2003 Constituent Sessions
NOAA Fisheries and Regional Fishery Management Councils' Activities

Marine Aquaculture

Aquaculture provides more than one-third of the world's seafood supply and its production is growing. People in the United States continue to eat more fish—U.S. consumption of fishery products was 15.6 pounds per person of edible meat in 2002. To meet this increasing demand, the United States imported $11 billion of edible seafood—approximately 40 percent cultured in 2003. Dependence on imported seafood is a major contributor to the overall U.S. trade deficit. In 2003, the trade deficit in edible seafood exceeded $7.7 billion.

Farmed shrimp and salmon are a significant portion of imported seafood, but the United States also imports farmed catfish, tilapia, oysters, mussels, scallops and other familiar seafood. Much of the seafood sold in restaurants and in grocery stores (including catfish, trout, salmon, striped bass, tilapia, shrimp, clams, mussels and oysters) consists of predominantly farmed products. Ornamental fish (both freshwater and marine) are also farmed and imported from around the world, and the United States is now the largest market for these fish that grace many public and private aquariums.

Long before September 11 NOAA and the Department of Commerce realized the importance of seafood for economic and food security. In fact, NOAA is expanding its aquaculture research effort to improve the technology for environmentally acceptable aquaculture, including offshore and recirculating production systems and marine fish enhancement studies. Aquaculture is considered an integral part of the U.S. seafood supply when taken in context with wild harvest and the coastal communities that depend upon these living resources.

NOAA's National Marine Fisheries Service has a long history of involvement with aquaculture, including the farming of salmon in the Pacific Northwest, the revitalization of the oyster industry in the Northeast, and marine shrimp propagation in the Southeast. NOAA Fisheries' Manchester laboratory, using aquaculture technology, has prevented extinction of Red Fish Lake Sockeye, and scientists are aiding the recovery of this and other important species. The agency's laboratory in Milford, Conn., recently held its 22nd annual Aquaculture Seminar. Current research priorities include studies of aquaculture's contribution to rebuilding efforts for wild stocks. In addition to its in-house research programs, the agency has a history of supporting aquaculture grants to industry through the Saltonstall/Kennedy Grant Program as well as loans to the industry through the Fisheries Finance Program.

The NOAA Central library has created a national Aquaculture Information Center to provide information and research results to users through Web-based and personal assistance.

NOAA investments in aquaculture have already led to many significant results:

- Several species have been spawned or reared for the first time in the United States, including Cobia (see picture to the right), Mutton Snapper (see picture at top of article), Black Sea Bass, Cod, Haddock, Halibut, Flounder, Pacific Threadfin (Hawaii)(see picture

below right), Sablefish (Washington), and rockfish (Washington). NOAA grant recipients and NOAA Fisheries laboratories are continuing work to successfully close the life-cycle for some of these marine species. Potential applications for stock enhancements are being examined.

- A draft policy framework for U.S. aquaculture in the Exclusive Economic Zone (EEZ - federal waters extending out to 200 miles from shore) has been prepared and circulated to decision makers. Most aquaculture in the United States currently takes place either on land or in coastal waters under state jurisdiction. In order for the industry to develop in offshore areas of the ocean beyond the limits of state control, a federal legal and administrative framework is needed.
- Codes of Conduct for conducting aquaculture operations in an environmentally and socially responsible manner have been developed by the Pacific shellfish industry and other best management practices are being drafted for several other industry sectors. A draft code, based on input from a series of public meetings held by the National Marine Fisheries Service, is currently being finalized.
- Several regional efforts to take aquaculture out of the more sensitive inshore waters into more distant offshore waters have been initiated in Hawaii, Puerto Rico, the Gulf Coast, the Pacific Northwest, and New England.
- Two new companies have been established for offshore aquaculture in Hawaii and Puerto Rico, with the Hawaii company already harvesting its first crop.
- Research on scallops on the west coast of Florida has helped lead to the first opening of the recreational scallop fishery since 1995.
- The decline of coral reefs around the world has led to concern that the collection of marine ornamentals may impact certain species and coral reefs in general. In response, the National Sea Grant College Program has sponsored two international meetings in Hawaii and Florida on the culture and capture of marine ornamental species and has funded research on hatchery and rearing techniques—and best management practices—for sustainable harvest of ornamental species. As a result, several coral reef species are now farmed commercially and are available to marine aquarists around the world.

Bycatch/Bycatch Reduction

Bycatch continues to be a top concern for NOAA Fisheries, and through our National Bycatch Strategy we have assessed our progress and identified areas where more can be done to minimize bycatch. On March 11, 2003, NOAA Fisheries announced a National Bycatch Strategy which set the stage for a series of Regional Preliminary Bycatch Assessment Reports (July 2003) and a major report on a national approach to standardized bycatch reporting methodology (November 2003). In December 2003, the Regions and Atlantic HMS Division of the HQ Office of Sustainable Fisheries submitted final bycatch implementation plans containing a variety of ambitious and innovative action items, including the following:

- Reducing fishing capacity in the Gulf of Mexico shrimp fishery.

- Determining the effects of bycatch of adult and sub-adult leatherback and loggerhead turtles on the reproductive capacity of the respective populations in the Pacific Ocean.

