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## Regional Saltwater Recreational Fishing Action Agendas

November 2011

NOAA



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## A Message from the Assistant Administrator for Fisheries

I am pleased to share with you NOAA Fisheries' regional saltwater recreational fishing action agendas for 2012. Prepared by regional NOAA Fisheries staff in consultation with members of the Marine Fisheries Advisory Committee's Recreational Fisheries Working Group and other members of the public, these plans follow through on commitments made in the National Recreational Fisheries Action Agenda to develop regional plans that focus on actions where you live and fish.

Since September 2009 when NOAA announced its commitment to a *Recreational Fisheries Engagement Initiative*, we have taken concrete actions to strengthen our ties with recreational fishermen across the nation. From appointing a new National Policy Advisor for Recreational Fisheries and nominating regional recreational fishing coordinators to hosting collaborative workshops on key issues and increasing our level of collaboration with our MAFAC advisors and anglers like you, we have worked to fulfill our commitments. These individual actions represent significant steps that build cooperation and create momentum.

These regional action plans are another step forward. Each plan is organized around the five priority goals you identified during the 2010 Saltwater Recreational Fishing Summit. The objectives, activities, expected deliverables, and timelines reflect our best thinking on how we can make progress on the issues you raised.

Please take a moment to read through these plans, share them with your friends and colleagues, and let us know what you think. We would like to know because these action agendas are not an end in themselves, but rather a means-to-that-end we all seek – healthy fish stocks, vibrant and satisfying recreational fisheries, and a trusting relationship. We know that success will be judged not on the number of our promises, but on the strength of our actions and we encourage you to work with us as we work to implement the plans.

I look forward to hearing your thoughts on how we can best move forward together.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Schwaab', with a horizontal line extending to the right.

Eric Schwaab  
Assistant Administrator  
NOAA Fisheries Service

## Background

The April 2010 Recreational Saltwater Fishing Summit marked the renewal of a conversation with the recreational fishing community to help forge a stronger partnership through dialogue and follow-up action. Summit participants highlighted a range of issues, including better catch, effort, and economic data; improved and more regular communication regionally and nationally; and more consistent inclusion of recreational interests in management processes. The October 2010 *Recreational Saltwater Fisheries Action Agenda* (National Action Agenda) was the immediate outcome of that exchange.

In May 2011, NOAA's National Marine Fisheries Service (NMFS) announced that it would host seven Regional Action Plans: Northeast (Maine-Virginia), Southeast (North Carolina-Texas, including the Caribbean), Southwest (California), Northwest (Oregon and Washington), Alaska, Pacific Islands, and Highly Migratory Species (Northeast and Southeast). These Regional Action Plans are intended to serve as publicly available roadmaps detailing regional priorities and objectives for addressing regional recreational fishing issues.

# Pacific Islands Region

## Pacific Islands Regional Overview

The importance of recreational fishing to marine fisheries management has not gone unnoticed, and NMFS has begun a new initiative to raise the profile of recreational fishing in the Pacific Region. Recreational fishing is a way of life in the Pacific islands, and fishery conservation and management efforts have tremendous economic, social, and ecological impacts. Because these are oceanic islands, fishing and fish sharing are part of the culture. As U.S. fisheries are governed by annual catch limits and accountability measures to prevent overfishing and, as appropriate, move toward catch shares, island recreational fishermen need to work with NMFS and the Western Pacific Fishery Management Council to stay engaged, informed, and proactive in the fishery management decision-making process.

## Goals and Objectives

### GOAL 1: Improve Recreational Fishing Opportunities

**Objective** ▶▶ To reduce post-release mortality of recreationally caught fish to increase the number of fish available to be caught in the future.

#### **Project 1** ▶▶ **Barbless Circle Hook Project**

Staff in the NMFS Pacific Islands Fisheries Science Center (PIFSC) will provide barbless circle hooks (BCH) and educational materials at high-profile large and small fishing tournaments, fishing festivals, fishing clubs, and associations in Hawaii and encourage anglers to participate in BCH challenges. Barbless circle hooks are intended to minimize post-hooking trauma to marine resources (including fish, turtles, and Hawaiian monk seals) that are hooked and get away or are released. The use of barbless circle hooks increases the survival of fish that are released and decreases the potential of injury to fishermen during hook removal. Recreational fishing opportunities are improved along with the conservation of protected resources. PIFSC will participate in 10 to 20 recreational fishing events to introduce BCH concepts and benefits to the fisheries and protected resources.

**Timing** ▶▶ September 2012 (continuation of the project is contingent on availability of funds).

### GOAL 2: Improve Recreational Catch, Effort, and Status Data

**Objective** ▶▶ Improve the collection of non-commercial fishery data.

**Project 1** ▶▶ **Execute a memorandum of understanding with the State of Hawaii on the exchange of confidential fisheries information between the State (Department of Land Natural Resources) and NMFS (PIFSC and Pacific Islands Regional Office, PIRO).**

**Project 2** ▶▶ **Collaborate with and support the State in modifying its Vessel Registration System to serve as a vehicle for data collection.**

Specific tasks will include NMFS (PIFSC and PIRO) consulting with the State to determine how to:

- Cost-effectively implement surveys targeted at vessels in the Registry that are used to fish recreationally.
- Revise paper registration forms and instructions to facilitate the collection of the information pertaining to fisheries.
- Modify vessel registration database to accommodate changes to vessel registration form.

- Modify the web-based vessel registration system.
- Provide outreach and education materials to fishermen on improved non-commercial fishery data collection.

**Project 3 ►► Provide information about and encourage Hawaii’s marine recreational fishermen to register with the National Saltwater Angler Registry (PIRO has lead).**

Each of the above three projects will help PIRO facilitate a State exemption to the National Saltwater Angler Registry Program; produce a framework to facilitate future fisheries boat-based surveys of recreational anglers in Hawaii.

**Timing ►►** July 2012

### GOAL 3: Improve Social and Economic Data on Recreational Fisheries

**Objective ►► Increase understanding of the social importance of fish to Hawaiian communities that can also be used as a model for conducting similar research throughout the region.**

**Project 1 ►► Implement a project to understand the flow of non-commercial catch fish in Hawaiian communities (PIRO has lead).**

Throughout the Pacific Islands, sharing fish has important cultural significance, because it is an expression of generosity, gives one status in the community, and enables social recognition. This pilot project will examine fish flow in two communities in Hawaii by ethnographic interviewing and the administration of a short community survey for people who distribute and receive recreationally caught fish. This “fish flow” may be analogous to having multiplier effects, not measurable in dollars but in terms of community competence and community solidarity. A central question is to assess the feasibility of beginning with a ceremonial event and working backward through network ties to the fisherman who initially contributed the catch. PIRO will deliver a tested methodology for tracking fish flow through multiple personal exchanges.

**Timing ►►** June 2012.

### Goal 4: Improve Communication

**Objective ►► Enable island recreational fishermen to participate in NMFS activities in fisheries, habitat conservation, and protected species programs and to help develop fisheries research initiatives.**

**Project 1 ►► Plan and develop a Pacific Islands regional recreational summit in 2012.**

A major goal of the summit will be for fishermen—with representation from Hawaii, American Samoa, Guam and the Commonwealth of the Northern Mariana Islands—to meet face-to-face to review the progress of regional projects consistent with the National Action Agenda for Saltwater Recreational Fishing, and to develop new action plan activities for the next fiscal year. PIRO will hire a contractor to provide logistical and administrative support to coordinate the summit.

**Timing ►►** September 2012

## Goal 5: Institutional Orientation

**Objective** ► Strengthen and then maintain NMFS' ability to manage for the goals of Pacific Islands recreational fisheries, which differ from the traditional management goals of commercial fisheries that have historically guided agency actions.

### **Project 1** ► Hire a Marine Recreational Fisheries Specialist

The Marine Recreational Fisheries Specialist will provide dedicated recreational capacity within the PIRO Sustainable Fisheries Division. The recreational fisheries specialist will have the following major duties:

- Conduct marine stewardship sessions in fishing communities in cooperation with the Council, PIFSC, and state/territorial agencies. These sessions will inform participants about fisheries regulations (federal and state) and conservation issues that most directly affect recreational fishermen.
- Visit fishing tournaments and other venues where fishermen congregate, and attend public events (e.g., the annual Hawaii Fishing Festival) and meetings, to distribute information to recreational fishermen.
- Work with a professional scientific/technical writer to improve the Sustainable Fisheries Division's fisheries web page to clearly present information on fisheries regulations, policies, and agency activities of regional concern.
- Expand and utilize the recently developed PIRO recreational fisheries list-serv for communication and information distribution.
- Work with the Sustainable Fisheries Division Social Scientist and PIRO communication staff to develop effective messaging to recreational fishermen.

**Timing** ► January 2012



# Alaska Region

## Alaska Region Overview

In 2009, the Alaska Sport Fish Harvest Survey showed that anglers fished approximately 914,000 days and spent over \$407 million on fishing trips and durable equipment in marine waters.<sup>1</sup> A 2007 survey estimated the total economic impact from recreational fishing (in both fresh and marine waters) in Alaska to be as high as \$1.4 billion.<sup>2</sup> Alaska's 40,544 miles of coastline represents 40% of the U.S. total and provides endless recreational fishing opportunities in both fresh and marine waters. The most commonly caught species in marine waters off Alaska are Pacific halibut (*Hippoglossus stenolepis*), Pacific salmon (*Oncorhynchus spp.*), rockfish (*Sebastes spp.*), lingcod (*Ophiodon elongatus*), several species of char (*Salvelinus spp.*), and shellfish. This action plan is focused on marine waters, but also includes salmon, an anadromous species.

Pacific halibut is the primary recreational species managed by NOAA's National Marine Fisheries Service (NMFS) in Alaska. The Alaska Department of Fish and Game (State) manages most recreational fisheries in Alaska. This responsibility includes issuing angler fishing licenses; licensing fishing guides; licensing charter vessels; administering the charter vessel logbook program; estimating recreational harvest and effort using creel census, logbook, and mail survey information; and managing non-halibut species.

The International Pacific Halibut Commission (IPHC) and NMFS manage the Pacific halibut fishery through regulations established under the Northern Pacific Halibut Act of 1982 (Halibut Act). The IPHC promulgates regulations governing the Pacific halibut fishery under the Convention between the United States and Canada for the preservation of the halibut fishery of the North Pacific Ocean and Bering Sea. Regulations proposed by the IPHC are subject to approval by the Secretary of State with concurrence from the Secretary of Commerce.

The Halibut Act also authorizes the North Pacific Fishery Management Council (Council) to develop regulations in addition to, and not in conflict with, approved IPHC regulations. Such Council regulations may be implemented by NMFS only after approval by the Secretary of Commerce. Due to the overlap of halibut and non-halibut recreational fishing, NMFS collaborates with the State in the management of recreational halibut fisheries. Further, recreational data collected by the State is used on a national level to report catch as part of the Marine Recreational Information Program.

In addition to Pacific halibut, other important recreational issues fall under NMFS authority. This includes funding to the State for data collection programs to support recreational fishery management. In addition, the NMFS Habitat Conservation Division works in coordination with industry, stakeholder groups, government agencies, and private citizens to avoid or offset the adverse effects of human activities on essential fish habitat and living marine resources in Alaska.

The State has regulatory authority over the majority of recreational fisheries in Alaska's marine waters. Current issues that involve NMFS primarily focus on the proposed halibut Catch Sharing Plan, Charter Halibut Limited Access Program (effective February 1, 2011), and a restrictive bag and size limit for halibut anglers fishing from a charter vessel in Southeast Alaska.

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<sup>1</sup> Fisheries Economics of the U.S. statistical series 2009: [http://www.st.nmfs.noaa.gov/st5/publication/econ/2009/NPacifc\\_Tables\\_Econ.pdf](http://www.st.nmfs.noaa.gov/st5/publication/econ/2009/NPacifc_Tables_Econ.pdf).

<sup>2</sup> Southwick Associates, W.J. Romberg., A.E. Bingham, G.B. Jennings, and R.A. Clark. Economic impacts and contributions of sportfishing in Alaska, 2007.

The proposed Catch Sharing Plan and Charter Halibut Limited Access Program dramatically changed the regulatory and policy landscape for guided halibut anglers in Southeast and Southcentral Alaska. The proposed Catch Sharing Plan, recommended to NMFS by the Council, would establish a clear allocation of halibut resources between guided recreational and commercial setline sectors. The proposed Catch Sharing Plan builds on the Charter Halibut Limited Access Program, which limits the number of charter vessels participating in the guided sport fishery for halibut.

Recreational concerns arising from regulatory actions primarily focus on allocation among the commercial sector, charter halibut sector, non-charter halibut anglers, commercial fisheries bycatch, and subsistence users. The halibut resource is fully utilized among these groups and has become particularly contentious in Southeast Alaska, where harvestable halibut biomass has declined, resulting in a reduction in commercial quota and sport charter catch. This controversy, along with the previously described actions, have highlighted a desire by constituents to improve data reporting and quality—including timely reporting of recreational halibut catches—and the need for social and economic data collection and analyses to inform managers about the impacts associated with their decisions. The State collects much of the recreational catch data through a combination of mail-out surveys, creel sampling, and saltwater logbooks. NMFS and the State work cooperatively to coordinate data collection to ensure State and federally managed programs are adequately supported.

In addition to managing Pacific halibut, NMFS also supports habitat restoration. Habitat restoration projects occur throughout Alaska, and include both marine and anadromous fish habitat. These projects are not necessarily focused on recreational fisheries, but have obvious benefits for species important to recreational anglers.

## Goals and Objectives

### GOAL 1: Improve Recreational Fishing Opportunities

#### Objective ▶▶ Ensure quality recreational fishing habitat

##### Project 1 ▶▶ Work with federal and state agencies and local communities to implement Fish Habitat Partnerships under the National Fish Habitat Action Plan

NMFS is a partner with other federal and state agencies and local communities in the Mat-Su basin, Kenai Peninsula, and Southwest Alaska to implement Fish Habitat Partnerships under the National Fish Habitat Action Plan. These efforts identify important habitat areas for salmon and other aquatic organisms, protect and restore habitats that support recreational fisheries, and increase related public education and outreach. Specific restoration efforts include improving anadromous fish passage to spawning areas, restoring natural hydrology to anadromous fish streams, establishing riparian zones to improve spawning habitats, and removing marine debris along Alaska's coastline.

**Deliverable** ▶▶ Complete restoration projects for coastal, marine, and anadromous fish habitats, and communicate with the public about habitat issues.

**Timing** ▶▶ Restoration projects are ongoing. Specific projects are identified by the Fish Habitat Partnerships on an annual basis. Project status and completion information are contained in an annual summary of relevant restoration work publically available on the NMFS Alaska Region webpage: <http://alaskafisheries.noaa.gov/habitat/default.htm>

## GOAL 2: Improve Recreational Catch, Effort, and Status Data

### **Objective ►► Create a reporting system for tracking halibut caught under the proposed Guided Angler Fish Program (GAF)**

#### **Project 1 ►► Electronic reporting system**

NMFS will work cooperatively with potential GAF participants to create an electronic reporting system for the proposed GAF. This reporting system will allow GAF participants, NMFS, and NOAA Office of Law Enforcement to monitor halibut harvest amounts and account balances in near-real time.

**Deliverable ►►** NMFS will provide federally permitted charter halibut participants an electronic reporting system that uses a web-based application to track halibut caught under the proposed GAF. In addition, NOAA Fisheries will work with the State of Alaska to modify the sport charter logbook to facilitate its use by enforcement officers in concert with the GAF reporting system.

**Timing ►►** The web-based application and logbook modifications are anticipated to be completed by June 30, 2012.

### **Objective ►► Improve the accessibility and quality of recreational catch and effort data reported in the sport charter logbook program**

#### **Project 1 ►► Grant Federal Assistance Funding to the State**

This project is intended to improve data accessibility and quality control by electronically storing trip-level logbook information using image recognition software and improving staff knowledge about reporting requirements.

**Deliverable ►►** The State of Alaska will write a performance report describing the progress, challenges, problems, and accomplishments associated with efforts to improve data quality and accessibility in the charter logbook program.

**Timing ►►** The performance report will be completed by September 30, 2012.

### **Objective ►► Grant the State Federal Assistance Funds to help attain coded wire tag sampling goals in the Southeast Alaska marine sport fishery**

#### **Project 1 ►► Fund fishery samplers**

The contribution of Alaska and non-Alaska hatchery Chinook salmon, exploitation, survival, and other statistics are estimated using coded wire tag sampling, harvest, and recovery information. Financial support from NMFS to the State will fund five additional recreational fishery samplers in Juneau and four in Ketchikan.

**Deliverable ►►** Increased port sampler presence to improve data collection of coded wire tagged salmon caught in recreational fisheries, which will contribute to a Fishery Data Series Report prepared by the Alaska Department of Fish and Game.

**Timing ►►** The project will occur from July 1, 2011, to June 30, 2012, with a published report summarizing results expected in 2013.

