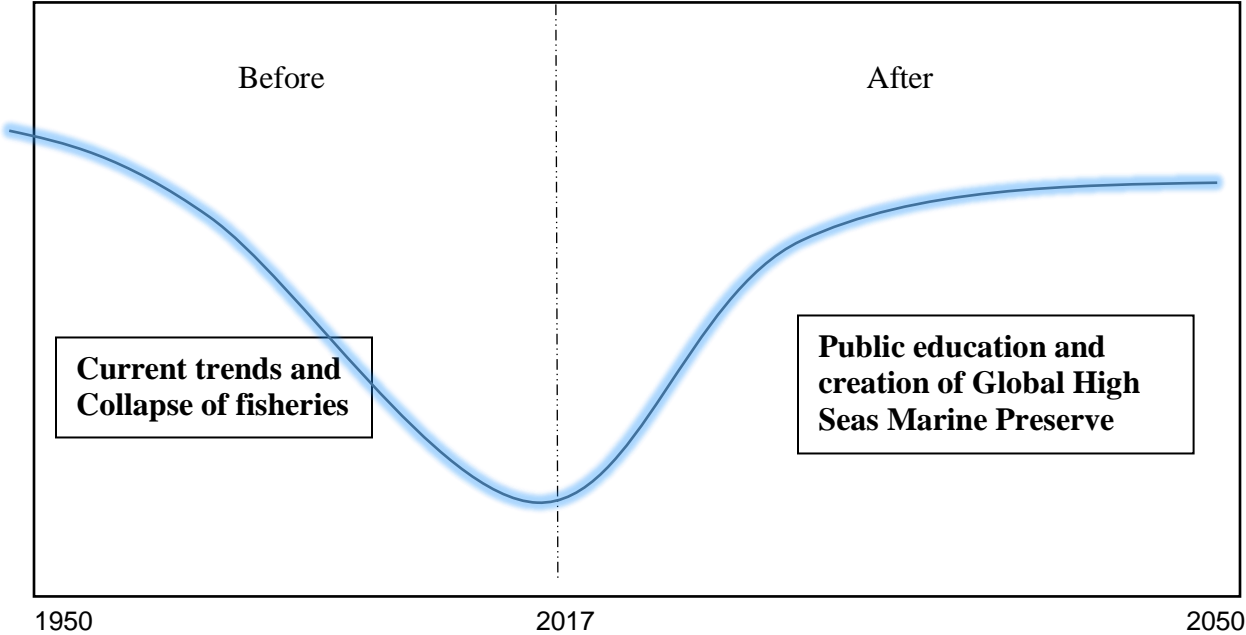
When the millions of people all over the world go to the beach what they see is a beautiful ocean. They do not see giant drag nets killing 4,000 year old coral reefs. They do not see 70-100,000,000 sharks being killed annually for shark fin soup. They do not realize Blue Fin Tuna are almost extinct. Because people cannot see this problem they don’t work for a solution. Add the fact that the problem is not advertised and you have is a looming environmental-humanitarian disaster.

There is hope. Marketing campaigns can be very successful when their cause is just. Case in point, reducing cigarette smoking because it is hazardous to your health. Advertising worked. The developed world is a consumer based society that can be taught and habits can and do change.

Amending this federal law will be successful because all of us have a vested interest in saving the fisheries from collapse. From the fisherman who depends on this vital resource for his livelihood to the end consumer that needs the protein, to the coral reef that is an essential life form.

The short term goal is to reduce the demand for seafood in the developed world. Closing off the U.S. market to foreign fishing will make a big impact on overfishing worldwide. It will finally bring attention to this problem.

The long term goal is to create a Global High Seas Marine Preserve. This will save the wildlife in the oceans for future generations. This will put humans and nature in balance. We are available to answer any questions.



SOURCES

1. Big-Fish Stocks Fall 90 Percent Since 1950, Study Says. Online at:
"From giant blue marlin to mighty bluefin tuna, and from tropical groupers to Antarctic cod, industrial fishing has scoured the global ocean. There is no blue frontier left," said lead author Ransom Myers, a fisheries biologist based at Dalhousie University in Canada. "Since 1950, with the onset of industrialized fisheries, we have rapidly reduced the resource base to less than 10 percent—not just in some areas, not just for some stocks, but for entire communities of these large fish species from the tropics to the poles."
2. Seafood May Be Gone by 2048, Study Says John Roach for National Geographic News November 2, 2006 online at:
<http://news.nationalgeographic.com/news/2006/11/061102-seafood-threat.html>
3. <http://www.worldometers.info/world-population/> and
http://www.census.gov/population/international/data/worldpop/graph_annualchange.php
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There are various figures reported on the amount of by-catch.