- Promoting the use of electronic logbooks to facilitate identification and correction of bias in estimating bycatch for unobserved vessels in the Alaska Region.

- Integrating 2002-03 West Coast Groundfish Observer Program data into groundfish bycatch models and revising non-trawl/fixed gear 2004 groundfish landings limits based on early analysis of 2002-03 data.

- Studying animal behavior as it relates to gear modification in Northeast fisheries (e.g. turtle bycatch in the Chesapeake Bay poundnet fishery).

- Developing new logbook data elements for Pacific Islands fisheries to capture any long-term effects from modified fishing practices.

The NOAA Fisheries FY04 budget contained $3.8 million in new funding to reduce bycatch. Of this total, $1.3 million of this funding will be used to carry out critical research. Projects include:

- Development of gear modifications and fishing practices to reduce turtle takes in pelagic longline fisheries, including evaluating 18/0 circle hooks and bait types (sardines and herring) in the directed tuna fishery

- Development of halibut excluders for the Gulf of Alaska groundfish fisheries and salmon excluders for pollock trawlers

- Use of underwater infrared video and imaging sonar to document and categorize groundfish behavior in front of and in the mouth of a bottom trawl

- Collaboration with industry representatives and funding of research to develop and test gear modifications to reduce marine mammal and turtle bycatch in the Northeast squid, mackerel, and butterfish fishery.

The remaining $2.5 million or FY 04 is primarily being used to contract with fisheries observers to report on catch and bycatch. Observers collect biological samples and other fisheries data, such as type of gear deployed, method of deployment, area/time of fishing activities, environmental conditions. Observer coverage projects include the following:

Kodiak salmon set gillnet fishery observer program
Mid-Atlantic Illex squid fishery
New England Groundfish fishery
South Atlantic/Gulf of Mexico shrimp otter trawl fisheries observer program
Atlantic and Gulf of Mexico pelagic longline fishery observer program
California longline fishery observer program
California coastal purse seine fishery observer program
Video-based electronic monitoring of hook and line bycatch
Analysis of Atlantic and Gulf of Mexico shrimp trawl bycatch data

In addition, several regulations designed to minimize bycatch have been published by NOAA Fisheries in recent months, including:

- A final rule requiring management measures to reduce seabird incidental take in the Alaska hook-and-line halibut and groundfish fisheries.

- A final rule to implement Amendment 10 to the Fishery Management Plan for the Shrimp Fishery of the Gulf of Mexico, which requires, with limited exceptions, the use of NMFS-certified bycatch reduction devices in shrimp trawls in the Gulf of Mexico exclusive economic zone east of Cape San Blas, Florida.

- A final rule to implement Amendment 1 to the Fishery Management Plan for Atlantic Tunas, Swordfish, and Sharks, which includes gear restrictions and a time/area closure off the coast of North Carolina.

- A proposed rule is being drafted to implement recommendations of the Bottlenose Dolphin Take Reduction Team and reduce bycatch of coastal Atlantic bottlenose dolphins in the gillnet fishery.

- In 2003, NOAA Fisheries published a final rule that requires the use of large turtle excluder devices (TEDs) in the shrimp trawl fishery. As requested by affected constituents, the effectiveness of the rule was delayed for six months in the Gulf of Mexico so that fishermen would have time to purchase the begin using the new gear. NOAA Fisheries has now published a proposed rule to allow a new TED that was developed by the industry. The double cover long flap TED will continue to protect turtles while increasing retention of shrimp.

- Through cooperative work with the industry, NOAA Fisheries has found that sea turtle interactions in longline fisheries can be significantly reduced through the use of large circle hooks as opposed to the traditional "J-style" hook. These findings have already been applied through a final rule that reopened the Hawaii longline fishery with the new gear modifications.

- Examples of other gear modifications that have been developed include: 1) excluder grates to decrease halibut bycatch in the Alaska flatfish and Pacific cod trawl fisheries; 2) trawl modifications to decrease rockfish bycatch in West Coast sole fisheries; 3) grates and square mesh in trawl codends to reduce the bycatch of juvenile pollock in the Alaska pollock fisheries; and 4) excluders and large mesh to reduce skate bycatch.

Regional Fishery Management Councils

NOAA and the eight regional Fishery Management Councils have made steady incremental progress over the past several years in meeting our management and scientific goals. According to the Report to Congress on the Status of U.S. Fisheries (www.nmfs.noaa.gov/sfa/reports.html), over the period 1997 to 2002 overfishing has been corrected a total of 26 times and stocks have

been rebuilt above their biomass thresholds a total of 20 times. Although the reverse has also occurred, the net result has been positive.

There are many recent examples of cooperative efforts made by NOAA Fisheries, the Fishery Management Councils and commercial and recreational fishermen to eliminate overfishing and rebuild stock biomass, thus allowing the stocks to support more valuable commercial and recreational fisheries. Several stocks have exhibited dramatic increases in biomass over the last few years. Some of the examples, particularly west coast groundfish, illustrate the dramatic changes to fisheries that have been necessary to reduce overfishing and rebuild stocks.