### GOAL 3: Improve Social and Economic Data on Recreational Fisheries

#### Objective ►► Conduct Alaska saltwater sportfishing economic survey

##### Project 1 ►► Economic survey

NMFS will collect data from resident and non-resident anglers on their saltwater fishing activities, expenditures, preferences, and attitudes toward saltwater recreational fishing in Alaska. Data collected through this survey will be used to estimate the demand for saltwater fishing in Alaska and for conducting analyses to determine how factors such as fisheries regulations affect behavior and the value of recreational fishing trips.

**Deliverable ►►** A social and economic survey designed to collect data for analyses to determine the value of recreational saltwater fishing in Alaska.

**Timing ►►** Survey and data collection will occur in 2012 with analyses to follow.

#### Objective ►► Create Alaska recreational charter vessel guide and owner data collection system

##### Project 1 ►► Cost and earnings survey

Project goals are to develop and test two data collection instruments for deployment in the charter vessel fleet in Alaska. The intention is to gather information about costs, earnings, and behavior of the guided fishing fleet. The first instrument is a web-based portal that will collect information from charter operators about their charter trips, including information on spatial behavior. The second is an annual cost and earnings survey of charter vessel operators. Quantitative testing of these instruments will occur through focus groups and cognitive interviews with charter operators and business owners.

**Deliverable ►►** Development of data collection instruments for gathering information in the saltwater charter vessel fishing sector in Alaska.

**Timing ►►** Data collection instrument development testing will be completed in 2012 and will be deployed in the field when funding becomes available.

### Goal 4: Improve Communication

#### Objective ►► Create recreational fishing constituent database to help establish regular and better communication with recreational fishers

##### Project 1 ►► Constituent database

The Alaska Regional Office will develop a recreational angler e-mail list to distribute information, news releases, and links specific to recreational angling interests in Alaska.

**Deliverable ►►** A regional recreational fishing constituent database specific to Alaska, with contact information of interested recreational constituents, for use in communications between NMFS and recreational interests.

**Timing ►►** Initial e-mail list will be compiled no later than December 31, 2012, with ongoing updates.

#### Objective ►► Create a recreational fishing-themed booth and educational materials to be on display and distributed at Alaska-based sport fish-related events, such as outdoor recreation events, boat shows, maritime festivals, etc.

##### Project 1 ►► Events planning

Increase public awareness of NMFS involvement in recreational fishing by attending at least one Alaska-based sport fish-related event in 2012. NMFS will staff a booth highlighting various aspects of NOAA's role in recreational fisheries, including the science that underpins regulatory actions, how NMFS works with the Council, and the opportunities and economic

benefits of recreational fishing in Alaska. Educational materials will be distributed to interested members of the public.

**Deliverable** ▶▶ Recreational fishing-themed booth and educational materials to be used at outreach events.

**Timing** ▶▶ A booth and educational materials will be designed and presented at a recreational fisheries event by December 2012.

**Objective** ▶▶ **Develop website hosted by NMFS Alaska Region designed specifically for web visitors interested in recreational fishing**

**Project 1** ▶▶ **Website**

Gather information relevant to recreational fisheries for web page content and work with the Alaska Region webmaster on a specialized recreational fishing web page. Design will include links to the Council actions relevant to the halibut catch sharing plan and will guide users to help track the public process of recreational issues, provide information on habitat restoration through the Fish Habitat Partnership program, and provide summaries of grant projects supported by NMFS that relate to recreational fishing interests.

**Deliverable** ▶▶ Publish a user-friendly website designed to increase presence of recreational fishing information on NMFS Alaska Region website and inform general public of recreational fishing issues relevant to Alaska.

**Timing** ▶▶ Website design has been ongoing, with majority of work completed no later than April 2012.

# Northwest Region

## Northwest Regional Overview

NOAA's National Marine Fisheries Service (NMFS) Northwest Regional Office will carry out activities to support and enhance recreational fisheries under the guidance of the April 2010 NOAA Recreational Saltwater Fishing Summit, and the October 2010 NMFS Recreational Saltwater Fisheries Action Agenda (National Action Agenda).

The National Action Agenda includes five goals:

1. Improved Recreational Fishing Opportunities
2. Improved Recreational Catch, Effort, and Stock Status Data
3. Improved Recreational Socio-economic Data.
4. Improved Communication
5. Institutional Orientation

In the Northwest, salmon and steelhead fisheries dominate NMFS' management responsibilities that affect recreational fishing, in marine waters and freshwater. There are limited recreational fisheries on groundfish or highly migratory species in the Northwest.

Harvest of virtually all salmon and steelhead in the region is negotiated and adopted by the Northwest states and tribes to ensure compliance with conservation requirements and implementation of treaty Indian fishing rights under *U.S. v. Washington* and *U.S. v. Oregon* – including ocean fisheries considered by the Pacific Fishery Management Council. All of these discussions include determinations of the allowable harvests in recreational fisheries. NMFS participates in the discussions and must review and approve the effects of harvest on myriad listed salmon and steelhead populations under Endangered Species Act (ESA) sections 7, 10(a)1(a), or the Service's rule adopted in July 2000 under Section 4(d) (50 CFR 223, 42422).

Ultimately, sustainable salmon and steelhead fishing in the Northwest will rely on the recovery of ESA-listed populations and therefore benefit from the vast majority of resources and activities devoted to that goal. From development and oversight of the Biological Opinion for operation of the Federal Columbia River Hydropower System (FCRPS BiOp), to hundreds of formal and informal Section 7 consultations on federal actions affecting listed fish, to administration of the Pacific Coastal Salmon Recovery Fund (PCSRF), nearly all regional activities focus on conservation of salmon and steelhead resources of importance to recreational anglers and other fishermen..

NMFS' Northwest Region also administers the Mitchell Act program, which funds the production of approximately 70 million salmon and steelhead smolts in the Columbia River. This production hatchery program supplies a significant number of fish for harvest by the recreational, commercial, and tribal fisheries in the Columbia River Basin and along the coast to Alaska. This is the only national NMFS program that directly provides fish for harvest by recreational fishermen.

In the Northwest there is also a significant interaction between salmon fisheries and marine mammals. NMFS works to minimize these conflicts and has worked with state and local governments to provide assistance for hazing and removal activities.

The primary interface in the Region between the recreational angling public and NMFS is the Salmon Management Division, which is responsible for all harvest management and hatchery activities relating to salmon and steelhead under the Magnuson-Stevens Act, the Mitchell Act, and the Endangered Species



Act. The initiatives described below are predominantly carried out by the Salmon Management Division, with some assistance from the Protected Resources and Sustainable Fisheries Divisions.

## Goals and Objectives

### GOAL 1: Improve Recreational Fishing Opportunities

The Northwest Region relies on abundant salmon populations. Working to improve harvest through funding for hatchery reform and coordination of co-managers will improve fishing opportunities while ensuring conservation requirements are met.

**Objective ►► Develop and evaluate an abundance-based harvest management approach for ESA-listed Columbia River natural Tule fall Chinook salmon.**

**Project 1 ►► A proposal, if found technically feasible, for an abundance-based harvest management approach to Tule fall Chinook salmon for consideration by the Pacific Fishery Management Council and other co-managers.**

Support and participate in the multi-agency Tule Chinook Work Group investigating the merits of and methods for establishing an abundance-based management regime for Tule Chinook. The investigation conforms to a task included in the Lower Columbia River Salmon Recovery Plans for Washington and Oregon.

**Timing ►►** The Work Group anticipates delivery of a proposal to the Pacific Council in fall 2011. If approved by the Council, it is expected to be forwarded to NMFS for consideration in the next Lower Columbia River Tule biological opinion under ESA Section 7. If a usable approach emerges from the process, the Council may consider a fishery management plan amendment to adopt the approach as a formal conservation objective in the Salmon Fishery Management Plan.

**Objective ►► Establish and utilize the Snake Basin Harvest Forum to assist co-managers with reconciling fisheries to meet conservation and harvest objectives.**

**Project 1 ►► Reconciled tribal and recreational harvest plans in the Snake River and its tributaries for consideration and ESA determinations under Section 4(d).**

The migration pattern of the salmon and steelhead populations in the Northwest results in multiple and sequential fisheries managed by multiple state and tribal governments under complex legal requirements for appropriate harvest sharing. Where sharing uncertainties exist, coordination and cooperation is required to ensure conservation requirements are met.

**Timing ►►** Approved harvest plans prior to 2012 tribal and recreational salmon fisheries in the Snake Basin.

**Objective ►► Implement hatchery reform at programs funded through the Mitchell Act.**

**Project 1 ►► Provide funding for more than 20 salmon and steelhead hatchery facilities in the Columbia River through the Mitchell Act.**

Production from these funded hatchery facilities will provide, among other things, up to one-half the harvestable salmon off the coast of Washington and will significantly contribute to harvest governed by the Pacific Salmon Treaty with Canada. NOAA has worked with the state and tribal operators of these facilities to design and prioritize hatchery reforms to reduce the adverse effects of hatchery production on ESA-listed and other depressed salmon and steelhead populations. Reform projects have also been funded through the Pacific Coastal

Salmon Recovery Fund and direct Congressional appropriations (an additional \$10 million provided in FY 2010 Mitchell Act appropriations).

**Timing** ▶▶ Reform project priorities are updated continually in anticipation of available funding. Implementation occurs as funding is provided.

**Objective** ▶▶ **Reduce pinniped and human conflicts in the Rogue River, Oregon.**

**Project 1** ▶▶ **Continue implementation of cooperative program in Gold Beach, Oregon.**

Program seeks to reduce nuisance pinnipeds (seals and sea lions) from (1) taking recreational angler-hooked fish, and (2) damaging Port of Gold Beach property (e.g., docks, marina). This project, in its fifth year of implementation, has been extremely effective in reducing conflict between humans and pinnipeds in the Rogue River estuary and marina. Local, state, and federal government agencies, along with Gold Beach business and recreational fishing leaders, pooled their authorities, resources, and expertise to humanely discourage seal and sea lion use of the estuary during a 12-week period each summer/fall when the town of Gold Beach experiences a huge influx of recreational boaters and fishermen. Minimizing negative interactions between humans and pinnipeds serves NMFS' mission to recover, rebuild, and sustain living marine resources, and to sustain coastal communities and economies.

**Timing** ▶▶ Takes place over 12 weeks during summer and fall of 2012

## GOAL 2: Improve Recreational Catch, Effort, and Status Data

By continually evaluating harvest programs, abundant salmon populations will be properly maintained or replenished. These populations are vital for Pacific ecosystems. A review of the effects of Chinook salmon abundance on killer whale abundance and recovery is underway.

**Objective** ▶▶ **Review the Lower Columbia River coho salmon harvest matrix.**

**Project 1** ▶▶ **Host meetings among co-managers to discuss tasks and outline responsibilities for implementing the review.**

Lower Columbia River (LCR) coho were listed as threatened under the ESA in 2005. NMFS consulted under Section 7 on the effects of harvest to LCR coho in 1-year biological opinions in 2006 and 2007. In 2008, NMFS completed a multi-year opinion that is still in place. Oregon and Washington have proposed to manage ocean and in-river fisheries subject to a harvest matrix similar to the one used for Oregon Coast (OC) coho. Total exploitation rates vary depending on brood year escapement and estimates of marine survival. The LCR coho matrix differs from the OC matrix in that it has both an ocean and in-river component. When these components are combined, they allow for a higher overall impact for a given set of circumstances than are allowed for by the OC matrix. NMFS has limited the exploitation rate on LCR coho to the rate allowed by the ocean portion of the harvest matrix. In 2011, for example, the escapements and marine survival rates are such that the harvest matrix would allow for an overall exploitation rate of 21.4 percent; NMFS' biological opinion limited the exploitation rate to 15 percent. The states of Oregon and Washington and other parties have expressed interest in reconsidering harvest management for LCR coho and constraints imposed by the current opinion. Additional information obtained since completion of the current opinion in 2008, suggests that a second look may be warranted. As an initial step, NMFS has provided the states of Washington and Oregon a summary of analytical steps and other tasks that must be addressed by co-managers to accomplish the review. NMFS is

hosting meetings among co-managers to discuss these tasks and outline responsibilities. Co-managers agreed to proceed with the effort, a decision that was recorded in subsequent correspondence from NMFS to Oregon and Washington.

**Timing** ▶ Tasks identified and reviewed in the correspondence are to be completed by the co-managers by September 2012 so that NMFS is able to complete ESA review and Biological Opinion prior to the 2013 salmon fishery. As the initiative continues, reports will be forwarded to the Lower Columbia River Salmon Recovery Councils in Washington and Oregon, the parties to *U.S. v. Oregon*, and the Pacific Council for consideration.

**Objective** ▶ **Conduct scientific workshops on the relationship of Chinook harvest to Chinook abundance as prey for ESA-listed Southern Resident Killer Whales.**

**Project 1** ▶ **Co-host a workshop**

NMFS and Fisheries and Oceans Canada (DFO) have agreed to co-sponsor a bilateral, three-session, scientific workshop process to review the science relating the effects of Chinook salmon fisheries to killer whales. The Independent Science Panel members have been selected, as has the Science Chair for the workshops.

**Timing** ▶ The three sessions will be held September 13-15, 2011; March 13-15, 2012; and September 18-20, 2012. A draft and final report from the Independent Science Panel will be issued following the workshops.

### **GOAL 3: Improve Social and Economic Data on Recreational Fisheries**

Providing a variety of data on fisheries improves communication and informs others of the significant impact the loss of harvest would bring.

**Objective** ▶ **Maintain and make available current estimations of economic effects of recreational salmon fishing activities.**

**Project 1** ▶ **The Northwest Region will maintain, update, and publish a variety of documents containing information about the economic value and effects of marine and freshwater recreational salmon fishing.**

These documents include: The Columbia River Basin Hatchery EIS, the Puget Sound Hatchery EIS, NEPA documents associated with consideration, adoption and promulgation of rules governing annual salmon fishing regimes in the Pacific Ocean under the Magnuson/Stevens Act, NEPA documents associated with ESA determinations under sections 4(d) and 10 on Hatchery Genetic Management Plans and Resource Management Plans, various Congressional and administration requests and requirements related to the costs and benefits of salmon and steelhead production funded under the Mitchell Act.

**Timing** ▶ Periodic and ongoing.

### **Goal 4: Improve Communication**

**Objective** ▶ **Conduct outreach to Northwest recreational fishing stakeholders**

**Project 1** ▶ **Identify and coordinate with key recreational fishing stakeholders in the Northwest to target outreach efforts.**

Specific actions in support of this project include:

- Develop e-mail list of Northwest recreational fishing associations and clubs.

- Initiate discussions with other communicators within recreational fishing community and identify opportunities for improved collaboration and coordination.
- Ensure recreational fishermen are aware of opportunities to participate in development of Northwest policies that may affect them, including the Puget Sound Hatchery Environmental Impact Statement and the Columbia Basin Hatchery Environmental Impact Statement

**Timing** ▶▶ Ongoing throughout 2012.

**Objective** ▶▶ **Highlight Northwest activities in support of recreational fisheries**

**Project 1** ▶▶ **Develop and distribute informational Materials on Northwest activities in support of recreational fisheries.**

Specific actions in support of this project include:

- Develop a targeted recreational fishing web page to provide convenient access to information of interest.
- Develop a targeted fact sheet on Northwest activities in support of recreational activities.
- Participate in one recreational fishing/boating event.

**Timing** ▶▶ March - September 2012.

### Goal 5: Institutional Orientation

**Objective** ▶▶ **Reflect hatchery reforms in approved Hatchery Genetic Management Plans (HGMP), complete with NEPA coverage, for the nearly-300 hatchery programs in the region, reconciling hatchery production, harvest management Resource Management Plans (RMP) and recovery planning under Section 4 of the ESA**

**Project 1** ▶▶ **Approve HGMP and RMP for all hatchery programs and harvest management plans, with associated NEPA compliance.**

This deliverable requires the three states and more than 25 Indian tribes in the Northwest to collaborate and submit draft HGMPs and RMPs for NOAA consideration under provisions of the ESA.

**Timing** ▶▶ Early 2012.

**Objective** ▶▶ **Improved internal awareness of recreational fisheries issues and priorities.**

**Project** ▶▶ **Internal communications**

The Northwest Region's Recreational Fisheries Coordinator will conduct annual in-house planning and coordinating meetings to review the regional Recreational Fisheries Action Plan deliverables and activities, and explore ways to improve services to the recreational fishing community.

**Timing** ▶▶ December 2011.

# Southwest Region

## Southwest Region Overview

California marine recreational fisheries encompass resident and non-resident anglers fishing from shore, private boats, and a commercial passenger fishing vessel (CPFV) fleet that provides access and guiding services to private anglers.

