

PEW OCEANS REPORT
by Jerald Horst, Sea Grant Extension Fisheries Specialist

After two years of work, the Pew Oceans Commission has released its long awaited report, **America's Living Oceans: Charting a Course for Sea Change**. The 18 commissioners traveled around the country and spoke to thousands of people who live and work along U.S. coasts. According to the report, "The story that unfolded is one of a growing crisis in America's oceans and along our coasts." Their report is the first national review of ocean policies since the Stratton Report was released in 1969. Another report, from the U.S. Commission on Ocean Policy, will be completed later in 2003. The Pew Report identified nine major threats to oceans, and proposes some ways to address them.

Threats Identified by the Report

Overfishing. As of 2001, the government could only assure that 211 of 959 fish stocks (22%) were not being overfished. The report says that even this figure is optimistic because the legal definition of overfishing does not account for the health of other species or the ecosystem. "The intent of ecosystem-based management is to maintain the health of the whole as well as the parts." According to the report, one of the most promising new approaches to marine conservation is the development of marine reserves (marine protected areas), where all activities that upset the ecosystem or take things from it are prohibited. This includes fishing.

Bycatch. Scientists estimate that fishermen worldwide discard about 25% of what they catch — about 60 billion pounds. This reduces catches in other fisheries and can alter ecosystems. Bycatch in longline fisheries affects sea birds and sea turtles.

Nonpoint Source Pollution. This is pollution that can't be identified as coming from specific points, but rather from broad sources, such as runoff from land or deposits from the air. It is estimated that the oil entering the oceans from runoff from U.S. streets and driveways equals an *Exxon Valdez* oil spill — 10.9 million gallons — every 8 months. The greatest threat, the report says, to coastal marine life is the runoff of excess nitrogen from fertilized farm fields and cities. Nitrogen runoff from animal feedlots is considered to be point source pollution and adds to the problem. It also enters the ocean from the air, where it comes from industrial smokestacks and automobile exhaust pipes. The excess nitrogen in the ocean fertilizes the massive growth of microscopic algae, which removes oxygen from the water when it dies and decays.

Point Source Pollution. Point source pollution comes from identifiable sources. In the U.S., animal feedlots produce about 500 million tons of manure each year, more than 3 times the sanitary waste produced by the human population. In one week, a single 3,000 passenger cruise ship produces about 210,000 gallons of sewage, 1,000,000 gallons of shower, sink, and dishwashing water, 37,000 gallons of oily bilge water, over eight tons of solid waste, and toxic wastes from dry-cleaning and photo processing.

Invasive Species. Alien species of plants and animals are establishing themselves at an alarming rate in coastal waters, often crowding out native species and changing

habitats and food chains. In San Francisco Bay alone more than 175 species of introduced marine fish, invertebrates, algae, and higher plants live.

Aquaculture. Farmed fish can escape, compete with wild fish for space and food, and interbreed with them, producing young less fit for survival in the wild. A salmon farm of 200,000 fish can release as much nitrogen as is in the untreated sewage of 20,000 people, as much phosphorus as for 25,000 people and as much fecal waste as for 65,000 people. The report said that the oyster disease dermo (*Perkinsus marinus*) was likely introduced to the Atlantic and Gulf coasts by aquaculture.

Coastal Development. Sprawl development is consuming land at 5 times the rate of population growth in many coastal areas. Coastal counties, which are 17% of the U.S. land area, hold more than half the U.S. population. One of the most harmful parts of development is the creation of hard surfaces — roads, parking lots and rooftops — that prevent water from soaking into the soil. They collect pollutants, which then run off rapidly to natural waters. A one-acre parking lot has 16 times the runoff of a one-acre meadow.

Habitat Alteration. Fishing gear that drags along or digs into the bottom, the report says, destroys seafloor habitat needed by marine wildlife. It can take 5 years for bottom-living invertebrates (animals without backbones) to recover from one pass of a dredge.

Climate Change. World air temperatures are expected to rise by 2.5-10.4° F in this century, causing sea levels to rise by 4-35 inches. A 2° F temperature rise may destroy the world's coral reefs, and an increase in water temperatures could possibly shut down the Gulf Stream.

One Problem Identified in the Report

One of the major problems that the report identified is that the U.S. has a fractured ocean policy. Instead of a system, it is a hodgepodge of 140 separately-passed laws that involve at least 6 federal departments and dozens of agencies. What is needed, the report says, is application of the following 6 principles:

- **Upholding the public trust** by the government being a steward for the oceans.
- **Practicing sustainability** by taking no more living things from the ocean than the ocean can replace and adding no more contaminants than the oceans can safely absorb.
- **Applying precaution** by erring on the side of protecting ecosystems when science is uncertain.
- **Recognizing interdependence** between human well-being and the well-being of our coasts and oceans.
- **Ensuring democracy** by not allowing the needs and desires of a few people to override the benefits to all people.
- **Improving understanding** of coastal and marine ecosystems with more research.

Challenges and Recommendations

The Pew Oceans Commission identified 5 main challenges, and made recommendations for changes in U.S. law to meet those challenges.