The success stories include many valuable commercial or recreational species such as Atlantic (Acadian) redfish, summer flounder, Georges Bank winter flounder, Gulf of Mexico king mackerel, South Atlantic and Gulf of Mexico gag grouper, Pacific whiting, and Georges Bank and mid-Atlantic sea scallops.

More work still needs to be done. Some rebuilding plans have rebuilt stocks to the point where they are no longer considered overfished, yet are not at their final goals. Other overfished stocks do not have rebuilding plans in place for a variety of reasons, such as for those fisheries managed by our state partners or internationally. NOAA Fisheries continues to work with the Fishery Management Councils and other partners to make progress.

Future challenges include staying on course with rebuilding plans that are working, refining those plans that need amending to better achieve the goals of the Sustainable Fisheries Act, distributing benefits accruing from rebuilding efforts fairly and equitably, and taking proactive steps to prevent overfishing in the future.

Economic, Social and Cultural Issues

NOAA Fisheries continues to improve social science advice to the Councils during fishery management action development, and has encouraged the Councils to develop social science expertise. Through the use of contractors and Council resources, there has been a measurable improvement in the quality of social impact assessments and data used in developing fishery management actions. Training workshops for Council and NOAA Fisheries Regional staff have been provided by the headquarters economist and sociologist.

NOAA Fisheries has also taken steps to improve social and economic surveys, improve economic analyses and fishery modeling, and initiate an employment survey supported by a national vessel inventory sampling frame. Planning is underway for development of a relational database for fishing community and port profile data. The adoption of a standard database architecture will allow us to improve regional comparative research in support of fishery management actions. It will also allow us to carry out systematic national analyses that provide a significant challenge at this time.

In response to many comments from recreational anglers, NOAA Fisheries has begun a process to revise the 1996 *Recreational Fisheries Strategic Plan for NOAA Fisheries*. In developing this

plan, NOAA Fisheries is seeking public input on ways to improve science, management and outreach: 1) improve the information base for stewardship of our marine resources through an interdisciplinary, ecosystem-based approach that incorporates biological, economic and socio-cultural components; 2) improve the inter-jurisdictional management of our marine resources through better coordination with an increased participation of the recreational sector; and 3) engage the American public to promote public education and support for recreational fishing, and for improved living marine resource conservation.

Ecosystem Management

An *ecosystem approach to management* is management that is adaptive, geographically specified, takes account of ecosystem knowledge and uncertainties, considers multiple external influences, and strives to balance diverse societal objectives. NOAA recognizes that the transition to an ecosystem approach to management needs to be incremental and collaborative.

NOAA Fisheries is working on this transition through the following actions: giving priority to its scientific programs while assuring that it is able to fulfill its specific management mandates (Magnuson-Stevens Fishery Conservation and Management Act, Marine Mammal Protection Act, Endangered Species Act); developing place-based integration of these activities; encouraging greater public participation in setting operational objectives; and developing decision support tools (i.e., operational models) that take into account societal values, legal mandates and uncertainty in scientific information.

Full implementation of an ecosystem plan is a multi-year process that requires involving all stakeholders in a coordinated planning, analysis and development effort. The $2 million in FY04 funding will allow initiation of four plans: one each in New England, the Middle Atlantic, the South Atlantic, and the Gulf of Mexico. The four pilots are connected by oceanic phenomena, the presence of many ecologically similar species, migration patterns of some marine species, and by some overlapping fisheries (e.g., the pelagic longline fishery). Key local, state, national, and international representatives will be involved. These pilot projects will allow NOAA Fisheries to develop guidance on how to address the technical and organizational issues of implementing ecosystem approaches, and provide preliminary estimates of the total effort/total cost of full-scale management plans.

Enforcement

Office for Law Enforcement partners with State and U.S. Territorial enforcement agencies to facilitate expanded enforcement efforts. This facilitates more comprehensive enforcement of NOAA's mandate to protect the nation's living marine resources within an expansive 3.4 million square mile jurisdiction. Congress appropriated $6.9 million dollars for this use in FY 2003, allowing the Office of Law Enforcement to enter into Joint Enforcement Agreements with 23 coastal states and territories. The agreements provided over 33,000 hours of at sea patrols, over 35,000 hours of land based (dock side) patrols, and over 1,000 hours of public outreach through our State and Territorial partners.

The Office of Law Enforcement has expanded its application of modern technology through the Vessel Monitoring System (VMS) program. This system provides an efficient way to monitor over 1,600 fishing vessels throughout the Pacific and Atlantic Oceans resulting in near-perfect compliance with open and closed seasons, closed areas, and international boundaries. It has also, on several occasions, provided critical, life saving information to the Coast Guard for Search And Rescue efforts.

NOAA's Office for Law Enforcement received national reaccreditation in 2003, a voluntary process for law enforcement agencies to demonstrate their compliance with national law enforcement best practices. After an on-site assessment by the Commission on Accreditation for Law Enforcement Agencies (CALEA), a private group, NOAA's law enforcement arm became the first federal law enforcement agency in the country to be re-accredited by CALEA.