- **Economic Importance:** California recreational fisheries are of economic importance to the State and Nation as measured by both the number of jobs and income supported by trip and durable goods related expenditures, and the economic value placed on fishing and fishery resources by the public. In 2009, an estimated 1.5 million recreational anglers completed roughly 4.7 million fishing trips in saltwater and spent over \$1.6 billion in fishing trip and durable equipment expenditures. Over 61% of these anglers were residents of a California coastal county, 33% were from California non-coastal counties, and roughly 5% were from out of state. Of the total saltwater fishing trips taken, over 8% of them were taken from CPFVs, 14% were taken from private boats, and another 77% were shore-based.
- **Habitats:** California has a variety of diverse marine and anadromous habitats, including among others, the Channel Islands in Southern California, the Farallon Islands in Northern California and the freshwater and estuarine habitats of several major river systems including the Sacramento/San Joaquin and Klamath Rivers.
- **Species:** Anglers on the West Coast have the ability to target a wide range of species including but not limited to: highly migratory species (tuna, billfish, sharks), groundfish, salmon, and coastal pelagic species, as well as many state managed species.
- **Data Collection:** Data collection efforts include the California Department of Fish and Game CPFV logbook program, the Ocean Salmon Project, and the California Recreational Fisheries Survey (CRFS), which samples about 900 sites statewide to interview anglers and obtain catch and effort data.

## Regional Fisheries Issues Overview

- **Pinnipeds (seals and sea lions)** – Since the passage of the Marine Mammal Protection Act (MMPA) in 1972, populations of Pacific harbor seals and California sea lions have increased dramatically and are now considered healthy and robust. Their increased abundance has been accompanied by a growing number of interactions with humans, raising concerns by private citizens and government officials who are seeking ways to protect property, fishing gear, and catch from damage by seals and sea lions.
- **U.S. Fishing in Mexico** – California-based boats frequently fish inside the Mexican EEZ. This includes both private boaters and CPFV trips on day trips, as well as the San Diego based long-range CPFV fleet operating 5 to 15 day trips. This portion of the California recreational fishery represents a substantial economic benefit to the United States.
- **Marine Life Protection Act** – A network of new marine protected areas (MPAs) and reserves were designated throughout State waters, pursuant to the California Marine Life Protection Act, that have displaced anglers from historic fishing areas. These new MPAs were not designed fundamentally to complement existing fishing regulations and combined with the restrictions in federal waters (e.g., Rockfish Conservation Areas), the new MPAs resulted in greatly reduced access to and opportunity for fishing off the coast, increased issues of anglers' transit/safety at sea, and have raised concerns about possible economic impacts to local businesses, .

- **Fish Stock Assessments** – The availability of data (i.e., limited in extent or lacking altogether for some stocks) remains an ongoing challenge for supporting science-based management decisions. Not only is there a need for more accurate, complete, and timely data to manage fish stocks on the U.S. West Coast, there is also a need for new, robust assessment models that can make strong inferences from limited information.
- **Salmon** – In 2008 and 2009, salmon fisheries off California were closed due to low returns of Sacramento Fall Run Chinook (SRFC) caused by poor ocean conditions that reduced juvenile survival. As conditions improved and returns increased, recreational fishing and a very limited commercial fishing season occurred in 2010, and both fisheries resumed in 2011. Several salmon stocks are listed under the Endangered Species Act, which constrains fishing opportunity for non-listed stocks. Salmon fisheries issues hinge on balancing urban and agricultural water usage, habitat conservation and restoration, improved hatchery operations, managing around weak stocks, and fair and equitable management of both recreational and commercial fishing interests.
- **Live Bait** – California recreational fisheries depend heavily on the use of live bait, especially when targeting highly migratory species like tuna, billfish, and sharks. Pacific sardine, northern anchovy, and market squid are caught by small coastal purse seiners and held in bait receivers in many California harbors for sale to anglers. These species are also important as bait, both alive and dead, in the salmon, groundfish, and State of California coastal fisheries such as California halibut and white seabass. Maintaining the availability of this bait source is of paramount importance to recreational anglers.
- **Barotrauma** – Rockfish are an economically important group of fish for recreational anglers of California. Seasons and areas have been restricted in recent years due to the depressed population status of a few species, particularly the cowcod, canary, yelloweye and bocaccio rockfish. Rockfish suffer from a high degree of barotrauma while being caught at depths that exceed 100 feet. In order to increase the chance of survival in prohibited species of rockfish (canary, yelloweye, cowcod), it is best to assist the fish in reaching their depth of capture during release. Many recompression tools are available to do this. Effective use of these tools can reduce the mortality associated with barotrauma and have a positive impact in the management of the species in question. Educational programs are needed to inform anglers about these tools and how to properly use them.

## Goals and Objectives

### GOAL 1: Improve Recreational Fishing Opportunities

**Objective** ▶▶ Participate in fishing events with a broad spectrum of stakeholders (e.g., youth groups, veterans, disabled anglers, and minority groups) to improve stewardship awareness and adoption of ethical recreational fishing practices.

#### **Project 1** ▶▶ Ethical Angler Program participation at fishing events

Provide opportunities for stakeholders to learn about the NOAA Ethical Angler Program, fishing techniques, and marine conservation at piers and onboard Commercial Passenger Fishing Vessel (CPFV) trips. Provide Ethical Angler and Best Fishing Practices information through demonstrations and brochures to event participants.

#### **Partners** ▶▶

- California Dept. of Fish and Game
- Friends of Rollo

- United Anglers of Southern California
- Pathways to Adventure
- United Pier and Shore Anglers of California
- Paralyzed Veterans of America
- Purple Heart Foundation
- Wounded Warrior Foundation
- Boys and Girls Clubs
- Other groups as possible

**Deliverable** ▶▶ Participation in fishing trips and events

**Timing** ▶▶ Ongoing

**Objective** ▶▶ **Conduct research on best fishing practices to reduce post-release mortality in an effort to facilitate more sustainable fishing opportunities through higher survivorship of released fish.**

**Project 1** ▶▶ **Conduct Thresher Shark Post-release Mortality Study**

Partner with the southern California recreational fishing clubs and stakeholders to conduct field research to reduce the catch-and-release mortality rates for sport-caught common thresher sharks.

**Partners** ▶▶

- Pflieger Institute of Environmental Research (PIER)
- Oceanside Anglers Club
- Balboa Anglers Club
- San Diego Anglers
- San Diego Rod and Reel Club
- United Anglers of Southern California
- Other groups as possible

**Deliverable** ▶▶ Publish research findings on NMFS-PIER post-release mortality studies in peer-reviewed fisheries journals and disseminate best fishing practices and ethical angling information to stakeholders through:

- 1) multimedia outreach products (print, web, audio-visual),
- 2) presentations at fishing club meetings and other speaking venues, and
- 3) guest appearances on local sportfishing radio shows.

**Timing** ▶▶ Ongoing

**Project 2** ▶▶ **Promote methods to reduce rockfish barotrauma mortality**

Work to reduce fishing mortality of rockfish through promoting use and development of fish descending devices to recompress fish and release them at the depth of capture. The reduction of post-release mortality, particularly of overfished species caught incidentally, will contribute to the overall sustainability of the rockfish fishery and has the potential to expand fishing opportunity through longer fishing seasons and to reduce the size of closed areas.

**Partners** ▶▶

- Fishing Clubs

**Deliverable** ▶▶ Presentations to fishing clubs and distribution of best fishing practices outreach materials

**Timing** ▶▶ Ongoing



## GOAL 2: Improve Recreational Catch, Effort, and Status Data

**Objective** ▶▶ Improve recreational fisheries monitoring data for use in management.

### **Project 1** ▶▶ Support the California Recreational Fisheries Survey

Work with the RecFIN technical team and the State of California to maintain a robust and accurate sampling program for recreational fishing in both shore- and boat-based modes. In particular, onboard sampling of recreational anglers has the potential to greatly improve our estimates of recreational catch, bycatch, catch rates, and stock status. Catch, effort, and location information at this level of resolution is important to stock assessment efforts. Direct observation of species composition and discard rates would improve estimates of recreational discard, and allow for apportionment of unidentified catch to species.

#### **Partners** ▶▶

- California Department of Fish and Game

**Deliverable** ▶▶ Catch and effort estimates

**Timing** ▶▶ Ongoing

**Objective** ▶▶ Conduct research on methods for reducing depredation and marine mammal interactions with anglers.

### **Project 1** ▶▶ Research and Test Sea Lion Depredation Methods

Project in progress partnering with commercial passenger fishing vessel (CPFV) operators to evaluate effectiveness of several devices designed to reduce sea lion depredation during fishing operations.

#### **Partners** ▶▶

- CPFV Operators

**Deliverable** ▶▶ Technical report

**Timing** ▶▶ August 2012.

**Objective** ▶▶ Conduct cooperative research projects with local anglers to improve understanding of recreational fishery effects and the importance of data collection, and monitoring.

### **Project 1** ▶▶ Encourage HMS Biological Sample Donation

Anglers will continue to be encouraged to donate the heads and stomachs of tunas and other highly migratory species to the SWFSC. These samples will be used to estimate parameters used in stock assessments as well as to characterize foraging ecology and stock structure. These are important elements for effective management.

#### **Partners** ▶▶

- Sportfishing Association of California

**Deliverable** ▶▶ Provide research results to the management agencies. Disseminate results through scientific meetings and publications, and by presenting at fishing club meetings and other pertinent presentation venues.

**Timing** ▶▶ Ongoing

### **Project 2** ▶▶ Encourage and support sighting reports – basking sharks

Anglers will continue to be encouraged to report sightings of basking sharks to the SWFSC. Basking sharks were listed in 2010 as a NOAA Species of Concern. All sightings data are helpful to SWFSC scientists studying this rare species.

#### **Partners** ▶▶

- Centro de Investigación Científica y de Educación Superior de Ensenada, Mexico

- The Pacific Shark Research Center (PSRC) at Moss Landing Marine Laboratories
- Department of Fisheries and Oceans Canada
- Canadian Pacific Shark Research Lab

**Deliverable** ▶▶ Information on the abundance and distribution of basking sharks off the U.S. West Coast. This information will help us understand the environmental drivers behind distribution and abundance patterns.

**Timing** ▶▶ Ongoing

### **Project 3 ▶▶ Continue rockfish surveys**

To access rocky habitat-associated stocks not effectively captured by trawl survey techniques, continue surveys of rockfish species abundance and distribution using combined information from multiple-frequency echo-sounder and high-resolution underwater camera observations. The Collaborative Optical-Acoustic Survey Technique (COAST) and the results of two comprehensive surveys of rockfishes in the Southern California Bight will be evaluated by a panel representing the Center for Independent Experts and the Pacific Fishery Management Council.

#### **Partners** ▶▶

- Sportfishing Association of California

**Deliverable** ▶▶ Review of the survey method

**Timing** ▶▶ Review of survey method in February 2012. Survey is ongoing.

### **Project 4 ▶▶ Encourage and support HMS billfish tagging**

Anglers will continue to be encouraged to participate in the SWFSC Billfish Tagging Program including both filling out an annual survey and deploying conventional tags. This program has now been in place for over 40 years and provides the only estimate of recreational billfish fishing activity in the Pacific and Indian Oceans. The information collected is used to estimate catch per unit effort, stock structure, movement patterns, and growth rates. More information is available at the SWFSC website and tags are available for deployment.

#### **Partners** ▶▶

- Billfish anglers

**Deliverable** ▶▶ An annual index of catch per unit effort for a range of species from various locations throughout the Pacific and Indian Oceans. These results are captured in the *Billfish News Letter* published by NOAA. Results are also shared through scientific publications, meetings and by presentations at fishing club meetings.

**Timing** ▶▶ Ongoing

## **GOAL 3: Improve Social and Economic Data on Recreational Fisheries**

**Objective** ▶▶ Conduct socio-economic research to determine how recreational fishing activities contribute to the California economy and jobs.

### **Project 1 ▶▶ Conduct 2011 Angler Expenditure Survey**

The 2011 survey is an opportunity for marine anglers in California to help NMFS produce an updated, accurate picture of how recreational fishing contributes to supporting jobs and the economy of California.

**Partners** ▶▶

- NOAA Fisheries Headquarters

**Deliverable** ▶▶ Technical report

**Timing** ▶▶ Data collection concludes in May 2012. Publication of results in June 2013.

**Project 2 ▶▶ Pilot Cost & Revenue Southern California CPFV Study**

A pilot study of Southern California party and charter boat operating costs and revenues will provide the groundwork for future studies to produce an updated, accurate picture of how the party and charter boat industry contributes to supporting jobs and the economy of California.

**Partners** ▶▶

- Sportfishing Association of California

**Deliverable** ▶▶ Report

**Timing** ▶▶ Data collection concludes in May 2012. Publication of results in June 2013.

**Objective** ▶▶ **Conduct socio-economic research and develop tools that can better inform management decisions and other factors affecting the recreational fishing sector.**

**Project 1 ▶▶ Develop Decision-Making model of CPFV Operators & Anglers**

The development of a temporal-spatial model of party and charter boat operator and marine angler fishing decisions will provide the groundwork to model the expected impact on recreational fishing of changes in environmental, economic, and regulatory factors.

**Deliverable** ▶▶ Manuscript for submission to journal.

**Timing** ▶▶ June 2013

**Project 2 ▶▶ Conduct assessment of dam removal on salmon and steelhead in Klamath River**

Conduct an analysis of economic effects of removal of four Klamath River dams on the ocean recreational salmon fishery and on Klamath River recreational fisheries for salmon, steelhead, and redband trout.

**Partners** ▶▶

- Department of the Interior
- California Department of Fish and Game
- Oregon Department of Fish and Wildlife

**Deliverable** ▶▶ Two technical reports

**Timing** ▶▶ September 2011.

**Project 3 ▶▶ Develop Valuation Model: Ocean Salmon Recreational Fisheries**

Develop a valuation model for the ocean recreational salmon fishery in California and Oregon

**Deliverable** ▶▶ Manuscript for submission to journal.

**Timing** ▶▶ June 2012.

**Project 4 ▶▶ Develop Valuation Model: In-River Salmon and Steelhead**

Develop a multiple site valuation model for the in-river salmon and steelhead fishery in California.

**Deliverable** ▶▶ Manuscript for submission to journal.

**Timing** ▶▶ June 2012.

## Goal 4: Improve Communication

**Objective** ▶ Engage with sportfishing and outdoor media to improve communications on recreational fisheries issues; discuss issues with and provide information to constituents.

### **Project 1** ▶ Participate in sportfishing radio shows

SWR Recreational Fisheries Coordinators and the SF-HQ Pacific Coast Recreational Fisheries Coordinator will participate in sportfishing radio shows to disseminate the latest NMFS science and management information and answer constituent call-in questions.

#### **Partners** ▶▶

- Southern California's Let's Talk Hookup
- Other radio shows throughout California

**Deliverable** ▶▶ Radio appearances

**Timing** ▶▶ Ongoing / quarterly, and as invited

### **Project 2** ▶▶ Develop and Distribute Fact Sheets

Work with California-based sportfishing periodicals, local newspapers, and angling club newsletters to promote NMFS Fact Sheets highlighting topics such as economic surveys species of interest, and pinniped depredation, as well as activities such as the Fred Hall Fishing and Boating Show exhibit and MRIP.

#### **Partners** ▶▶

- Western Outdoor News
- Pacific Coast Sportfishing
- Fishing club newsletters
- Local Newspapers

**Deliverable** ▶▶ Articles in periodicals

**Timing** ▶▶ Ongoing

**Objective** ▶▶ Engage with stakeholders to hear concerns, share information, and collaborate on efforts, as appropriate.

### **Project 1** ▶▶ Engage with Recreational Fishing Advisory Bodies

Engage with and maintain regular communications with the California-based members of the MAFAC Recreational working group and PFMC advisory panel and Council members.

#### **Partners** ▶▶

- PFMC Council Members
- PFMC Advisory Panel Members
- MAFAC Recreational Working Group

**Timing** ▶▶ Ongoing

### **Project 2** ▶▶ Attend Recreational Fishing Focused Conventions

Organize a NMFS outreach and education booth at several California recreational fishing shows.

#### **Partners** ▶▶

- SWR and SWFSC Recreational Fisheries Coordinators
- SF-HQ Pacific Coast Recreational Fisheries Coordinator
- Other SWR and SWFSC staff

**Deliverable** ▶▶ Participation in annual:

- Fred Hall Fishing and Boating Show

- San Diego Day at the Docks
- other relevant shows

**Timing** ▶▶ Ongoing

**Project 3 ▶▶ Demonstrate / Present Ethical Angling and Best Fishing Practices**

Proactively seek opportunities to hold listening sessions and present information on current activities and research to smaller groups, particularly to sportfishing clubs and on charter sportfishing trips.

**Partners** ▶▶

- Turners Rod and Reel Club
- Los Angeles Rod and Reel Club
- Oceanside Anglers Club
- Balboa Anglers Club
- San Diego Anglers
- San Diego Rod and Reel Club
- Cambria Fishing Club
- Other groups as possible

**Deliverable** ▶▶ Presentations to fishing clubs

**Timing** ▶▶ Ongoing

**Objective** ▶▶ **Develop and maintain an informative website on recreational fisheries with current information and tools to inform and assist anglers about management, stewardship practices, and opportunities/events.**

**Project 1 ▶▶ Enhance Current Recreational Fishing Websites – SWRO, SWFSC**

Redesign and improve the recreational fishing websites of the Southwest Regional Office and Southwest Fisheries Science Center. This will include coordinating with the national NMFS website.