Challenge 1, Ocean Governance in the 21st Century. The U.S. should enact a National Ocean Policy Act (NOPA) with clear and measurable goals and standards. As part of NOPA, Congress should create "regional ecosystem councils" to plan ocean use, practice ocean zoning and reduce user conflicts. Congress should create a national system of marine reserves (marine protected areas). Congress should also create a new national oceans agency, under which should be placed as many as practical of the oceans programs now under other agencies. Finally, Congress should establish a permanent interagency oceans council. The head of the new national oceans agency should chair the council and its membership, should include the heads of federal agencies whose activities affect oceans.

Challenge 2, Restoring America's Fisheries. The main goal of American fisheries policy should be redefined to be to protect, maintain and restore marine ecosystems. Conservation and allocation decisions should be separated, with conservation always given priority over economic or political considerations. The government should practice marine zoning and ecosystem planning. Fishing should not be allowed until after considering how it affects the entire ecosystem. Fishing gear such as trawls and dredges should be zoned into specific areas and then only allowed if scientists find that the gear can be used with minimum problems. Fishing should only be allowed under bycatch monitoring and management plans, with the goal being near-zero bycatch. Allocation plans that limit access and allocate catch, and meet conservation goals should be developed before fishing is allowed. A permanent fisheries trust fund should be established to fund research data collection, management, enforcement, habitat management, license buyback, and community development programs.

Challenge 3, Confronting Urban Sprawl. Nonpoint source pollution action plans should be developed for watersheds. Critical ecosystem habitat should be protected from development. At all levels of government, development should be managed for compact growth, reduction of hard surfaces and to discourage development in some areas. Government subsidies and programs should be directed away from development and towards activities such as restoration.

Challenge 4, Cleaning Coastal Waters. Congress should establish water quality standards for nutrients such as nitrogen and require the use of best management practices to control runoff from agriculture and development. EPA and the states should ensure that water quality standards are in place for pollutants such as PAHs, PCBs and heavy metals such as mercury. Air emissions of nitrogen, mercury and other pollutants should be reduced. Waste water discharges from animal feed lots and cruise ships should be brought under control and ballast-water treatment for vessels should be required. A national electronic permitting system should be created to track imports of live species that may get loose in the environment. Congress should provide more funding to develop invasive-species management plans. The U.S. should ratify the

Stockholm Convention on Persistent Organic Pollutants. Congress should pass legislation that allows other chemicals to be added to the "dirty dozen" list. More seafood monitoring should occur.

Challenge 5, Sustainable Marine Aquaculture. A new national marine aquaculture policy based on conservation principles should be created for the location, design and operation of ecologically sustainable fish farms. Until such a policy and its standards are passed, Congress should place a moratorium on new marine finfish farms. Also, until a review process can be established, a moratorium should be placed on use of genetically engineered species. The U.S. should provide international leadership for sustainable marine aquaculture practices.

Some Reactions to the Report

Not everyone agrees with the assessments of the Pew Commission. NOAA Fisheries (National Marine Fisheries Service) points to the number of fisheries species recovering under fisheries management plans. Thor Lassen, President of Ocean Trust said "The fact is most major U.S. stocks, which make up 99 percent of U.S. landings, are fished sustainably. The 16 percent of major stocks that are overfished are either recovering under rebuilding plans or otherwise protected by federal law." Columnist John Fiorillo for News@thewaveonline said, "This report and the work of the commission represent little more than an attempted power grab by environmentalists."

The Seafood Coalition, speaking for 32 fisheries trade associations and four corporations said "The Pew Commission would create several new layers of bureaucracy, eating up any new funding that Congress might provide for fisheries research, "and warned U.S. Congressmen and Senators "Don't be fooled by the negativism in the Pew Commission's report." In a co-written press release, The Trawlers Survival Fund and the Associated Fisheries of Maine called the commission a "traveling road show" funded by the Pew Charitable Trusts, which also funds the environmental law advocacy group Oceana. They called the Pew report "alarmist" and "gloom-and doom".

Finally, U.S. Congressman Richard W. Pombo of California, Chairman of the House Resources Committee, says "The pictures are nice, but this study contributes about as much to fisheries management as a coffee table book about coffee tables. Unfortunately, criticism always sells, regardless of fact. How would they justify the huge expense of time and money if the report supported the great progress we've made in fisheries management? Pew is naturally calling for more of what sustains it and every other radical environmental entity: bigger government and more regulation. They use outdated regulations to file frivolous lawsuits, plunder taxpayer dollars from the U.S. Treasury, and pay the rent on their offices." Pombo added, "Remember, the Pew Commission is funded by the same foundation that has funded some of the more radical environmental groups and has been funding the environmentalists' attack on fisheries management through the courts. That is exactly why Congress created the U.S. Commission on Ocean Policy, which will release its report this fall. We cannot expect such a group to issue non-biased recommendations."

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Sources: *America's Living Oceans: Charting a course for Sea Change*. Pew Oceans Commission 2003. *Pew Commission: Show Us the MONEY, Spare Us the Dog and Pony Show*. John Fiorillo, News@thewaveonline, June 4, 2003. *The Ocean's Bright Future*. Thor Lassen, News@thewaveonline, June 4, 2003. Open letter from The Seafood Coalition. June 2, 2005. *Fishing Groups Call Report on Oceans Alarmist*. Doug Frazer, Cape Cod Times, June 4, 2003. Press Statement from Congressman Richard Pombo. June 4, 2003.