Essential Fish Habitat

NOAA Fisheries has made great strides in identifying important habitats, communicating and coordinating with other Federal agencies, and working with the Councils to identify ways to minimize adverse effects of fishing, to the extent practicable. Councils have designated EFH for approximately 1,000 species managed under 43 Fishery Management Plans (FMPs). In addition, the effects of fishing for each species have been evaluated. For effects that are more than minimal and not temporary, FMPs include management options to minimize those effects to the extent practicable.

The Magnuson-Stevens Act requires the Secretary to develop a schedule for reviewing and updating EFH information. The 2002 EFH regulatory guidelines require reviews at least every five years. Reviewing the EFH information would not necessarily result in new FMP amendments or National Environmental Policy Act (NEPA) documents; that depends on the nature of new information and whether or not it would suggest changes to earlier decisions should be considered.

NOAA Fisheries issued an Advanced Notice of Proposed Rulemaking (ANPR) on the EFH regulatory guidelines to seek input from the public on whether revisions are warranted. The comment period on the ANPR, which has been extended once, closes on April 26, 2004.

The EFH provisions provide a framework for classifying habitat and initiating the research needed to solidify a firm understanding of the connections between marine habitats and the Nation's fisheries. EFH has not only helped focus attention on the importance of habitat considerations to sustaining fish populations, but it also has been used as a tool to develop ecosystem- based management measures to conserve valuable fish species and their habitats.

NOAA Fisheries is also working to restore marine habitat through the activities of the NOAA Restoration Center. The Restoration Center restores degraded habitats, advances the science of coastal habitat restoration, and transfers restoration technology to the private sector, the public and other government agencies thereby contributing to the sustainability of commercial and recreational fisheries.

Infrastructure (Land-Based)

Infrastructure that supports commercial and recreational fisheries is being eroded by rising land prices, increasingly restrictive conservation and environmental regulations, and declining prices for commercially harvested seafood. Demographic changes in the United States are causing increasing numbers of individuals to move to coastal areas where demand for waterfront property has created premium values for real estate. Declining seafood prices due to increased imports from increased aquaculture of high value seafood products and the declining abundance or availability of domestic stocks of fish have lead to a reduction in value of waterfront property for use as unloading and processing of fish species. This has lead to a replacement of commercial docks with recreational fishing marinas and boat storage facilities for processing plants. As more people moved to coastal areas such as the Florida Keys, Nags Head, and Cape Cod, even these recreational marinas began to be replaced by pleasure craft whose owners could afford higher slip fees.

Fishery management and environmental regulations have also played a role in reducing the value of waterfront property for activities that support commercial and recreational fishing. Turtle excluder devices, bycatch reduction devices, days at sea restrictions, size and trip limits, marine protected areas, and limited entry regulations raise the costs of commercial fishing and in some cases recreational fishing, resulting in a reduction in the value of the dock and processing plant that support the fishing activity and associated industry. The options to fish become fewer for charter and headboat operators, who depend on their customers being able to take fish, as more fisheries are closed earlier in the season due to the race for fish that characterizes many domestic fisheries.

Alternative uses of the same waterfront property become relatively more valuable and a change in ownership often results in a change in the use of the property. Since commercial fishing operations and condominiums do not coexist well, the commercial operations are moved to other areas. Over time docking and unloading space becomes scarce. Domestic shrimp processors in Louisiana and Texas are facing declining profitability as shrimp prices fall, and many have gone out of business. The Florida Keys was a series of small fishery dependent communities that have evolved into a nearly continuous string of retirement homes and hotels. As recreational demand expanded, only 4 out of 17 processing businesses survived in the Keys. These survivors converted to recreational marinas. However, demand for recreational services is seasonal and the land base is being converted to second homes and retirement communities. In Virginia, the increased demand for waterfront real estate development resulted first in recreational anglers replacing the commercial fishing operations and marinas replacing the recreational operations.

Fishermen react to these changes by adopting new fishing practices. Watermen in Virginia, who have been denied access to offloading facilities near shore are developing contractual arrangements with buyers at a centralized location. For example, large vessels using fish houses still have access to offloading facilities. Small boats that sell scallops work directly with buyers at large processing facilities. Small processors are finding that direct marketing to specialty or niche markets increases their profits. Coastal communities can also develop recreational tournaments to preserve the use of waterfront facilities for recreational fishing. The Governor of a state could, for example, mandate seafood industrial parks, as in Suffolk Va or the Portland Maine fish pier and auction, that guarantee a place for boats to dock, unload, and be maintained.

A change in management approach can also work in favor of re-establishing infrastructure. For example, the halibut/sable fish fishery use of IFQ=s has resulted in the lengthening of the fishing season and an expansion in the fresh product delivered to market year round. However, some consolidation is also expected; e.g., northern California is also in transition where communities have lost their fleets due to the groundfish trawler permit buyback program. But, communities in Oregon are increasing their infrastructure to handle the relatively higher level of landings that are expected in this fishery. Stripped bass fishing has lead to enhanced and expanded marinas along the southeastern Atlantic coast. More charter boat activity is expected which has caused small bait, tackle, and fuel shops to remain open longer hours to meet demand.