**Deliverable** ▶▶ Redesigned websites

**Timing** ▶▶ 2012.

**Goal 5: Institutional Orientation**

**Objective** ▶▶ **Demonstrate Agency commitment to collaborating with recreational fishing constituents on strategies for improved management, stewardship, and research.**

**Project 1 ▶▶ Meet with constituents annually to discuss issues and opportunities**

Meet with constituents the week of the Long Beach Fred Hall Fishing and Boating Show to present current NMFS research, projects, and news to the California recreational fishing community.

**Deliverable** ▶▶ Meeting

**Timing** ▶▶ March 2012 and annually thereafter

**Project 2 ▶▶ Acknowledge constituents for exemplary Ethical Angling and Marine Resource Stewardship practices**

Annually recognize groups or individuals who have contributed to ethical angling and marine research stewardship in the Southwest Region. These contributions could be through cooperative research, habitat restoration, promotion of ethical angling practices, or

development of innovative fishing gear and techniques to improve catch-and-release survivability.

**Partners** ▶▶

- Group and individual recreational fisheries constituents

**Deliverable** ▶▶ Presentation of one or more plaques/certificates per year based on available funding.

**Timing** ▶▶ Ongoing

**Objective** ▶▶ **Ensure that recreational fisheries issues are communicated and considered in research and management decisions.**

**Project 1** ▶▶ **Maintain effective internal communications**

Improve incorporation of recreational fishing community considerations into management and research decisions through ongoing communication and collaboration with other staff and leadership in the Southwest Regional Office and Southwest Fisheries Science Center.

**Partners** ▶▶

- SWRO
- SWFSC

**Deliverable** ▶▶ Coordinators provide briefing update to Deputy Regional Administrator and Deputy Science Center Director at least once per quarter

**Timing** ▶▶ Ongoing / monthly coordinators call, and Regional Office/Science Center leadership meetings.

## Summary

The 2012 SWR Recreational Saltwater Fisheries Action Plan lays out the strategy that the SWR will follow over the next year to enhance its understanding and management of recreational fisheries and working relationship with the California saltwater recreational fishing community. Developed in coordination with recreational constituents, the Plan identifies actions that will be undertaken to achieve the five overarching goals and twelve associated objectives of this effort. The Plan should be viewed as a component of broader Agency efforts to create and maintain a productive relationship between NMFS and the recreational fishing community. The SWR will also be looking to the recreational community to help ensure the success of the Plan by providing feedback, participation, and commitment to collaborative efforts identified. The Plan should be considered a "living document" with the 2012 version as one chapter of many that will be updated annually. As identified in the Plan, one such opportunity to check in on the status of the Plan's implementation is during the spring of 2012 in conjunction with the Fred Hall Boating and Fishing Show. In these challenging economic times it is imperative to maximize and leverage available funds and resources to achieve success. The SWR looks forward to working with the California recreational fishing community to form strong and active partnerships to carry out this Plan and ensure its success.

# Southeast Region

## Southeast Region Overview

NMFS' southeast region (SER) comprises eight coastal states (Texas, Louisiana, Mississippi, Alabama, Florida, Georgia, South Carolina, and North Carolina), the territory of U.S. Virgin Islands, and the commonwealth of Puerto Rico. The southeast region works with three Fishery Management Councils—Gulf of Mexico, South Atlantic, and Caribbean. These three Councils manage a total of 18 fishery management plans, containing 172 fish stocks or complexes within their respective Exclusive Economic Zones.

In 2008, an estimated 6.1 million U.S. recreational fishermen completed over 46 million fishing trips and spent over \$19 billion in fishing trip and durable equipment expenditures<sup>3</sup> in the Gulf of Mexico and South Atlantic. The majority of these anglers were residents of a regional coastal county.

The following is a list and brief description of the region-wide recreational fishing issues in the southeast, followed by a list of issues specific to the Gulf of Mexico, South Atlantic, and Caribbean.

- **Science and Data Collection** – For some species, constituents lack confidence in the science and data collection methods, including information used to set catch limits and quotas, landings and effort estimations, and stock assessment models.
- **Marine Recreational Information Program (MRIP)** – Fishermen have expressed frustration with the timeline of the MRIP and would like to see this program implemented more quickly.
- **Annual Catch Limits/Accountability Measures (ACLs/AMs)** – Fishermen have expressed frustration with the lack of flexibility with new Magnuson-Stevens Act Fishery Conservation and Management Act requirements for ACLs and AMs, especially regarding how ACLs and AMs may trigger closures and reduce season length.
- **Data Poor Stocks** – There is concern that management decisions are being based on stocks with little or no data or on outdated datasets.
- **Allocation** – There is increased demand on the regional Councils to allocate more catch to the recreational sector.
- **Bottlenose Dolphin Interactions with Recreational Fishing Gear** – There are increased reports of dolphin depredation (removing bait and catch from fishing gear) and scavenging (consuming bycatch and discards). The SER is also documenting higher numbers of dolphin strandings and incidents where animals are becoming entangled in recreational fishing gear, resulting in serious injury or death.

Note: A large highly migratory species recreational fishery in the southeastern U.S. and Caribbean is managed by the NMFS Highly Migratory Species division, rather than by the Councils. Thus, more information on this fishery can be found in the Highly Migratory Species Recreational Action Plan.

### Gulf of Mexico

- **Sector Separation** – Currently, there are two allocation groups – commercial and recreational (the latter includes both for-hire and private anglers). Some members of the Gulf for-hire fleet would like to see the recreational group split into separate for-hire and private sectors, while others

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<sup>3</sup> Fisheries Economics of the United States (2008). *Note: Information for recreational fisheries in the U.S. Caribbean (Puerto Rico, U.S. Virgin Islands) was not available and therefore not included in final figures.*



oppose this idea. If adopted the two recreational sectors would receive their own allocations as set forth by the Gulf of Mexico Council.

- ***Length of Red Snapper Recreational Fishing Season*** – Red snapper stocks appear to be rebuilding, and projections estimate that overfishing ended in 2009. There are increased demands to lengthen the recreational season as the size and number of fish increases.
- ***Gag*** – This stock is overfished and is undergoing overfishing. Interim regulations prohibited the 2011 gag harvest for most of the year, with the exception of a 2- month recreational season from September 16 to November 15.
- ***Greater Amberjack*** – There have been frequent recreational quota overages for amberjack. These overages must be paid back in the following recreational fishing season through new ACL measures.
- ***Grouper Allocation*** – The Gulf Council is working on an amendment to address potential changes to the gag, black, and red grouper allocations (recreational and commercial).
- ***Oil Spill*** – There is growing concern regarding the impacts of the Deepwater Horizon oil spill on recreational fisheries, especially in relation to the health and reproduction of targeted species and potential short- and long-term ecological and socio-economic impacts.
- ***For-hire Industry Flexibility*** – The Gulf for-hire industry has requested greater flexibility to deal with reductions in the length of recreational fishing seasons. Some suggestions have included instituting days-at-sea or tagging programs. The Gulf Council is currently investigating the feasibility of these options.

## South Atlantic

- ***Red Snapper*** – This stock is overfished and is undergoing overfishing. In 2010, a complete moratorium on harvesting red snapper in the South Atlantic was issued and will stay in place until further notice.
- ***Black Sea Bass*** – This stock is overfished and is undergoing overfishing. Currently, the recreational ACL is 409,000 pounds gutted weight. If the recreational ACL is met or projected to be met, recreational fishing for black sea bass is closed in-season. If the ACL is exceeded, the ACL for the following year will be reduced by the amount of that overage. The bag limit has been reduced from 15 fish per person per day to 5 fish per person per day in an effort to extend the length of the recreational fishing season.

## Caribbean (including Puerto Rico and the U.S. Virgin Islands)

- ***Implementation of the Marine Recreational Information Program in USVI*** – Currently, MRIP is not implemented in USVI.

Note: The majority of recreational fishing in federal waters is for highly migratory species in the Caribbean. Please reference the Highly Migratory Species Recreational Fishing Action Plan for more details.

## Goals and Objectives

Several actions recently completed in the Southeast Region have focused on recreational fisheries issues. For example, in May 2011, the International Symposium on Circle Hooks was held in Miami. The symposium produced an updated science-based assessment of the management and conservation utility of circle hooks in commercial and recreational fisheries around the globe. Funding opportunities in the

Southeast Region have also targeted species and issues linked to recreational fisheries interests. These projects range from studies on stock abundance, life history, and culture methods for recreationally important finfish (e.g., red snapper, blackfin tuna, and cobia) and baitfish species (e.g., goggle eye), to reducing the amount of fishmeal in commercial aquaculture diets, improving recreational catch data, and examining post-release mortality.

Currently, the Southeast Region is involved in a number of activities linked to the following five goals identified during the April 2010 Recreational Saltwater Fishing Summit.

## **GOAL 1: Improve Recreational Fishing Opportunities**

### **Objective ►► Improve fishing flexibility within the for-hire industry**

#### **Project 1 ►► Gulf Council Advisory Panels**

The Gulf FMC assembled several panels to investigate more flexible management strategies to provide greater fishing opportunities to for-hire boat captains. NMFS' staff in the Southeast Region will participate in this process.

**Timing ►►** Ongoing, to be completed in 2012.

### **Objective ►► Extend Gulf of Mexico red snapper recreational fishing season**

#### **Project 1 ►► Reopen the recreational fisheries when excess quota is available, and work closely with the Gulf FMC to evaluate alternative seasons.**

NMFS is monitoring catch limits and working with the Councils to reopen fisheries where seasonal quotas are not met. For example, in 2010 the agency worked with the Gulf Council to reopen the recreational red snapper fishery, as fishing closures implemented during the Deepwater Horizon/BP oil spill left available quota unfulfilled. NMFS and the Gulf Council reviewed a similar action for 2011 recreational red snapper season; however, the fishery was not reopened because NMFS projected the quota would be exceeded. The Gulf Council is working on an amendment that will give the NMFS Southeast Regional Administrator the authority to reopen this recreational fishery in subsequent years without needing to go through the Council process. Additionally, the Gulf Council is currently evaluating new alternatives for the 2012 recreational fishing season, such as having the season open only on weekends rather than on a continuous basis until the quota is met.

**Timing ►►** The Gulf Council plans to make a decision on this action by early 2012, so changes to the management strategy will be effective before the June 1, 2012 season opening.

## **GOAL 2: Improve Recreational Catch, Effort, and Status Data**

**Objective ►► Implement an electronic logbook pilot program to improve catch and effort data for the for-hire fleet in the Gulf of Mexico.**

### **Project 1 ►► Electronic logbook pilot program**

Staff with the NMFS Southeast Regional Office (SERO), Southeast Fisheries Science Center (SEFSC), Gulf States Marine Fisheries Commission (GSMFC), Florida Fish and Wildlife Conservation Commission (FWC), and Texas Parks and Wildlife Department (TPWD) are collaborating on a joint project entitled Gulf of Mexico Logbook Pilot Program for Collection and Validation of Catch and Effort from For-Hire Fisheries. With the support of MRIP, this project is testing reporting and validation methods on 60 for-hire vessels in Corpus Christi, Texas, and 357 for-hire vessels in the Florida Panhandle.

**Timing ►►** January 2012

**Objective ►► Develop methods for improving recreational data collection in the for-hire sector and delivering data in a timelier manner.**

### **Project 1 ►► Electronic logbook pilot program**

In October, 2010 the SEFSC developed a pilot study entitled Implementation of Electronic Logbooks on Headboats Operating in the U.S. South Atlantic. The South Atlantic Council and the Gulf of Mexico Council are considering implementation of electronic reporting for headboats, based in large part on a favorable review of the pilot program and subsequent report.

**Timing ►►** Ongoing

**Objective ►► Create a fishery-independent survey in the U.S. South Atlantic to index the abundance of red snapper and other reef fishes.**

### **Project 1 ►► South East Fishery-Independent Survey (SEFIS)**

In 2010, the NMFS Southeast Fisheries Science Center created the SouthEast Fishery-Independent Survey (SEFIS) to work collaboratively with the Marine Resource, Assessment, and Prediction (MARMAP) program to sample reef fishes in the U.S. South Atlantic. In addition to bolstering fishery-independent samples, SEFIS has introduced underwater video as a new gear to index the abundance of reef fishes.

**Timing ►►** Ongoing

**Objective ►► Determine the frequency and geographic extent of bottlenose dolphin interactions with recreational fishing gear and the impact these interactions have on bottlenose dolphin populations.**

### **Project 1 ►► Development of survey on bottlenose dolphin-recreational fishery interactions**

To meet this objective, the SERO Protected Resources and Sustainable Fisheries Divisions developed draft survey questions on dolphin–recreational fishery interactions. These questions are being considered for inclusion into the redesigned MRIP survey, as well as for in-house data analysis. The SERO Protected Resources Division also partnered with the Mississippi-Alabama Sea Grant Consortium on a 2-year research project in the northern Gulf of Mexico to assess/characterize the frequency of occurrence and geographic scope of depredation by bottlenose dolphins on recreational fishing gear. This project also focused on development of preventative measures to reduce/eliminate interactions and employed the

assistance of for-hire boat captains for data collection and testing of mitigation measures. The project was completed in fall 2010 and SERO is awaiting the final report.

**Timing** ▶▶ Ongoing throughout 2011 and 2012

### GOAL 3: Improve Social and Economic Data on Recreational Fisheries

**Objective** ▶▶ Provide improved and updated economic data to assist in making allocations and regulatory decisions

**Project 1** ▶▶ 2011 Angler Expenditure Survey

Execution of the 2011 Angler Expenditure Survey in the Gulf of Mexico and South Atlantic.

**Timing** ▶▶ Data collection completed in December 2011

**Objective** ▶▶ Understand the socio-economic impacts of natural disasters on the recreational fishing community

**Project 1** ▶▶ Understand the socio-economic impacts of natural disasters on the recreational fishing community.

The SEFSC continues a research effort to understand how changes in climatic activity (e.g., tropical storms and hurricanes) influence fishing activities in the Gulf of Mexico. The initial results of this work have been published in the peer-reviewed literature (e.g., Carter and Letson, 2009<sup>4</sup>).

**Timing** ▶▶ Ongoing throughout 2011

**Objective** ▶▶ Improve the understanding of human dimensions of recreational fishing

**Project 1** ▶▶ Improve the understanding of human dimensions of recreational fishing (e.g., motivations).

The SEFSC is involved in ongoing work regarding fishing site choice demand models, including:

- Improving our ability to forecast changes in sport fishing demand through the development of hedonic models (e.g., Carter and Letson, 2009). Additional work is planned for FY 2012 to examine changes in the fishing demand for private and for-hire vessels in the South Atlantic and Gulf of Mexico. (Ongoing)
- Improving estimates of cost and earnings in the for-hire sector via data collections, including the Louisiana-Florida for-hire fleet data collection (e.g., Liese and Carter, 2011<sup>5</sup>) and the South Atlantic and Gulf of Mexico fleet data collections. These collections are expected to be completed in FY 2012. Additionally, the SEFSC is seeking to collect for-hire fee data via the For-Hire (Telephone) Survey.

Previously, the SEFSC embarked on a number of projects focused on improving estimates of angler fishing value. This has involved estimating changes in sport-fishing harvest through the

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<sup>4</sup> Carter, D.W. and D. Letson. 2009. Structural Vector Error Correction Modeling of Integrated Sport fishery Data. *Marine Resource Economics* 24(1):19-41.

<sup>5</sup> Liese, C. and D.W. Carter. 2011. Collecting Economic Data from the For-Hire Fishing Sector: Lessons from a Cost and Earnings Survey of the Southeast U.S. Charter Boat Industry. 14 p. In Beard, T.D., Jr., A.J. Loftus, and R. Arlinghaus (editors). *The Angler and the Environment*. American Fisheries Society, Bethesda, MD.

use of hedonic valuation models in the Gulf of Mexico for-hire industry (e.g., Carter and Liese, 2010<sup>6</sup>) as well as through stated preference experiments on private and for-hire vessels.

**Timing** ▶▶ Ongoing throughout 2011

#### **Goal 4: Improve Communication**

**Objective** ▶▶ Provide regular opportunities for informal public question and answer sessions with the Regional Administrator and Science Center Director during fishery management council meetings

**Project 1** ▶▶ Informal question and answer sessions at council meetings.

Informal Q&A sessions are conducted at both the Gulf Council and South Atlantic Council meetings. These Q&A sessions are held the night before public comment testimony so all constituents have a chance to ask questions of the SERO Regional Administrator and staff, SEFSC Director and staff, law enforcement, and Council members and staff. All discussions are off the record and approximately 50 to 100 constituents attend each session. These sessions began in 2007 and have been well-received by the public.

**Timing** ▶▶ Ongoing throughout 2011 and 2012

**Objective** ▶▶ Meet with constituent groups about current fisheries issues

**Project 1** ▶▶ Constituent meetings

Meet with recreational constituents upon request. Staff from SERO and the SEFSC regularly meet with recreational groups upon request and will continue to do so. These meetings provide a direct line to regional NMFS staff to discuss recreational fisheries issues.