"Bycatch

Although commercial fishing fleets target only a few valuable species of fish, they kill and waste billions of pounds of unmarketable marine species each year. When the catch is hauled aboard, the non-commercial marine life—"bycatch"—is separated out and thrown back into the ocean dead.

Bycatch can be fish with no commercial value, juveniles of marketable species, sea turtles and birds, marine mammals such as seals, dolphins and whales, and many other forms of ocean life.

According to a United Nations report, commercial fisheries discard an average of 54 billion pounds of fish bycatch each year [about 27 million metric tons]. As many as 40,000 sea turtles and more than 200,000 albatross are caught each year on longlines. In 2000, over 200 billion pounds of marine life were brought to market for food. Estimated bycatch equaled 21% of the total catch. Globally, shrimp trawlers catch approximately 22 billion pounds of bycatch each year – almost half of all bycatch. Long line fishing fleets, towing miles of cable strung with thousands of baited hooks intended for tuna, swordfish, and Patagonian toothfish (Chilean Sea Bass), kill tens of thousands of albatross each year, which get caught on hooks as they dive for bait. In 1992 the Alaska fishing fleet threw back 442 million pounds of bycatch, almost twice the amount of fish landed by the entire domestic fishing effort in New England that year. For every pound of shrimp caught in the Gulf of Mexico, between four and eight pounds of marine bycatch is discarded. For finfish, the ratio of bycatch to target fish can be as high as 11:1 because the bycatch is either too young, out of season, or the vessel has no permit to keep it. In 1998, U.S. pelagic Atlantic longlines fishing discarded 22,536 swordfish, 1,274 blue marlin, 1,485 white marlin, and 1,304 bluefin tuna as bycatch."

5. World Wild Life Fund, Living Planet Report online at:
http://wwf.panda.org/about_our_earth/all_publications/living_planet_report/living_planet_index2/
6. Among the numerous sites on the internet regarding the size of the planet's population, here is one of the best. <http://www.worldometers.info/world-population/>
7. Ibid
8. This projection that the world's fisheries will collapse is controversial but supported by substantial scientific data. The state of the world's fisheries has been carefully studied by scientists Dr. Daniel Pauley and Dr. Dirk Zeller in a project funded by the Pew Charitable Trust. See Daniel Pauly and Dirk Zeller *Sea Around Us*, Fisheries Centre, The University of British Columbia, Vancouver, B.C. V6T 1Z4 Canada
9. Ibid. As Dr. Pauly correctly observed: "However, the total marine area protected globally is currently so small that its concentration in a few marine protected areas means that much of the world's oceans are essentially unprotected." Assessing progress towards global marine protection targets: shortfalls in information and action Louisa J. Wood, Lucy Fish, J Laughren and Daniel Pauly at p. 349
10. See generally, United Nations Environmental Issues online at:
http://www.unep.org/urban_environment/issues/coastal_zones.asp
11. "A billion people dependent on fish in the world" online at: http://www.suds-en-ligne.ird.fr/ecosys/ang_ecosys/intro1.htm
12. See FAO Stats at: <http://faostat.fao.org/site/629/default.aspx> and World Fisheries Production at:
https://en.wikipedia.org/wiki/World_fisheries_production#cite_note-faostat-1
13. Much has been written about these super trawlers. See, Monsters of the Oceans, online at: <https://www.greenpeace.org.au/blog/monsters-oceans-7-criminal-super-trawlers-threaten-waters/>
14. World Watch Institute citing FAO data at:
<http://www.worldwatch.org/files/pdf/Vital%20Signs%202007-2008.pdf>
15. – 19. Ibid
20. World Ocean Review at: <http://worldoceanreview.com/en/wor-2/fisheries/state-of-fisheries-worldwide/>

See also:

Some initiatives are having a positive effect on a small scale. See the Bloomberg Foundation's Vibrant Oceans.

<http://www.bloomberg.org/program/environment/#vibrant-oceans>

See Tragedy of the Commons at:

https://en.wikipedia.org/wiki/Tragedy_of_the_commons

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Stop Shark Finning at: <http://www.stopsharkfinning.net/lets-take-shark-fin-soup->

[off-the-menu/](#) See also, Saving Sharks at: <http://www.savingsharks.com> Shark Water at: <http://www.sharkwater.com> Oceana at: <http://oceana.org> and numerous other shark conservation organizations.

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