Sea grant advisory programs have tried to work with communities to maintain and expand existing commercial and recreational fishing related activities, but funds, authority, and power are lacking. Most Sea Grant public meetings were to identify and define the problems facing particular areas. Increased funding could be used to developing zoning plans to share limited waterfront property amongst different users for the benefit of the local community.

Magnuson-Stevens Act

After several years of internal study and consultation with stakeholders, NOAA Fisheries completed work on its proposed amendments to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), and, with OMB's clearance, formally submitted them to Congress as the Administration's proposals in June 2003. The Administration's package included 26 proposed amendments, addressing themes such as: (1) harmonization of rules for approving Fishery Management Plans and the accompanying regulations, (2) more appropriate overfishing/overfished definitions, (3) standards governing individual fishing quotas, (4) streamlined provisions for fishing capacity reduction programs, and (5) tougher fines and penalties for infractions of fishery regulations.

NOAA Fisheries believes that the Magnuson-Stevens Act provides a basically sound framework for managing our Nation’s marine fisheries and the proposed amendments should make the current system work more effectively. There has not yet been any formal Congressional action on our proposals. Congress has heard much testimony on various aspects of Magnuson-Stevens Act reauthorization during the last several years. However, neither the House nor the Senate scheduled a hearing on Magnuson-Stevens Act reauthorization in 2004.

Congressman Wayne Gilchrest (R-MD), Chairman of the Subcommittee on Fisheries Conservation, Wildlife and Oceans in the U.S House of Representatives developed a proposal in

2002 (H.R. 4749), and reissued the proposal earlier this year as a "Discussion Draft". Notably, the House Discussion Draft does not address fisheries law enforcement, while the Administration bill devotes a half a dozen provisions to the broad area. It does offer detailed provisions in a few areas that were not addressed in the Administration's bill, especially Habitat Areas of Particular Concern and ecosystem management. On a number of other issues, such as individual fishing quotas, the House Discussion Draft and the Administration bill are reasonably close.

Senator Olympia Snowe (R-ME), a Member of the Commerce, Science, and Transportation Committee, has recently introduced a Senate Magnuson-Stevens Act reauthorization bill. S. 2066 is much closer to the Administration's bill, borrowing a dozen of our proposed amendments to the Magnuson-Stevens Act. However, like the House bill, the Senate proposal does not address fisheries law enforcement in the same detail contained in the Administration's proposal. In addition, Senator Snowe's proposals differ in the following important areas:

- Rebuilding of Overfished Fisheries (80 % of Fmsy instead of stock rebuilding in 10 years)
- Steaming Time added to National Standard 4
- Cumulative Impacts must be reviewed
- Mandatory peer review of stock assessments

The national standard (NS) guidelines were revised in May 1998 to help the fishery management councils and NOAA Fisheries comply with section 304 of the Magnuson-Stevens Fishery Conservation and Management Act. NOAA Fisheries is now engaged in a significant review of the guidelines for National Standard 1, which address overfishing criteria and rebuilding plans. The goal of the review has been to clarify, simplify, or amplify the current NS1 guidelines to make them easier for all affected parties and the public to understand and use. The recommendations reflect ideas exchanged during extensive communications among Working Group members, the public, a NOAA Fisheries-wide workshop, and a Science Board meeting. The most substantive recommended changes in terms of their influence on fishery management practices are to strengthen the requirements for quickly ending overfishing, but at the same time to simplify and, within limits, to increase the flexibility of stock rebuilding times.

In response to an Advanced Notice of Proposed Rulemaking (ANPR), NOAA Fisheries received comments from the fishing industry, environmental organizations, several members of the U.S. Congress, and many members of the public. Almost all the comments received from the public were form letters requesting that no action be taken to weaken the guidelines (i.e., make the guidelines weaker in terms of requirements related to preventing overfishing and rebuilding overfished fish stocks). Environmental organizations submitted comments requesting that NOAA Fisheries prevent overfishing in any overfished stocks immediately. Members of the U.S. Congress recommended that the guidelines provide for flexibility so that the fishing industry and fishing communities would be preserved during periods of rebuilding overfished fisheries. Many of the fishery management councils called for more practical guidelines on how to develop overfished and overfishing definitions for data-poor fisheries.

A NOAA Fisheries Working Group was formed after the end of the comment period on the ANPR to study the public comments and evaluate issues and concerns that had been raised during the first five years that the revised NS1 guidelines were used. NOAA Fisheries will provide fishery management councils with proposed revised codified text for NS1 guidelines and

a preliminary draft environmental assessment within the next couple of weeks, then publish a proposed rule in the Federal Register in Summer 2004.

Marine Mammals

Section 118 of the Marine Mammal Protection Act (MMPA) requires NOAA Fisheries to publish annually a list of commercial fisheries and classify each fishery based on whether it has frequent (Category I), occasional (Category II), or remote (Category III) likelihood of incidental mortality and serious injury of marine mammals. All fisheries are subject to review and classification change based on interactions and whether measures have been taken to reduce interactions with marine mammals. The proposed List of Fisheries for 2004 published in the Federal Register on April 13, 2004. Public comments will be accepted for 30 days, and a public workshop will be held during that time to review the scientific basis for the proposed listings.