**Timing** ▶▶ Ongoing throughout 2011 and 2012

**Objective** ▶▶ Expand engagement of the recreational fishing community in data collection programs

**Project 1** ▶▶ Expand engagement of the recreational fishing community in data collection programs

The Adopt-A-Billfish tagging program is being coordinated by a team of experienced scientists who work with the NMFS SEFSC and SWFSC, University of Miami Center for Sustainable Fisheries, the Billfish Foundation, the Bermuda Department of Environmental Protection, and the International Game Fish Association. The program enlists the help of billfish anglers who are interested in learning more about the billfish they pursue and who also want to play an important role in ensuring their stocks are healthy for future generations. Tagging operations are currently underway throughout the Atlantic Ocean and Caribbean Sea, including the waters off south Florida, the Bahamas, and Bermuda. In the Pacific, NMFS is collaborating with a network of researchers, including those affiliated with the Presidential Challenge Tournament Series off the coast of Central America. NMFS is looking to expand this network of researchers and billfish anglers to assist with these data collection efforts.

**Timing** ▶▶ Ongoing throughout 2011 and 2012

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<sup>6</sup> Carter, D.W. and C. Liese. 2010. Hedonic Valuation of Sport-fishing Harvest. *Marine Resource Economics* 25(4): 391-407.

**Objective** ▶ Improve communications with the recreational fishing industry on the issue of bottlenose dolphin interactions with recreational fishing gear

**Project 1** ▶ Improve communications with the recreational fishing industry on the issue of bottlenose dolphin interactions with recreational fishing gear.

The SERO Protected Resources Division is conducting targeted outreach efforts related to bottlenose dolphin stranding events and disentanglement of dolphins in recreational fishing gear. Targeted outreach is conducted with NMFS partners and includes press releases, in-person educational visits, direct mailings of educational materials and letters, and development of FAQs. Outreach materials are geared toward providing information on how fishermen and the public can help prevent these interactions and steps to take when an interaction may occur (e.g., reporting). The SERO Protected Resources staff also participated in a Facts & Fishing workshop with local fishermen in Orange Beach, Alabama, in May 2011 to discuss dolphin–recreational fishery interactions and potential mitigation measures. Targeted outreach efforts to recreational fishermen continue.

**Timing** ▶ Ongoing throughout 2011 and 2012

## Goal 5: Institutional Orientation

**Objective** ▶ Improve understanding of the SEDAR (Southeast Data, Assessment and Review) stock assessment process through increased recreational representation and involvement

**Project 1** ▶ Improve understanding of stock assessment process

The SEDAR process provides a means for developing and reviewing complex fisheries stock assessment analyses. It is also a public process, which provides an opportunity for data collectors, fisheries researchers, and constituents to take part in the stock assessment. SEDAR strives to improve the quality of assessment advice provided for managing fisheries resources in the Southeast by increasing and expanding participation in the assessment process, ensuring the assessment process is transparent and open, improving documentation of assessment methods and input data, and providing a robust and independent review of assessment products.

**Timing** ▶ Ongoing throughout 2011 and 2012

**Objective** ▶ Improve understanding of the federal fishery management process

**Project 1** ▶ Marine Resource Education Program

The Gulf of Maine Research Institute (GMRI)—in collaboration with the NMFS Southeast Region, Gulf of Mexico Fishery Management Council, and South Atlantic Fishery Management Council—propose to adapt the Marine Resources Education Program’s outreach and science education process, originally developed in New England, to the Southeast Region. The Marine Resources Education Program educates fisheries stakeholders in the fundamentals of fisheries science and management. This education enables fishermen and others to participate productively in the fisheries management process, and leads to improve cooperation and trust between fishermen, scientists, and fishery managers. This program will help lay the foundation for the regions to fully engage diverse stakeholders, as envisioned by the reauthorized Magnuson-Stevens Act, and promote trust. One of the Southeast Region’s recreational fishing coordinators, along with representatives from the Gulf of Maine Research Institute and the Gulf Council, are currently investigating opportunities to fund this program.

**Timing** ▶▶ If funding can be, an executive steering committee will be assembled in 2012 to plan the curriculum. This committee will consist of NMFS and Council staff, fishing constituents, and other experts in the field of fisheries management and research. The first educational workshops could be held within a year of securing funding.

**Objective** ▶▶ Define recreational allocation in Puerto Rico

**Project 1** ▶▶ Caribbean Fishery Management Council and NOAA Fisheries Service are working together on amendments to implement separate recreational and commercial catch limits in Puerto Rico

Currently stocks in the U.S. Caribbean are managed without differentiation between the commercial and recreational sectors. As a result of the implementation of both the 2010 and 2011 annual catch limit amendments for the Caribbean, the commercial and recreational sectors in Puerto Rico will be separated and have their own annual catch limits.

**Timing** ▶▶ 2012

## Summary

In an effort to shape a more productive partnership between NOAA Fisheries Service and the recreational fishing community in the southeast region, this plan has identified several key issues facing fisheries managers and stakeholders in the Gulf of Mexico and South Atlantic.

Based upon feedback received from participants of the 2010 Recreational Saltwater Fishing Summit, we have listed specific goals and objectives as well as the actions which have been (and are currently being) undertaken by both SERO and SEFSC staff. These actions are designed to involve constituents at the local and regional level and provide an opportunity for recreational fishermen to collaborate with scientists, economists and managers in an ongoing effort to address the complex issues facing the region.

# Northeast Region



## Northeast Region Overview

NMFS Northeast Regional Office (NERO) and the Northeast Fisheries Science Center (NEFSC) administer NOAA's programs in the New England and Mid-Atlantic areas to manage living marine resources and their habitats, and to protect marine mammals and other threatened and endangered species. NERO implements conservation and management programs, and NEFSC provides scientific advice and much of the scientific information on which the conservation programs and management are based. Together they maintain programs that support management of Northeast marine fish stocks to achieve optimum yield and to provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems.

For recreational fisheries, the Region works with the Regional Fishery Management Councils (and the states to maintain sustainable saltwater recreational fisheries from Maine through North Carolina, and in some cases implements fisheries regulations along the entire East Coast (Maine through the east coast of Florida). Together, these entities manage important marine recreational fisheries for cod, haddock, many flounders, Atlantic bluefish, black sea bass, and scup; they are also responsible for the management of other recreationally caught and/or forage species such as Atlantic sea herring, Atlantic mackerel, squid, and butterfish that provide an important food source for recreationally sought-after species such as striped bass, tuna, and sharks. The Region is also responsible for the management of spiny dogfish and Northeast skates, which support commercial fisheries, play an important role in the Northeast marine ecosystem, and are frequently encountered by Northeast recreational anglers.

The marine recreational fisheries that take place throughout the Region are an important economic activity, with 24.6 million fishing trips taking place in 2009. NOAA's 2009 fisheries economic study estimated the marine recreational fishing trips and their related expenditures for New England at \$1.8 billion, and for the Mid-Atlantic at \$3.5 billion. This provides a total of \$5.3 billion in economic activity for Northeast coastal state economies. Recreational fishing also offers the citizens of and visitors to the Northeast coast special experiences that can enrich their lives by giving them close contact with the ocean and the complex web of life it supports. These experiences can foster an appreciation for conservation of sea life, and provide insight into the types of programs required to maintain and protect fisheries and the habitat supporting them.

The Region is committed to working with the recreational fishing community—a group with keen interest in and knowledge of our marine fisheries—to better understand their perspectives and needs, and to positively engage them in the development and conduct of programs that affect recreational fisheries.

The Region's Action Plan is based on the relationship principles as defined in the National Action Agenda, which are that NOAA will strive to:

- Provide opportunities for regular, two-way communication.
- Provide communications aimed at clearly answering constituent questions.
- Work within the confines of our legal mandates and established processes, but not use these systems as an excuse for being non-responsive or for failing to consider new ideas.
- Provide information to avoid surprises and ensure stakeholders are aware of the thinking behind Agency decisions.

The National Action Agenda is national in scope, but acknowledges the need to implement regional work plans closely linked to it. The Action Plan includes the major ongoing activities conducted by the Region

that are necessary to manage recreational fisheries such as annual management specifications, major surveys, habitat reviews, and stock assessments. Most importantly, it also includes a number of new and/or revitalized items to improve our internal and external ability to manage recreational fisheries. Many of the items are designed to better engage the recreational fisheries community in that process. The intent of the action items, ongoing and new, is to help achieve, on a regional basis, the five goals of the National Action Agenda:

1. Improved Recreational Fishing Opportunities
2. Improved Recreational Catch, Effort, and Stock Status Data
3. Improved Recreational Socio-economic Data
4. Improved Communication
5. Institutional Orientation

In the following sections of the Action Plan, individual action items for the Region are listed by project number under each of the National Action Agenda's five goals.

## Goals and Objectives

### GOAL 1: Improve Recreational Fishing Opportunities

**Objective** ▶ Reduce user conflicts on artificial reefs in Federal waters.

**Project 1** ▶ Special management zones (SMZs) for sportfish restoration funded artificial reefs (NERO Lead)

Oversee and participate in the Mid-Atlantic Council's efforts to use the SMZ mechanism and its new reef monitoring committee formulated under provisions of the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP) to review information on and recommend actions to reduce recreational/commercial conflicts for five artificial reefs in Federal waters off the coast of Delaware. These reefs are state-built, using U.S. Fish and Wildlife Service (FWS) Dingell-Johnson Sportfish Restoration (SFR) funds, and recreational fishing groups contend that proliferation of commercial lobster pots and fish traps on reefs in the Mid-Atlantic are interfering with recreational fishing on SFR-funded reefs. Reducing recreational/commercial conflicts could lead to improved recreational access and increased recreational fishing opportunities for these artificial reefs.

**Deliverable** ▶ Participate in the development of measures to reduce user conflicts between recreational and commercial fishing on artificial reefs, and, if necessary, publish Federal regulations to implement such measures.

**Timing** ▶ The formulation of the reef monitoring committee and initial informational meetings will take place in 2012. Recommendations from the committee are expected in 2012.

**Objective** ▶ Ensure that proposals to allocate scup fully consider the needs of all stakeholders.

**Project 1** ▶ Evaluate recreational/commercial allocation in the scup fishery under the Mid-Atlantic Council process (NERO Lead).

The Mid-Atlantic Council has funded a study to examine the scup allocation between recreational and commercial fisheries. NERO will work with the Council to ensure the data collected and any study recommendations used for management meet Magnuson-Stevens Act standards of using the best scientific information, are fair and equitable to all fishermen, are reasonably calculated to promote conservation, and are carried out in such manner that

no particular individual, corporation, or other entity acquires an excessive share of such privileges. This will provide a sound basis for any recommended scup fishery allocations, and optimize changes in the sustainable use of the resource for the Nation.

**Deliverable** ▶▶ Review of the scup allocation report, and oversight of any Council recommendations to reallocate the recreational/commercial scup allocation.

**Timing** ▶▶ This study report is expected to be completed by the end of 2011, and information and methods developed through the study will be used by the Council to evaluate other fishery allocations in future years.

**Objective** ▶▶ **Ensure that Atlantic mackerel are allocated to the recreational fishery.**

**Project 1** ▶▶ **Provide for a recreational allocation in the Atlantic mackerel fishery (NERO Lead)**

Approve and implement the Mid-Atlantic Council's Amendment 11, which adds a designated recreational Atlantic mackerel allocation to the Council's Atlantic Mackerel, Squid, and Butterfish FMP. The Council has submitted Amendment 11, and NMFS is reviewing it to ensure it meets Magnuson-Stevens Act and other Federal standards. If so, NMFS will implement the amendment through the Federal regulatory process. Establishing a specific recreational fishery allocation in the Atlantic mackerel fishery will provide for continued access to the resource for the recreational community and help manage and maintain the fishery at sustainable levels with a formal allocation to the recreational sector. Maintaining sustainable levels of stocks and a recreational fishery allocation will help provide increased recreational fishing opportunities.

**Deliverable** ▶▶ Recreational Atlantic mackerel allocation.

**Timing** ▶▶ Implement final measures through approval of Amendment 11 and the Atlantic Mackerel, Squid, and Butterfish FMP specification process in late 2011.

**Objective** ▶▶ **Increase spawning and nursery area for anadromous species.**

**Project 1** ▶▶ **Improve fish passage for the Saco River, ME, and Hudson River, NY (NERO and NEFSC)**

Conduct work and oversee implementation of fish passage measures under two settlement agreements regarding Federal Energy Regulatory Commission relicensing of six hydropower projects—five on the Saco River, ME, and the Green Island Hydropower project on the Hudson River, NY—to improve fish passage. Improved fish passage will provide more spawning and nursery habitat for Atlantic salmon, American shad, river herring, and American eels. These species support recreational fisheries and/or provide a forage base for other estuarine and marine recreational fish stocks. Providing them more and/or better habitat will help increase their populations and enhance the recreational fisheries they support.

**Deliverable** ▶▶ Oversight of schedule and implementation of fish passage measures within two settlement agreements.

**Timing** ▶▶ These are long-term projects involving upstream and downstream passage work over the next decade. Planning and baseline information collection for upstream passage at two dams and downstream passage at one dam on the Saco River will take place in FY 2011. Project recommendations for alterations of fish passage at three sites on the Saco River will be completed by the end of FY 2012. Work on further improvements will take place in future years. All work at the Green Island project will take place in future years.

**Objective ►► Increase spawning and nursery area for anadromous species.**

**Project 1 ►► Dam removal and fish passage projects in the Northeast Region (Northeast Restoration Center Lead)**

Provide funding and technical assistance to organizations throughout the Northeast Region to complete dam removal and fish passage projects to enhance passage for river herring, American shad, and American eel. These projects will restore access to approximately 150 stream miles and 1,700 acres of historic spawning habitat for river herring and American shad, and juvenile and adult habitat for American eel, thereby enhancing the potential for increasing the populations of these species. Increasing the river habitat and populations of these species will help improve recreational fishing opportunities in the fisheries they support and provide a bait supply (river herring and eels) for recreational fishing and a forage base for larger recreational fish species.

*Table 1 Northeast Restoration Office Dam/Fish Passage Projects*

Dam removal and fish passage projects – 2011-2012 Northeast Region		
STATE	PROJECT NAME	RIVER
ME	Great Works dam removal	Penobscot River
ME	Savage Wildlife Preserve dam removal	Shoreys Brook
NH	Winnicut dam removal and fish passage	Winnicut River
NH	Bunker dam removal	Lamprey River
MA	Wapping Road dam removal	Jones River
MA	Wellingsley Brook dam removal	Wellingsely Brook
RI	Horsehoe Falls fish passage	Pawcatuck River
RI	Kenyon dam removal	Pawcatuck River
RI	Hunts Mill fish passage	Ten Mile River
RI	Turner Reservoir fish passage	Ten Mile River
RI	Omega Pond fish passage	Ten Mile River
CT	Tingue dam fish by-pass	Naugatuck River
CT	Wallace dam removal	Quinnipiac River
CT	West River tide gates	West River
NJ	Finesville dam removal	Mustconetcong River

**Deliverable ►►** Completion of 15 dam removal and fish passage projects (Table 1) to improve river herring, American shad, and American eel passage to spawning and rearing habitats throughout the region.

**Timing ►►** The Gulf Council plans to make a decision on this action by early 2012, so changes to the management strategy will be effective before the June 1, 2012 season opening.

**Objective ►► Protect important recreational fish habitat.**

**Project 1 ►► Improved Essential Fish Habitat (EFH) designations and review of areas of high habitat vulnerability (NERO and NEFSC).**

Work with the Councils to conduct analyses to refine EFH and identify areas of high habitat vulnerability to different types of fishing gear. In New England, assist with the development and analysis of alternatives to protect fish stocks as part of the New England Council's EFH Omnibus Amendment. In the Mid-Atlantic, the NERO will provide technical assistance in

development of the EFH provisions of the Bluefish FMP. Improved habitat protection will help rebuild and maintain productivity of a variety of fish stocks such as cod, haddock, flounders, bluefish, and the recreational fisheries supported by them

**Deliverable** ▶▶ Technical assistance to New England and Mid-Atlantic Councils regarding EFH.

**Timing** ▶▶ New England's EFH Omnibus Amendment—Analysis of habitat areas to identify high areas of habitat vulnerability will take place in 2011, and identification of alternatives for fishery management consideration by the New England Council will take place in 2012. The Mid-Atlantic EFH update for the Bluefish FMP will take place in 2012.

**Objective** ▶▶ **Meet NOAA's regulatory responsibilities for managing recreational species under the Magnuson-Stevens Act.**

**Project 1** ▶▶ **Summer flounder, scup, black sea bass, and bluefish fisheries annual recreational fishing specifications (NERO Lead).**

The Mid-Atlantic Council has funded a study to examine the scup allocation between recreational and commercial fisheries. NERO will work with the Council to ensure the data collected and any study recommendations used for management meet Magnuson-Stevens Act standards of using the best scientific information, are fair and equitable to all fishermen, are reasonably calculated to promote conservation, and are carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges. This will provide a sound basis for any recommended scup fishery allocations, and optimize changes in the sustainable use of the resource for the Nation.