Take Reduction Teams (TRT) are often developed for those fisheries that are classified as Category I fisheries. NOAA Fisheries works closely with the councils and industry in TRT deliberations to develop measures necessary to reduce bycatch of marine mammals to a level that is required under section 118 of the MMPA. Currently there are several management plans/regulations that have been reviewed by or implemented by NOAA Fisheries as a result of a Council recommendation, that were the result of a plan developed by a TRT. These councils and regions have worked together to develop protective measures for the following species: harbor porpoise (NEFMC and MAFMC and region), right whales (NER/SER, NEFMC, MAFMC, and SAFMC), bottlenose dolphin (currently being developed by SER, SEFMC and MAFMC). NOAA Fisheries is now developing two more TRTs as a result of litigation settlement that will involve east coast Councils.

One of the marine mammals of greatest concern to NOAA Fisheries is the North Atolantic right whale. In January 2003, NOAA Fisheries completed a Strategic Plan to reduce ship strikes of North Atlantic Right Whales. The draft plan is a comprehensive, multi-year, multi-agency blueprint for addressing one of the most significant known threats to the highly endangered North Atlantic right whale. The strategy includes a suite of domestic and international actions including potential changes to commercial shipping operations in order to reduce mortalities to this species from collisions with vessels. NOAA Fisheries presented the draft Strategy to other federal agencies for review in October 2003. It will be finalized in 2004. NOAA Fisheries is also preparing an Advance Notice of Proposed Rulemaking that will provide an opportunity for comment on alternatives for implementing this strategy.

Marine Protected Areas

There is a wealth of information available regarding Marine Protected Areas available on the Internet. To learn more visit: http://mpa.gov/

- NOAA is working with the Marine Protected Areas Federal Advisory Committee to develop a conceptual framework for a national system of MPAs. The public will be actively engaged in this process.

- Marine protected areas are important for protecting biodiversity of marine life, for sustainable management of marine living resources and for protection and wise use of coastal resources both for commercial and recreational purposes.

NOAA Leadership

NOAA's National Marine Fisheries Service (NOAA Fisheries) bears the stewardship responsibility for the largest Exclusive Economic Zone (EEZ) in the world. Our citizens depend on the Nation=s living marine resources for food, jobs, recreation, tourism, medicine and many industrial and commercial products. There is a growing recognition of the importance and value of healthy marine ecosystems to our environment and quality of life. This requires public policies that will result in the maximum sustainability of these resources for the economic and social benefit of future generations. NOAA Fisheries is dedicated to protecting and preserving our Nation's living marine resources and their habitats through fisheries management, law enforcement, and habitat conservation. NOAA Fisheries is also a world leader in fisheries research, providing the sound scientific foundation for the stewardship of living marine resources.

NOAA Fisheries partnered with the Regional Fisheries Management Councils to convene a major conference called "Managing our Nation's Fisheries: Past, Present and Future" (Nov. 13-15, 2003). This conference featured speeches from Senator Ted Stevens (R-AK) one of the principal architects of the Magnuson-Stevens Fishery Conservation and Management Act, the federal law that governs fishery management; Deputy Secretary of Commerce Samuel Bodman; NOAA Administrator Vice Admiral (Ret.) Conrad C. Lautenbacher; and representatives from every public and private sector interested in our Nation's living marine resources.

The National Conference on the Future of America's Living Marine Resources will be held on October 18-20, 2004 in Washington, DC This Washington, DC-based conference will be convened to provide guidance on the best ways to assure an economically and environmentally healthy future for the marine fishing and seafood industries. The conference will examine four major areas critical to the future strength and vitality of American fisheries and seafood supply. The four areas are: 1) marine aquaculture; 2) recreational fishing; 3) commercial fishing; and 4) ecosystem-based management. The conference is expected to draw from 500 to 700 people from recreational and commercial fishing interests, academia, environmentalists and the public, and from all parts of the country including Alaska and Hawaii.

Following a plenary session that welcomes the attendees and explains the conferences goals, attendees will break into sessions on each of the major topics. The sessions will be led by a panel of experts from industry, academia, environmental organizations and the general public. The conference will again assemble in plenary to hear reports from each of the session chairs and to hear from and ask questions of a panel of leaders on how best to integrate approaches recommended into a comprehensive national plan. The plan will serve as a roadmap to guide NOAA leadership on the issues of greatest concern to our constituents.

Overcapitalization/Rationalization

NOAA Fisheries has been engaged for several years in a program to measure capacity and report on capacity levels in federally managed fisheries. One issue, among others, is the question of

how to address latent effort (or latent capacity). The latent capacity issue has come up in two ways: first, how to define and measure it, and, second, how to address it through publicly- and privately-funded buybacks.

The process of fishing capacity reduction through buybacks is evolving into a major tool for reducing excess harvesting capacity. A buyback pays vessel owners and permit holders to relinquish their harvesting privileges. Buyback loans have increasingly financed subsequent buyback costs by allowing those who benefit most from the buyback to pay the cost of reducing their own excess competition for a limited resource. For example, in the recently concluded Pacific Coast groundfish buyback, a 5% landing fee enables an 85% increase in non-whiting groundfish allocations to the fewer post-buyback harvesters who pay the fee. The $100 million Bering Sea/Aleutian Islands crab buyback will accomplish $235 million worth fishing capacity reduction at a cost to taxpayers of only $25 million and will have contributed materially to the rationalization of three major national fisheries.

A NOAA Fisheries Working Group has already agreed on definitions and measures of harvest capacity, sponsored a consultation of non-government experts, and completed a qualitative report on capacity in more than 70 federally managed fisheries. The Working Group also decided to complete two quantitative capacity reports, dealing with, respectively, (1) excess capacity and (2) overcapacity. The national report on excess capacity should be completed sometime later in 2004, and the national report on overcapacity will be done in 2005 or 2006.

NOAA Fisheries has also prepared a national plan of action for the management of fishing capacity, a commitment we agreed to when the FAO Committee on Fisheries adopted an international plan of action. The draft U.S. National Plan of Action was made available for public comment. The final version of U.S. national plan of action is nearing completion and will soon be posted on NOAA Fisheries' website.

Pew Oceans Commission; National Commission on Ocean Policy

- NOAA Fisheries welcomes the Commission's draft report and we are coordinating our review with other federal agencies and the White House.

- NOAA is engaged in efforts to better coordinate management of coastal and ocean resources within NOAA, across agencies, and with regional, state, and local authorities. [Examples: NOAA Ocean Council, National Ocean Research Leadership Council, Office of Science Technology Policy, Coastal Coordination Committee, Regional Fishery Management Councils]

- Ecosystem-based management is one of NOAA's four fundamental strategic goals and is central to our efforts to protect, restore and manage the nation's ocean and coastal resources.

- The Pew report is also important. Both reports provide important insights and recommendations that could potentially shape how we manage our ocean and coastal resources for the future.

Regulatory Streamlining

The Regulatory Streamlining Project (RSP) is a coordinated effort by NOAA Fisheries to institute innovations and reforms to improve the process for developing fishery management actions. The RSP, as presented to Congress, entails the following key components in various stages of implementation: revising the documented process for complying with all applicable law and integrating mandatory timelines (the Operational Guidelines); using the National Environmental Policy Act (NEPA) process to ensure timely and public input from all interested parties; establishing a national training program; delegating decision making authority to appropriate levels; and undertaking initiatives to use technology (such as e-rulemaking).

The Regulatory Streamlining Program (RSP) is new development within NOAA Fisheries that promises to improve the fishery management process over the next several years. Building additional NEPA expertise within the agency, along with front-loading the consideration of complex legal and policy issues earlier in the rulemaking process, are key components of RSP. The program is designed to improve performance and efficiency. Electronic rulemaking initiatives, including a new database to track the progress of regulatory actions, and several pilot projects that will be accepting public comments on proposed rules via email, should also help to streamline the regulatory process and improve the connection to our constituents.

Science/Data/Observers

NOAA Fisheries Office of Science and Technology has developed a database called the Species Information System to maintain, update, and report on species-level information contained in the *Our Living Oceans* reports on living marine resources and habitat, and the annual *Report to Congress* which summarizes the status of fish stocks. Enhancements are being planned to support additional reporting requirements (e.g., NOAA Fisheries quarterly reports and annual operating plans), and to initiate an effort to integrate data on U.S. fisheries with international data distributed through the United Nations Food and Agricultural Organization's FIGIS (Fisheries Global Information System), a database and reporting website.

In late October 2003, VT Halter Marine Inc. and NOAA launched the first of four planned NOAA fisheries survey vessels. Christened OSCAR DYSON, the 208 ft. ship will be one of the most technologically advanced fisheries survey vessels in the world when it enters service in the summer of 2004. Its capabilities will far exceed those of older NOAA ships. It has been built to meet very specific data collection requirements as well as to meet exacting quietness standards set by the International Council for Exploration of the Seas to avoid disturbing the fish and mammals it is trying to study. The four ships will either augment or replace aging ships in the NOAA fleet. The second ship is under contract and scheduled for delivery in the summer of 2006. The other two ships, subject to appropriations, will follow in 2007 and 2008.

Fishery observers provide the most reliable source of high quality, objective, fishery-dependent data on all aspects of fishing operations. The FY2004 spending plans for observers and Reducing Bycatch have identified key projects for expansion of observer coverage and modernization of data collection technologies. They include:

- Expanded coverage for the following fisheries (an increase of 4,000 sea days overall): New England groundfish (including herring); West Coast groundfish; S. Atlantic and

Gulf of Mexico shrimp trawl; New England and mid-Atlantic scallop dredge; California, Hawaii and American Samoa longline, California purse seine and troll, and Alaska gillnet
- Research and testing of electronic monitoring (digital video cameras) in New England and West Coast groundfish fisheries
- Expanded analyses of sampling designs and observer data in the North Pacific groundfish fisheries and the S. Atlantic and Gulf of Mexico shrimp trawl fisheries.

The national Fisheries Information System (FIS) is addressing current issues in three broad areas: (1) data quality; (2) technology and data integration; and (3) coordination and communication regarding data collected by State and Federal agencies. National integration is essential for enhanced quality assurance and quality control, improved security, access, archiving services, and technological innovation. The national FIS will also help to provide NOAA Fisheries with the capabilities to measure the biological and economic performance of U.S. fisheries more fully. The plan expands the capability of existing regional systems to collect more and higher resolution data, while at the same time providing a nationwide structure with common goals, objectives and standards for data coverage, quality and data exchange.