**Deliverable** ▶▶ Monitor the fisheries and publish regulations for summer flounder, scup, black sea bass, and bluefish fisheries annual recreational fishing specifications, and implement the specifications through the Federal regulatory process.

**Timing** ▶▶ Implement recreational fishing measures for each species as soon as possible in 2012.

**Objective** ▶▶ **Prevent overfishing on recreational fish stocks.**

**Project 1** ▶▶ **Protect recreational fish stocks by instituting Annual Catch Limits (ACLs)/Accountability Measures (AMs) to prevent overfishing (NERO Lead).**

Work cooperatively with the New England and Mid-Atlantic Councils to develop and monitor ACLs/AMs for key recreational fish stocks (summer flounder, scup, black sea bass, bluefish, and multispecies recreational stocks). Provide recommendations to ensure the Mid-Atlantic Council's Omnibus Amendment for ACLs and AMs and the New England Council's multispecies ACL and AM actions meet Magnuson-Stevens Act and other Federal standards, and implement any needed ACL/AM actions through the Federal regulatory process. This will protect these stocks from overfishing while maintaining them at or rebuilding them to sustainable levels. High stock levels will help maximize recreational fishing opportunities.

**Deliverable** ▶▶ Implement and monitor 2011/12 ACLs/AMs for Northeast recreational fish stocks in 2011/12.

**Timing** ▶▶ A mechanism to implement ACLs/AMs, for recreational fisheries managed under New England FMPs was put in place in 2010, and a proposed rule with ACLs/AMs for the Mid-Atlantic Council stocks was published in June. Review and implementation of Mid-Atlantic measures will take place for summer flounder, scup, black sea bass, and bluefish in late 2011 and 2012, and monitoring of New England multispecies recreational fisheries for any necessary ACL/AM action will also be carried out in late 2011 and 2012.

**Objective ►► Protect forage species and monitor and reduce bycatch of species important to the recreational fishing community (NERO Lead).**

**Project 1 ►► Protect forage species and monitor and reduce bycatch of species important to the recreational fishing community (NERO Lead).**

NERO will work cooperatively with the New England Council on Atlantic herring and with the Mid-Atlantic Council on mackerel, squid, and butterfish to ensure these stocks are maintained at healthy levels, that bycatch of recreationally important species is minimized, and that the important role they play within the ecosystem as forage for important recreational species is considered. Improved monitoring and reporting will be proposed for the Atlantic herring fishery, and measures to address bycatch and improve management in the Atlantic herring fishery and the mackerel, squid, and butterfish fishery are under development in Amendment 5 to the Atlantic Herring FMP, and under review in Amendment 11 to the Atlantic Mackerel, Squid, and Butterfish FMP. Improved reporting in the Atlantic herring fishery and better methods to address bycatch and monitor their stock status will ensure that conservation and management measures will prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery. Encouraging an ecosystem approach to manage these fisheries will help maintain fishing opportunities on these species, and other higher level recreational fish species that depend on them as a food source.

**Deliverable ►►** Monitor the Atlantic herring, mackerel, squid, and butterfish resources and fisheries to ensure that overfishing is prevented, and reduce bycatch of other recreationally important species.

**Timing ►►** This is an ongoing activity, with monitoring of fisheries and any needed actions to be implemented in late 2011 or in 2012. A rule to implement improved reporting in the Atlantic herring fishery was proposed in June 2011; Amendment 5 to the Atlantic Herring FMP is under development by the New England Council; and Amendment 11 to the Atlantic Mackerel, Squid, and Butterfish FMP has been submitted by the Mid-Atlantic Council and is under review by NMFS.

**Objective ►► Reduce negative impacts of proposed projects on fish habitat.**

**Project 1 ►► Improve habitat protections through consultation with Federal agencies proposing to impact EFH and other living marine resources (NERO Lead).**

NERO will conduct consultations with Federal agencies (such as the U.S. Army Corps of Engineers, Federal Highway Administration, and Department of the Interior) that fund, authorize, or undertake activities that may adversely affect EFH and other NOAA trust resources throughout the Northeast Region. Such actions include energy development, roadway and bridge construction, dredging, port expansion, and coastal development. Improved habitat protection within the ocean, estuaries, and rivers will help rebuild and maintain a variety fish stocks such as cod, haddock, flounders, striped bass, black sea bass, bluefish, sharks, and tuna, and will help enhance the recreational fisheries they support.

**Deliverable ►►** EFH Consultations with Federal agencies.

**Timing ►►** Ongoing

## GOAL 2: Improve Recreational Catch, Effort, and Status Data

**Objective** ► Provide a more timely and efficient reporting system to party/charter vessels.

**Project 1** ► **Electronic logbook reporting by for-hire vessels (NERO Lead)**

An optional program for electronic logbook reporting by for-hire vessels in the Northeast multispecies fishery has recently been partially brought online so that for-hire vessels can file “did-not-fish” trip reports. NERO is working to expand the capability of the program to accept electronic fishing trip reports for all trips by for-hire vessels. Weekly logbook reporting is a requirement for all commercial vessels, including party and charter boats, fishing under a Northeast Multispecies Fishing Permit. The paper logbook reporting system is a time-consuming weekly paper fill-in and mail-in requirement. A new optional electronic reporting mechanism has been developed to reduce the physical reporting burden for vessels, and increase the timeliness of reporting. Electronic reporting in the party/charter fishery will help ensure that the data collected are timely and fully used.

**Deliverable** ► Electronic logbook reporting by for-hire vessels in the Northeast multispecies fishery.

**Timing** ► The first phase for this program was implemented in 2011 for the for-hire vessels with multispecies permits, who can now file weekly “did-not-fish” reports electronically through the new Northeast Region Fish-on-Line electronic reporting system. The option to report all multispecies trips through Fish-on-Line will be made available to for-hire vessels before the end of 2012.

**Objective** ► Design a project that will involve party/charter vessels in cooperative research.

**Project 1** ► **Workshop on fixed-gear survey techniques and the potential to conduct a cooperative research party/charter marine recreational based survey (NEFSC Lead)**

Stock assessments typically use abundance estimates derived from fishery-independent surveys. Most of these surveys use mobile commercial fishing gear, such as otter trawls. However, many species are not readily caught by mobile fishing gear, and many habitats are not amenable to trawl survey techniques. Marine recreational anglers fishing from party and/or charter vessels may be a promising source of survey information. Along the U.S. West Coast, hook-and-line surveys for bocaccio rockfish have been conducted by NMFS, and a recent study ([www.elsevier.com/locate/fisheries](http://www.elsevier.com/locate/fisheries)) presented survey field methods and analytical processes of a survey that uses fishing gear similar to that used by many recreational anglers participating in near-shore or off-shore recreational charter cruises. The NEFSC and its Northeast Cooperative Research Program (NCRP) convened a workshop on July 12 and 13, 2011, to explore fixed-gear survey techniques and the potential to conduct a party/charter marine recreational based survey. The workshop results will be used in a guidance document to help develop standardized fishery-independent recreational surveys in the Gulf of Maine, southern New England, and Mid-Atlantic regions. Identification of survey methods; a list of primary species to target; spatial and temporal sampling frames; and collaborative processes among party/charter industry, NMFS scientists, and academic or research institutions were discussed. Funding mechanisms were also explored. Any resulting recommendations on how the NCRP can be used to supplement and improve collection of recreational fisheries information through the NMFS Marine Recreational Information Program (MRIP) will be forwarded to NMFS program managers and recreational fisheries leaders.

**Deliverable** ▶▶ Guidance on the use of party and/or charter vessels in marine recreational fishery-independent surveys.

**Timing** ▶▶ The workshop was held in Narragansett, Rhode Island, on July 12-13, 2011, to produce a guidance document in late 2011.

**Objective** ▶▶ **Keep users of MRIP data informed of program updates and changes.**

**Project 1** ▶▶ **Northeast MRIP User Group (NERO and NEFSC)**

The NERO Recreational Fisheries Coordinator will organize and host a semi-annual Northeast Recreational Data Users Group (Recreational Data Group) conference call/webinar for state, Council, NEFSC, and NERO personnel who use MRIP data. With staff from the NMFS Office of Science and Technology, the group will address recent implementations of MRIP initiatives, such as the implementation of improved estimation procedures, changes to field surveys, angler registry implementation, coordination of MRIP for-hire survey and the Northeast Party/Charterboat logbook program, and information exchange on the Northeast Research Set-Aside Program and MRIP for-hire survey activities. The group will discuss the coordination of MRIP and Regional programs that collect information on recreational fishing and provide feedback to MRIP and Regional management on how well these activities support the Region's ability to manage recreational fisheries.

**Deliverable** ▶▶ Semi-annual information on MRIP to Northeast MRIP data users and advice to MRIP program managers on the implications of MRIP actions.

**Timing** ▶▶ The Northeast MRIP Users Group has met several times since 2009. The goal for the next few years, because MRIP and the Region are in the process of implementing a number of new initiatives for collecting recreational fisheries information, is to have a spring and fall meeting each year. The next meeting is planned for fall 2011.

**Objective** ▶▶ **Provide advice and information on data needs for the management of Federal recreational fishing programs.**

**Project 1** ▶▶ **Atlantic Coast Cooperative Statistics Program (ACCSP) Recreational Fisheries Technical Committee (NERO and NEFSC)**

Participate on the Recreational Fisheries Technical Committee, an Atlantic Coast-wide committee of state, Council, and Federal representatives who review and make recommendations on adjustments and improvements to Atlantic Coast recreational fisheries data collection programs. The ACCSP is a comprehensive state/Federal fisheries data collection body. The activities of the group ensure that local perspectives on recreational fisheries programs are taken into account when planning coast-wide data collection programs, and provide for a strong state/Federal dialog when designing programs to collect information on recreational fisheries.

**Deliverable** ▶▶ Recommendations to the ACCSP Recreational Fisheries Technical Committee.

**Timing** ▶▶ This is an ongoing activity.

**Objective** ▶▶ **Provide the scientific information necessary to assess and manage recreational fish stocks.**

**Project 1** ▶▶ **Survey and research to understand the biology and stock dynamics of important species supporting marine recreational fisheries (NEFSC Lead)**

The NEFSC collects baseline data and biological information, and conducts research on recreational fish species using numerous methods, such as trawl surveys, Apex Predator



Program, cooperative research, and the marine ecosystem program. These methods provide information useful to the management of many important recreational fish species such as tuna, sharks, striped bass, bluefish, cod, haddock, flounders, black sea bass, Atlantic herring, Atlantic mackerel, butterfish, and squid. This baseline information forms the basis for stock assessments and provides other biological information used to manage these species at sustainable levels, and thus maintain the recreational fishing opportunities they support.

**Deliverable** ▶▶ Baseline data and biological reports on recreational species.

**Timing** ▶▶ This is a core ongoing activity of the NEFSC, with numerous activities carried out and reports issued throughout each year.

**Objective** ▶▶ **Produce accurate stock status assessments for recreational fish stocks.**

**Project 1** ▶▶ **Conduct improved stock assessments for black sea bass, Gulf of Maine cod, and three stocks of winter flounder (NEFSC Lead)**

Black sea bass, cod, and winter flounder support important Northeast recreational fisheries. The NEFSC will collect the latest information on black sea bass; Gulf of Maine cod; and Georges Bank, Gulf of Maine, and Southern New England winter flounder and, using the best scientific information available, conduct new peer-reviewed stock assessments for these five stocks. The resulting information for black sea bass will be provided to the Mid-Atlantic Council, and the Gulf of Maine cod and winter flounder information will be provided to the New England Council for use in the development of fishery management actions. The results will also be published, and provided to the NERO and NMFS Headquarters for use in agency stock status decisions and reports. New assessments for these species will help sustain fisheries, prevent overfishing, and maintain fishing opportunities.

**Deliverable** ▶▶ Improved stock assessments and stock status reports for black sea bass, Gulf of Maine cod, and winter flounder.

**Timing** ▶▶ Provide the winter flounder and new black sea bass assessment information in late 2011, and the new Gulf of Maine cod information in 2012.

**Objective** ▶▶ **Give priority to conducting stock assessments on the recreational fish stocks with the most important immediate needs.**

**Project 1** ▶▶ **Prioritization of stock assessments for important recreational fish stocks (NERO and NEFSC)**

NERO and NEFSC will coordinate priority-setting for stock assessments for recreational fish stocks and other key stocks by participating in the bi-annual meetings of the Northeast Coordinating Council (NRCC), made up of leadership members from NERO, NEFSC, Commission, and Councils. Priority-setting of stock assessments among Northeast fisheries management groups will ensure that recreational fish stocks with the most urgent need for new assessment information will be given full consideration, and will have the best available information applied to their management. Recreational stocks recently prioritized for assessments are three winter flounder stocks (currently undergoing the final stages of new stock assessment work), black sea bass, Gulf of Maine cod, and Georges Bank cod.

**Deliverable** ▶▶ Stock assessments for important recreational fish stocks.

**Timing** ▶▶ Stock assessment schedules and priorities are reviewed twice a year by the NRCC. The next NRCC meeting is planned for the October 2011.

### **GOAL 3: Improve Social and Economic Data on Recreational Fisheries**

**Objective** ▶ Collection of accurate and comprehensive information on the value of marine recreational fisheries.

**Project 1** ▶ 2011 Angler Expenditure Survey

This survey is currently underway in the Northeast and across the rest of the Nation. This is the third time we have administered a detailed marine angler expenditure survey in the Northeast. Results of the first two surveys in 1998 and 2006 are available online at [http://www.st.nmfs.noaa.gov/st5/RecFishEcon\\_pubs.html](http://www.st.nmfs.noaa.gov/st5/RecFishEcon_pubs.html). The primary purpose of this survey is to evaluate state-level estimates of angler expenditures and the financial impacts (direct, indirect, and induced) of the expenditures in each region and nationally. The resulting expenditure and impact estimates provide the foundation for most of the economic assessments completed by NMFS economists across the Nation.

**Deliverable** ▶ Provide survey design and survey data analysis to gain greater understanding of marine recreational fishing economic contributions to society.

**Timing** ▶ Survey design and data collection will take place in 2011, and data analysis will take place in 2012. The final report will be produced in 2012.

**Objective** ▶ Obtain improved economic information on party/charter recreational fishing boats.

**Project 1** ▶ For-Hire Cost/Earnings Survey in the Northeast Region (NEFSC Project)

The NEFSC designed a voluntary survey to collect cost/earnings data from the party/charter fishing vessels and is responsible for project management and oversight. Personal interviews were conducted to collect annual trip and fixed-cost expenditures, business structure information, annual effort data, demographic data, and limited attitudinal information from for-hire owners operating out of New England and the Mid-Atlantic. NMFS is required by law to examine the economic impacts of proposed fishery policies. Currently, little information is available about the business structure, costs, and returns of for-hire fishing businesses in the Northeast region. This effort should help NMFS economists at the NEFSC and Council staff economists to determine the importance of this industry to the Northeast region's economy and to adequately address the economic impacts of proposed management actions on this industry.

**Deliverable** ▶ Report on cost/earnings for Northeast party/charter recreational fishing boats for use by the Councils in economic evaluations of recreational fisheries.

**Timing** ▶ This survey began in January 2011 and was completed in August 2011. Northeast Region Recreational Fisheries Coordinators will begin disseminating results in fall 2011.

**Objective** ▶ Obtain improved economic information on the recreational groundfish fishery.

**Project 1** ▶ Valuation and Economic Impact Study of Recreational Groundfish Anglers in the Northeast Region (NEFSC Lead).

This study is based on data collected through a NMFS Headquarters-funded project in 2009. A "respondents choice" experimental mail survey was conducted as an add-on to the Marine Recreational Fisheries Statistics (MRFSS) survey from Maine through New Jersey in 2009 and 2010. Following the data collection program, a bio-economic model of recreational angling in the Northeast groundfish fishery was constructed to quantify the effects of various regulatory scenarios on angler effort, catch, expenditures, and welfare in the Northeast. A regional input-output model also was constructed to examine the impact of alternative regulatory scenarios on the wider regional economy (jobs, income, and sales). These models

will be used in future economic assessments of changes in recreational management measures for groundfish.

**Deliverable** ▶▶ Models will be used in future economic assessments of changes in recreational management measures for Northeast groundfish.

**Timing** ▶▶ Completed models are expected by the end of 2011.

**Objective** ▶▶ **Provide economic information on the recreational fishery to allow for informed management decisions.**

**Project 1** ▶▶ **Valuation and Economic Impact Study of Recreational Summer Flounder, Black Sea Bass, and Scup Anglers in the Northeast Region (NEFSC Lead)**

This study is similar to the above groundfish study, but will focus on summer flounder, black sea bass, and scup. The project was funded by Headquarters in 2010 and the angler data are still being collected in the field during FY 2011. Slight changes to the respondents choice experimental survey, based on the groundfish survey, were made, but the same type of bio-economic model will be constructed to estimate the effects of regulatory changes on total angler effort (i.e., number of trips taken by anglers), catch (number of fish that will be kept and released), expenditures (total costs of angler purchases), and welfare (willingness to pay and consumer surplus).