Funding to date has focused on increased regional funding, and has already resulted in some improvements in the quantity, quality, and timeliness of regional data collection. For example, cooperative planning with States and Regional Commissions through the Atlantic, Pacific, and Gulf of Mexico regional information systems (ACCSP, Pacific RecFIN, and GulfFIN) has significantly improved the quality of marine recreational fishery catch and effort statistics by promoting more efficient coverage of marine recreational fisheries at higher levels of sampling. One of the primary objectives has been to standardize the survey sampling and estimation methods used to generate fishing effort and catch statistics. In addition, NOAA Fisheries has been working with Hawaii, Puerto Rico, and the U.S. Virgin Islands to expand survey coverage in recreational fisheries. Coordinated planning of state/federal data collection programs has been effective in eliminating unnecessary overlaps and gaps in coverage.

A significant effort is also underway to integrate vessel and dealer permit identification information across NOAA Fisheries' regions. This effort has resulted in the design and development of a new permits information and management system to support federal permits issued by the Southeast Regional Office. Further, the Northeast and Southeast Regions, in concert with the Office of Science and Technology, are exploring a collaborative dealer permit program to focus on providing on-line permit services for constituents along the Atlantic and Gulf coasts as part of the national FIS. System specifications have been provided to the States of Texas, Virginia, and Connecticut, which are considering upgrades to their state registration systems to comply with FIS and regional data standards. These activities are providing enhanced opportunities for electronic reporting and access in a secure environment as well as data quality assurance and control.

The FY2003 President's Request for NOAA Fisheries Expand Stock Assessments initiative was funded at a level of $16.9M. The new funds were used to improve stock assessments in three ways: (1) expand data collection to cover more time, area, and species; (2) improve data collection with new methods; and (3) improve our capability to conduct assessments using existing and new data. Additional chartered days-at-sea are addressing the chronic shortfall and expand resource surveys to cover more time, area, and species

Our effort to improve data collection is highlighted by the acquisition of new technology, particularly hydroacoustics, for underwater measurement of fish abundance. We are also improving the precision of our current technology with $1.3M to implement trawl survey monitoring protocols for surveys in the Northeast and lesser amounts in other regions. Other significant efforts include development of habitat-specific survey methods for rockfish off Alaska and the west coast, and improvements in the survey design in the Northeast by employing recent improvements in bottom mapping.

In FY2004, funds will continue to support development of new technology, conducting surveys to improve the assessments of particular species and multi-species assemblages, and building assessment expertise in our Science Centers. The advanced technology funds for FY2004 are targeted for support of six new technology-oriented FTEs, one in each Science Center, and have acquired the agency's first Autonomous Underwater Vehicle (AUV). Among the new projects to be conducted with expanded funding in 2004 would be: a hydroacoustic survey by the NWFSC to improve the assessment for widow rockfish; new technology surveys for highly migratory species and coastal pelagic species in the Southwest and Pacific Islands; surveys for forage species in the Alaska ecosystem; MARMAP data for deepwater reef-fish and high-quality fishery-dependent data will be collected in the Southeast using electronic logbooks; assessment for monkfish will be improved in the Northeast and improved trawl survey protocols will be implemented for all surveys.

The Strategic Plan for Fisheries Research was revised in March 2004. From enhancing our scientific capabilities to improving the effectiveness of research partnerships, this plan represents the roadmap of the agency's fisheries research efforts for the next five years.
The plan presents several goals and objectives including: 1) The deployment of advanced and innovative sampling technologies; 2) Production of next generation stock assessments of greater sophistication and accuracy to reduce uncertainty and incorporate ecosystem considerations; 3) Exploration of new technologies and practices for bycatch reduction ; 4) Further development of cooperative research efforts; 5) Enhancement of economics and social science data collection to more fully address the social, cultural, and economic diversity of the nation's fisheries; and 6) Establishing an inventory of living marine resource habitats and implementing measures to monitor the trends in habitat availability.

Focused cooperative federal-nonfederal field activities are a cost effective way to fill short-term information gaps without compromising long-term data collection from multipurpose fishery-independent surveys. Cooperative field programs provide expanded data sources with more precision, and geographic coverage, than self-reported fishing logbooks and are less costly than deploying additional scientific observers. The industry and local fishing communities offer valuable knowledge and experience that can make the difference between success and failure for some types of data collection. For example, cooperative tagging experiments have provided valuable information on fish migration patterns, local and seasonal availability, and the impact of fishing gear. Partnerships with recreational and commercial industries, academic researchers, and environmental organizations will continue to be an important tool for expanding research activities and communicating the results of scientific research.

Current initiatives will result in substantial improvements in the quantity and quality of fishery-dependent and fishery-independent data, improvements in the quality of stock assessments, better estimates of management targets and thresholds, improved conservation of bycatch

species, consideration of secondary effects of fishing, and better analyses of the impacts of alternative management actions on fishing communities.