**Deliverable** ▶▶ An economic model to estimate the effects of regulatory changes on total angler effort for summer flounder, black sea bass, and scup fisheries.

**Timing** ▶▶ Completed models are expected by the end of FY 2011.

**Objective** ▶▶ **Provide for an accurate and precise recreational use survey.**

**Project 1** ▶▶ **2011/2012 National Marine Recreational Use Survey (NEFSC Lead)**

NEFSC is working closely with NMFS Headquarters to lay the groundwork for this survey. Funded by Headquarters, this large and comprehensive survey will be conducted across the Nation beginning in 2012. The purpose is to collect data for quantifying expenditures on ocean-dependent recreational activities in the United States, particularly those activities that interact with marine resources falling within the scope of NOAA's public trust responsibilities. Ocean-dependent recreational activities include many activities besides recreational fishing, such as boating, wildlife watching, swimming, beach activities, kayaking, snorkeling, and scuba diving. The economic information provided from the survey will help inform fishery managers about ocean-related recreational expenditure patterns and contribute to a better understanding of public participation in these activities. The data collected may also be useful for marine spatial planning. Measures of economic performance that may be supported by this data collection include: (1) contribution to net national benefits derived from marine recreational sources; (2) contribution to income groups in industries that support ocean-dependent recreational activities; and (3) regional economic impacts (income and employment).

**Deliverable** ▶▶ Contribute expertise to the design of a National Marine Recreational Use Survey to improve accuracy and precision on estimates of recreational fishing parameters.

**Timing** ▶▶ Input and consultations with Headquarters on the design and implementation of the survey will continue through 2011 and 2012.

**Objective** ▶ Estimation of the “true” value of marine saltwater licenses in Massachusetts.

**Project 1** ▶ Measuring the Economic Value of Saltwater Fishing Licenses in Massachusetts (NEFSC Lead)

This study was recently funded by NMFS Headquarters. It was designed by the NEFSC, who will provide technical monitoring for the national survey. Collection of saltwater angler expenditure information is taking place during 2011 in every U.S. coastal state. The data from the Massachusetts study will help NOAA economists estimate how much people value the opportunity to go saltwater fishing in each coastal state in the Nation. The results of the survey should shed light on the likely “true” value of marine saltwater licenses in Massachusetts and provide data for other researchers to gain further insights into the accuracy of estimating recreation values.

**Deliverable** ▶ Report estimating the value of marine saltwater licenses in Massachusetts.

**Timing** ▶ Project start-up work began in 2011, and the project will be completed in 2012. Northeast Regional Recreational Fishing Coordinators will assist in outreach and dissemination of results.

#### **Goal 4: Improve Communication**

**Objective** ▶ Direct interaction of NERO/NEFSC leadership with the recreational fisheries community.

**Project 1** ▶ Northeast Region annual recreational fisheries forum (NERO Lead)

NERO will host an annual region-wide recreational fisheries forum (coordinated by the Northeast Recreational Fisheries Coordinator) where senior personnel will discuss recreational fisheries issues with representatives from the Northeast recreational fisheries community. Preferably, the forum will be held in conjunction with one of the Council or Commission meetings. A Recreational Forum Steering Committee will be formed to set up the forum and seek input on the forum’s agenda from the recreational fishing community.

**Deliverable** ▶ Annual Northeast recreational fisheries forum.

**Timing** ▶ Formation of the Steering Committee and planning for the forum will start in FY 2011, and the first forum will be held in FY 2012.

**Objective** ▶ Obtain direct sub-regional feedback on the Action Plan.

**Project 1** ▶ Sub-regional Northeast Region recreational fisheries information meetings (NERO Lead)

In addition to an annual recreational fisheries forum, the Northeast Recreational Fishing Coordinator will organize two sub-regional fisheries information meetings (preferably held at recreational fishing organization events or aligned with fisheries management meetings). These meetings will focus on gathering feedback from the recreational fisheries community on the Action Plan and other current sub-regional recreational fishing issues of concern.

**Deliverable** ▶ One meeting will be held in the New England area and the other in the Mid-Atlantic area.

**Timing** ▶ Planning for the meetings will take place in 2011, and the meetings will be held during the first half of 2012.

**Objective** ▶ Improve awareness and understanding of NOAA decisions and activities affecting recreational fishing through web-based information.

**Project 1** ▶ Development of recreational fishing web pages (NERO and NEFSC)

Although NERO and NEFSC post many items of interest to the recreational fishing community on their web pages, these items are not always found by members of the recreational fishing community. An easily recognizable recreational fishing site will be set up for NERO and NEFSC, with a direct link to the NMFS Headquarters recreational fishing webpage.

**Deliverable** ▶▶ Recreational fishing site on the web pages of NERO and NEFSC.

**Timing** ▶▶ Recreational web pages will be set up by the end of FY 2011.

**Objective** ▶▶ **Generate goodwill within the recreational fishing community by improving information flow to recreational fishing associations and clubs.**

**Project 1** ▶▶ **E-mail list of Northeast recreational fishing associations and clubs (NERO Lead)**

In FY 2011, NERO compiled an e-mail list of recreational fishing associations and clubs having an interest in the Region's management actions, and the Regional Recreational Fisheries Coordinator sends e-mails to them on key management actions likely to affect the recreational fishing community. The list will be updated and made more comprehensive, and e-mail notices to organizations about recreational fisheries actions will continue.

**Deliverable** ▶▶ Build and maintain a comprehensive e-mail list of Northeast recreational fishing associations and clubs.

**Timing** ▶▶ E-mail activity will continue in FY 2011 and FY 2012. The e-mail list will be updated at least every 6-months.

**Objective** ▶▶ **Direct communication with the fishing and boating public.**

**Project 1** ▶▶ **Special outreach at recreational fishing/boating events (NERO and NEFSC)**

NERO and NEFSC will cooperatively host a booth at the New England Saltwater Fishing Show and at another fishing/boating event each year (coordinated by the Northeast Recreational Fisheries Coordinators) to provide information on NOAA services and actions. Fisheries regulations, protected species programs, habitat protection activities, and NOAA weather and science information of interest to saltwater boaters and fishermen will be highlighted. In addition, NERO will partner with other NOAA offices and state agencies to conduct outreach efforts on the National Saltwater Angler Registry and regional NOAA programs, and to promote ocean literacy and ethical angling at fishing and boating shows and other recreational fishing-related events in New England and the Mid-Atlantic.

**Deliverable** ▶▶ Outreach activities at recreational fishing events.

**Timing** ▶▶ In 2011, the NERO hosted a booth at the New England Saltwater Fishing Show, partnered with the Commonwealth of Massachusetts on outreach activities at the New England Outdoor Exposition and the Boston Boat Show, participated with the USFWS on a family fishing day event, and conducted outreach on MRIP with several fishing clubs/associations. Similar activities are planned for fall 2011 through 2012.

**Objective** ▶▶ **Facilitate information flow on recreational fishing data collection programs.**

**Project 1** ▶▶ **Support MRIP outreach and information activities within the Northeast Region (NERO Lead)**

NERO (Recreational Fisheries Coordinator) will serve as a resource to the MRIP and the public about the requirements of the National Saltwater Angler Registry and other MRIP activities affecting Northeast recreational fisheries. Many changes to state licensing of saltwater anglers and Federal requirements for the angler registry took place in 2011, and improvements to how recreational anglers will be contacted to collect recreational fisheries

information are currently being implemented. The Regional Recreational Fisheries Coordinator will provide information to Northeast anglers on the Saltwater Angler Registry and its relationship to recent state marine licensing requirements, and also will provide feedback to MRIP on its Northeast activities.

**Deliverable** ▶▶ Provide information to the public on the National Saltwater Angler Registry and other MRIP program actions, with feedback to MRIP managers.

**Timing** ▶▶ This is an ongoing process. In FY 2011 the Regional Recreational Fisheries Coordinator routinely provided: (1) information to the public on the requirements of the National Saltwater Angler Registry related to new state marine fishing licensing/registry programs, (2) MRIP outreach materials at fishing shows, and (3) feedback to MRIP personnel on MRIP website and outreach materials. Similar activities are planned for FY 2012.

**Objective** ▶▶ **Develop Habitat Information Pamphlet (NERO Lead)**

**Project 1** ▶▶ **Inform the recreational fisheries community on the importance of protecting marine habitat to maintain healthy fisheries.**

NERO will develop a Habitat Information Pamphlet, geared toward recreational fishing interests, that will describe the importance of protecting habitat to maintain healthy fisheries, provide information on programs to protect and conserve marine habitat, and provide information and advice to the recreational fishing community on how to interact with appropriate agencies on habitat conservation issues.

**Deliverable** ▶▶ Habitat pamphlet or fact sheet.

**Timing** ▶▶ The pamphlet will be completed in late 2011, and will be distributed to the recreational fishing community in 2012.

**Objective** ▶▶ **Inform the recreational fisheries community about the Atlantic Coastal Fish Habitat Partnership (ACFHP).**

**Project** ▶▶ **Atlantic Coastal Fish Habitat Partnership Outreach (NERO Lead)**

Work with the ACFHP Steering Committee to distribute the ACFHP Strategic Plan, which describes the goals and objectives of the partnership to protect and restore estuarine fish habitat along the entire East Coast. Also, work with the ACFHP Steering Committee to better involve recreational fishing organizations and include them as new ACFHP partners.

**Deliverable** ▶▶ Distribution of ACFHP strategic plan to recreational fishing groups.

**Timing** ▶▶ Strategic plan will be distributed to recreational fishing organizations in early FY 2012. Discussions with recreational fishing organizations to join ACFHP will begin in FY 2012.

**Objective** ▶▶ **Inform the recreational fishery community about marine aquaculture issues.**

**Project 1** ▶▶ **Educate and solicit input from recreational fishing groups on aquaculture (NERO Lead)**

Inform recreational fishing organizations on the upcoming NOAA and DOC aquaculture policy roll-outs, and solicit input on policy and regulation development.

**Deliverable** ▶▶ Increased information to the recreational fishing community on the possibilities and challenges posed by aquaculture development for the recreational fishing industry.

**Timing** ▶▶ This is an ongoing process that will improve communication between the NOAA Aquaculture Program and the recreational fishing community.

**Objective** ▶ Provide information to the recreational fisheries community on how to identify and release sturgeon.

**Project 1** ▶ Sturgeon identification and release brochure (NERO Lead)

Shortnose sturgeon is a protected species under the Endangered Species Act (ESA), and Atlantic sturgeon has been proposed for ESA protection in the Gulf of Maine, Chesapeake Bay, and New York Bight. These species may be encountered during recreational fishing activities and, if caught, must be handled carefully and released quickly. A guide to identifying both of these species, and instructions on proper handling and release of hook-and-line caught sturgeon, will be developed and posted on the NERO recreational fishing website, and distributed to the recreational fishing community at boating and fishing shows and other outreach events. Proper identification and release of these protected species will reduce inadvertent fishing mortality and may allow recreational fisheries to continue in these areas.

**Deliverable** ▶ Sturgeon identification and release brochure for recreational fishermen.

**Timing** ▶ Development of the guide will start in fall 2011, and the guide will be finalized for distribution at 2012 winter/spring fishing shows and outreach events.

## Goal 5: Institutional Orientation

**Objective** ▶ NERO/NEFSC personnel to be aware of the importance of the Action Plan.

**Project 1** ▶ Annual In-house Recreational Fishing Action Plan Coordination (NERO and NEFSC)

The NERO and NEFSC Recreational Fisheries Coordinators will conduct annual in-house planning and coordination meetings with their respective divisions and offices to review the Action Plan deliverables and activities, and explore ways to improve services to the recreational fishing community.

**Deliverable** ▶ Improved internal awareness of recreational fisheries issues and priorities.

**Timing** ▶ The first briefings will take place early in each fiscal year.

**Objective** ▶ Elevate the awareness of recreation fishing issues among NERO personnel.

**Project 1** ▶ Institutionalize lectures on recreational fishing issues (NERO Lead)

The NERO Recreational Fisheries Coordinator will annually recruit a speaker and/or develop one presentation/lecture on a key recreational issues/program for one of the monthly in-house lectures to regional personnel. This lecture will also be offered to interested recreational fishing groups, clubs, or associations. NERO will also host one annual speaker on a recreational fishing issue as part of the Region's evening public lecture series.

**Deliverable** ▶ Annual in-house lecture and annual invited public speaker on recreational fishing issues.

**Timing** ▶ An in-house lecture on the changes to the collection of recreational fishing data through MRIP and their implications for Northeast recreational fisheries will be completed in FY 2011. A speaker from the Commission gave a public evening presentation on striped bass history and management at NERO in July 2011. Similar events will be planned for FY 2012.

**Objective** ▶ Improve communication between the USFWS and the NERO/NEFSC regarding marine fisheries grant funding programs.

**Project 1** ▶ Northeast Region NOAA Fisheries and USFWS Northeast grants workshop (NERO Lead)

NERO will develop a NMFS/USFWS Grants Workshop Steering Committee that will organize a biennial NMFS/USFWS Northeast grants workshop to discuss and review USFWS and NMFS Northeast fisheries grant program priorities. Some workshop discussions will address recent USFWS policies using USFWS Dingell-Johnson Sport Fish Restoration funds for artificial reefs, and provide an update on the Action Plan.

**Deliverable** ▶ Northeast grants coordination between USFWS and NMFS, with information exchange on recreational fisheries initiatives and policies.

**Timing** ▶ The Steering Committee planned and held a grants workshop in August 2011. Information on USFWS grants and NOAA grants will be made available to the recreational fisheries community through links on the NERO recreational fishing web page in 2012.

**Objective** ▶ Improve the understanding of the federal marine fishery management process by the recreational fishing community.

**Project 1** ▶ Presentation on Magnuson-Stevens Act fishery management with guidance for recreational fishing interests (NERO Lead)

The NERO Recreational Fisheries Coordinator will develop a presentation on the Northeast federal marine fishery management process. It will include advice on how those interested in recreational fishing issues can get involved with the Councils, Commission, and federal fishery management process.

**Deliverable** ▶ Presentation on the Northeast federal marine fishery management process from the recreational fishing perspective.

**Timing** ▶ A presentation given at the annual American Fisheries Society meeting in September 2011 will be offered to recreational fishery clubs and associations, and to new Council and Commission recreational fisheries members and advisors in 2012.

**Objective** ▶ Ensure that the NERO/NEFSC strategic planning process takes into account the Action Plan's goals and action items.

**Project 1** ▶ Align the Regional Recreational Fisheries Action Plan with the NOAA Fisheries strategic planning process. (NERO and NEFSC)

NERO and NEFSC Recreational Fisheries Coordinators will annually review the Action Plan's five major goals and action items, and, where applicable, work with regional strategic planning personnel to incorporate the goals and action items into the NMFS strategic planning process.

**Timing** ▶ The first review of the Action Plan will take place in early FY 2012.

**Objective** ▶ Create opportunities for the recreational fishing community to participate in cooperative research program projects.

**Project 1** ▶ Encourage cooperative research & monitoring on recreational species (NEFSC Lead)

The NEFSC's cooperative research program will work with the Councils and the Commission to include recreational fishing research needs in appropriate cooperative research programs. For example, the Mid-Atlantic Research Set-Aside (RSA) Program often uses fishery allocations originally available to recreational and commercial fleets for high-priority research



related to management. Since a number of RSA projects harvest recreational species, projects designed to address recreational fisheries issues should be considered.

**Deliverable** ▶▶ Consideration of recreational fishing projects in cooperative research programs.

**Timing** ▶▶ This is an ongoing process.

**Objective** ▶▶ **Inform other NOAA entities of the Action Plan and partner with them to provide information on NOAA services and products to the recreational fishing community.**

**Project 1** ▶▶ **Coordination of recreational fishing support activities with other NOAA entities (NERO Lead)**

The NERO Recreational Fisheries Coordinator will inform representatives from NOAA's Northeast offices and programs on the Northeast Recreational Fisheries Action Plan and recent fisheries management and MRIP activities. Also, partnerships with other NOAA groups will be formed to distribute NOAA materials (e.g., information on weather, nautical charts, the Stellwagen Bank Sanctuary) at recreational fishing and boating events.

**Deliverable** ▶▶ Information on recreational fisheries to other NOAA Offices and information on NOAA services and products to the recreational fishing and boating community.

**Timing** ▶▶ The Recreational Fisheries Action Plan will be distributed to NOAA's North Atlantic Regional Collaboration Team in late 2011, and collaboration with and distribution of materials to the recreational fishing community will be ongoing.

## Summary

This Action plan identifies regional activities to address the five major goals of the National Action Agenda. The Northeast Region and Science Center will be reviewing the Action Plan items with, and encouraging feedback from, our recreational fisheries constituents so that we can revise and improve the Action Plan in future years.

The Recreational Fisheries Coordinators for the Region are:

**Paul Perra** – Northeast Regional Office, Sustainable Fisheries Division, Gloucester, MA

**Earl Meredith** – Northeast Fisheries Science Center, Cooperative Research Program Gloucester, MA

The Regional Coordinators work closely with the NMFS National Policy Advisor for Recreational Fisheries to provide input and regional perspective on recreational fisheries issues of national interest.

The Coordinators attend key Regional leadership meetings, as appropriate, to help address recreational fisheries issues, and to seek input on a regular basis from the Region's recreational constituency, the Marine Fisheries Advisory Committee (and its Recreational Fisheries Subcommittee and Working Group members), and other recreational fishing groups interested in the Region's programs. They interact closely with Regional Division and/or Branch Chiefs when recreational issues arise, and conduct and coordinate outreach activities to the recreational fisheries community with regional outreach and communications personnel.

# Atlantic Highly Migratory Species

## Background on Atlantic HMS

The Secretary of Commerce manages Atlantic Highly Migratory Species (HMS), and has delegated that authority to NOAA's National Marine Fisheries Service (NMFS). The Atlantic HMS Management Division of NMFS manages Atlantic HMS, including tunas, sharks, swordfish and billfish. Atlantic HMS are managed under the dual authority of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the Atlantic Tunas Convention Act (ATCA). Management of HMS requires international cooperation given the migratory nature of the species.

The 2006 Consolidated Atlantic HMS Fishery Management Plan (FMP) was developed for the integrated management of HMS within the Atlantic Ocean (including the Caribbean Sea and Gulf of Mexico). The HMS Management Division oversees all aspects of recreational and commercial management, implements regulations, and initiates operational actions. This includes permitting, implementing quotas, supervising relevant fisheries, participating in enforcement activities, collecting data from recreational and commercial sectors, conducting outreach to constituents, and representing domestic interests in international management.

The HMS Management Division recognizes the importance of recreational fishing. HMS recreational fishing provides positive social experiences for recreational fishermen, and has significant positive economic impacts to coastal communities (e.g., angler expenditures, recreational charters, tournaments, and shore-side supporting businesses).

## Atlantic HMS Overview

The goal of improving recreational fishing opportunities is supported through management measures that protect the health of target stocks. Currently, recreational fishing for Atlantic HMS requires one of two vessel permits: HMS Angling or HMS Charter/Headboat. A third vessel permit, the Atlantic Tunas General category permit, allows for fishing under certain recreational limits only in registered HMS tournaments. While many HMS are overfished, the North Atlantic swordfish stock is fully rebuilt and the fishery is undergoing revitalization efforts by NMFS to encourage utilization of the stock within recreational and commercial sectors. NMFS has invested in the reporting infrastructure for tournaments and individuals targeting billfish, and continues to investigate mechanisms that improve the timeliness of landings reports. NMFS supports the collection of social and economic data to better understand recreational and commercial fisheries and improve fishery management. The Atlantic HMS Advisory Panel (AP)—which includes private anglers, charter/headboat operators, and tournament operators, among others—provides important ideas and feedback about HMS fishery management measures and strategies. The Atlantic HMS Management Division regularly seeks out the opinion of constituents to inform the decision-making process, distributes fisheries news bulletins via e-mail through Atlantic HMS News and the Atlantic HMS web page, and includes the recreational constituency in roll-out plans for relevant rulemakings. Development of this Atlantic HMS Recreational Action Plan included input from the Atlantic HMS AP and the Marine Fisheries Advisory Committee (MAFAC) Recreational Fisheries Working Group.

## Goals and Objectives

This Atlantic HMS Recreational Fishery Action Plan outlines goals and initial objectives for recreational fishery management and provides a framework for future Atlantic HMS recreational fishery management work.

### GOAL 1: Improve Recreational Fishing Opportunities

Management of HMS provides recreational fishing opportunities through the allocation of specific quotas or set-asides for the recreational fishery (e.g., bluefin tuna sub-quota management, a set-aside for the recreational fishery for blue and white marlin, swordfish incidental catch quotas, etc). These sub-quotas and allowances are established in the regulations, which ensure that access to these stocks is maintained and is legally defensible.

**Objective** ▶▶ Provide fair and/or equitable access to recreational Atlantic HMS fisheries as consistent with legal obligations, stock health, and the goals and objectives of relevant fishery management plans.

**Project 1** ▶▶ Atlantic HMS permits

Issue recreational Atlantic HMS permits to the public. The number of permits issued to the public may change as stock health fluctuates, but NMFS will always provide for fair access across stakeholder groups.

**Metric** ▶▶ Number of HMS Angling and HMS Charter/Headboat permits.

**Timing** ▶▶ Ongoing.

**Objective** ▶▶ Provide for, and improve where practical, recreational opportunities for Atlantic HMS through management practices that ensure healthy stocks are available to the fishery.

**Project 1** ▶▶ Ensure access to North Atlantic swordfish stocks through continued revitalization efforts for the North Atlantic Swordfish fishery.

These efforts include the cautious redevelopment of a sustainable fishery for North Atlantic swordfish using handgear and angling methodologies that result in minimal bycatch of protected resources and non-target species. A healthy stock increases availability of swordfish for recreational and commercial interests.

**Metric** ▶▶ Metric tons harvested

**Timing** ▶▶ Ongoing priority for HMS management.

**Project 2** ▶▶ Educate constituents about the inclusion of roundscale spearfish in the Atlantic HMS management unit with management measures identical to white marlin.

NMFS will assist anglers with species identification to distinguish roundscale spearfish from white marlin through the development of outreach materials and continued discussion with constituents. This action allowed recreational fishing opportunities to continue without interruption.

**Metric** ▶▶ Information about roundscale spearfish management measures distributed to anglers in compliance guides; mt harvested

**Timing** ▶▶ Roundscale spearfish were added to the management unit in 2010. Education of anglers is ongoing.

### Project 3 ►► ICCAT negotiations

To ensure reasonable numbers of marlin are available to U.S. fishermen, NMFS will continue to support the recreational billfish fishery by pursuing negotiations to maintain the U.S. allocation of northwest Atlantic blue and white marlin at annual ICCAT meetings. Only rod and reel gear may be used to harvest billfish, which provides and protects harvest opportunities for anglers across regions.

**Metric ►►** Individuals harvested

**Timing ►►** Ongoing

### Project 4 ►► Provide for recreational opportunities to catch Atlantic tunas—i.e., bluefin and BAYS (bigeye, albacore, yellowfin, and skipjack).

Tunas are extremely desirable sportfish to recreational anglers, and provide a high-value target for charter/headboat fisheries along the U.S. East Coast, in the Gulf of Mexico, and in U.S. Caribbean territories. NMFS issues permits to harvest BAYS tunas to anglers across regions. Anglers are not restricted to size or landing limits for albacore and skipjack tunas. Bigeye tuna have size limits, and yellowfin tuna have both size and landing limits to protect stock health. This action includes effective bluefin tuna sub-quota management. Sub-quota management ensures continued access for anglers to high-value bluefin tuna stocks across regions through modifications in size and retention limits.

**Metric ►►** Metric tons harvested

**Timing ►►** Ongoing

### Project 5 ►► Support recreational fishing opportunities to catch sharks.

Recreational fishing opportunities are provided for in HMS FMP. NMFS permits recreational anglers to harvest 18 species within the large coastal sharks, small coastal sharks, LCS, SCS, and pelagic shark complexes when stock health and regulations permit. Young sharks are protected from harvest through minimum size and bag limits, except for two species of shark having no size limits (bonnethead and Atlantic sharpnose).

**Metric ►►** Metric tons harvested

**Timing ►►** Ongoing

## GOAL 2: Improve Recreational Catch, Effort, and Status Data

Catch and effort information from recreational fisheries is vital for accurate stock assessments and for understanding changing trends in recreational fisheries. These data provide the basis for sound fishery management strategies.

### Objective ►► Implementation of Marine Recreational Information Program (MRIP) HMS Actions and Priorities

**Project 1 ►► Finalize MRIP recalculation of recreational catch and effort estimates, which will be used to produce improved estimates for stock assessments in support of management.**

**Metric ►►** New estimation roll-out to the public

**Timing ►►** January 2012

**Project 2** ▶▶ Finalize project results and reports for the HMS For-Hire Survey – Florida Pilot Study.

**Metric** ▶▶ Report completed June 2011 and available at:

<http://www.countmyfish.noaa.gov/projects/index.html>

**Timing** ▶▶ Pilot study completed in April 2011

**Project 3** ▶▶ Conduct a billfish catch card pilot program and HMS Angling phone survey in Puerto Rico.

**Metric** ▶▶ Completion of project and report anticipated 3rd quarter 2012

**Timing** ▶▶ Ongoing

**Project 4** ▶▶ Conduct Pilot Phase 1 of a Massachusetts Recreational Bluefin Tuna Landings Census (Design and Testing)

**Metric** ▶▶ Completion of project and report anticipated 2nd quarter 2013

**Timing** ▶▶ Project team is currently developing/designing, and the pilot will be implemented for the 2012 season.

**Project 5** ▶▶ Test for non-response bias in the Large Pelagics Telephone Survey.

**Metric** ▶▶ Completion of project and report anticipated 2nd quarter 2013

**Timing** ▶▶ Project team is currently developing survey design; pilot test will be implemented from June through October 2012.

**Project 6** ▶▶ Conduct for-hire electronic logbook studies in the Gulf of Mexico.

**Metric** ▶▶ To be determined

**Timing** ▶▶ Project still underway with testing in Texas and Florida

**Objective** ▶▶ Support the operation of Atlantic HMS tournaments and provide opportunities to obtain recreational catch and biological data on a variety of HMS species.

**Project 1** ▶▶ Administer Atlantic HMS tournament reporting.

**Metric** ▶▶ Number of tournament reports

**Timing** ▶▶ Ongoing.

**Project 2** ▶▶ Online Registration

Provide mechanisms for tournament operators to more quickly and efficiently register Atlantic HMS tournaments online. Tournament registries will be made available to the general public on the HMS webpage.

**Metric** ▶▶ Number of tournament registrants, length of time it takes to register the tournament online

**Timing** ▶▶ Ongoing.

**Objective** ▶▶ Facilitate quick reporting of catch information by anglers through internet & phone reporting

**Project 1** ▶▶ Promote live release of shortfin mako and collect data from the public on catch and release location through shortfin mako web page and Android application of live release maps.

Phase 1: Develop beta testing of shortfin mako webpage. Web page launched May 24, 2011.

Phase 2: Development and launch of Android application. Launched June 30, 2011.

Phase 3: Collect shortfin mako data and release locations and update maps.

**Metric** ▶▶ Number of hits on website, number of data submissions

**Timing** ▶▶ Ongoing

**Project 2** ▶▶ Maintain infrastructure for internet and phone reporting for billfish and swordfish.

**Metric** ▶▶ Number of reports

**Timing** ▶▶ Ongoing

**Objective** ▶▶ Improve timeliness of estimated landings from the Large Pelagic Survey (LPS) which will improve the availability of information for fishery management

**Project 1** ▶▶ Improve recreational bluefin tuna landings estimates by reducing the time between data collection and availability of preliminary estimates while preserving accuracy and precision.

**Metric** ▶▶ Time between interviews and preliminary estimate

**Timing** ▶▶ Starting in 2011, LPS preliminary estimates are produced monthly and available with a 1-month lag (previously estimates were produced bimonthly).

**Objective** ▶▶ Support stock assessments of HMS species to provide a better picture of stock health and improve management of the fishery for recreational and commercial uses

**Project 1** ▶▶ Participate in Southeast Data, Assessment, and Review (SEDAR) shark stock assessments and ICCAT assessments for other HMS.

**Metric** ▶▶ Completed stock assessments

**Timing** ▶▶ Ongoing

### GOAL 3: Improve Social and Economic Data on Recreational Fisheries

Social and economic information about recreational fisheries helps us better understand the value of recreational fisheries and benefits and impacts of fishery management measures.

**Objective** ▶▶ Explore the feasibility of updating the benchmark analyses used to analyze socio-economic impacts of rules on recreational and commercial fishing communities.

**Project 1** ▶▶ Identify funding opportunities for benchmark socio-economic analyses.

**Metric** ▶▶ Identification of potential funding sources

**Timing** ▶▶ Ongoing

**Objective** ▶▶ Collect updated social and economic data from recreational anglers.

**Project 1** ▶▶ Support 2011 National Marine Recreational Fishing Expenditure Survey.

**Metric** ▶▶ Completion of project and report

**Timing** ▶▶ Ongoing

**Objective** ▶▶ Collect social and economic data from Charter/Headboat owners/captains.

**Project 1** ▶▶ Complete For-Hire Cost & Earnings Survey (Mid-Atlantic and New England) data analysis and issue final report.

**Metric** ▶▶ Completion of project and report

**Timing** ▶▶ Data collection completed; final results anticipated 4th quarter 2011.

**Project 2** ▶ Conduct Decennial Economic Survey of For-Hire Boats in the Southeastern U.S.

**Metric** ▶ Completion of project and report

**Timing** ▶ Data collection completed; final results anticipated 4th quarter 2011.

#### **Goal 4: Improve Communication**

The Atlantic HMS Management Division actively seeks out constituent feedback on regulatory activities, and has adopted digital and face-to-face mechanisms to receive comments for the public record. NMFS is represented at many tournaments and events. HMS relies on its Advisory Panel (AP) as a major vehicle of communication with recreational, commercial, and environmental constituencies (and for advice on the changing nature of constituent communities). Each sector must be adequately represented, and the intent is to have a group that, as a whole, reflects an appropriate and equitable balance and mix of interests given the responsibilities of the AP. NMFS consults with, and considers the comments and views, of the AP when preparing and implementing Fishery Management Plans (FMPs) or FMP amendments for Atlantic tunas, swordfish, billfish, and sharks.

**Objective** ▶ Increase constituent awareness and understanding of Agency actions.

**Project 1** ▶ Regularly update and distribute HMS News, Recreational Compliance Guide, Bluefin Tuna Guide, and a shark identification placard for recreational fisheries stakeholders.

**Metric** ▶ Number of downloads/mailings/printed per year

**Timing** ▶ Ongoing

**Project 2** ▶ Include recreational information on the HMS webpage.

**Metric** ▶ Completed webpage.

**Timing** ▶ To be determined

**Objective** ▶ Conduct on-the-ground communication efforts with constituents.

**Project 1** ▶ Conduct outreach at boating, recreational, and species-specific events.

**Metric** ▶ Number of outreach events attended by an NMFS representative

**Timing** ▶ Ongoing

**Project 2** ▶ Identify constituents and constituent groups through Atlantic HMS tournament registration for distribution of outreach materials; facilitate biological data collection on landed HMS; and provide on-the-ground outreach to anglers.

**Metric** ▶ Number of registered tournaments, number of tournaments submitting landings reports, number of tournaments sampled

**Timing** ▶ Ongoing

**Objective** ▶ Communicate information regarding major NOAA initiatives with constituents, tournaments, and various associations that represent fishermen.

**Project 1** ▶ Collaborative outreach

Share information with our constituents about public participation opportunities and Coastal and Marine Spatial Planning (CMSP) activities. HMS will explore collaborative opportunities with the MRIP Communications and Education Team to increase awareness of the projects in the fishing community.



**Metric** ▶▶ Effort made to distribute information to constituents, tournaments, and through various fishing organizations.

**Timing** ▶▶ Ongoing

### Goal 5: Institutional Orientation

Improving institutional orientation toward recreational fisheries includes the integration of recreational fishing principles and values into NMFS' mission and culture. The HMS management division evaluates the effects of rulemakings on both recreational and commercial fisheries, strives to maintain balanced representation on the Atlantic HMS AP, and includes key members of the recreational fishing community in roll-out plans for rulemakings. The Atlantic HMS Management Division will continue to seek input from the recreational fishing community on management activities, and will use annual updates on the HMS Action Plan to further engage leadership and constituents in enhancing institutional orientation toward recreational fishing sectors.

#### **Objective** ▶▶ **Balanced recreational and commercial representation on the Atlantic HMS Advisory Panel (AP)**

**Project 1** ▶▶ **Ensure balanced constituent representation.**

**Metric** ▶▶ Number of individuals in each sector on the AP

**Timing** ▶▶ Ongoing

**Project 2** ▶▶ **Include recreational information on the HMS webpage.**

**Metric** ▶▶ Completed webpage.

**Timing** ▶▶ To be determined

#### **Objective** ▶▶ **Improve institutional awareness**

**Project 1** ▶▶ **Annual in-house planning sessions by the HMS recreational action plan coordination team. This will include soliciting feedback from HMS leadership and HMS team members who interact regularly with constituents.**

**Metric** ▶▶ Annual updates to the Atlantic HMS Action Plan

**Timing** ▶▶ This will be completed once each year prior to the AP meeting in which the Action Plan will be discussed.

**Project 2** ▶▶ **Briefing and discussion on the Atlantic HMS Recreational Action Plan and activities with the Atlantic HMS AP during public AP meetings, as appropriate.**

**Metric** ▶▶ Public briefing / presentation

**Timing** ▶▶ Ongoing

**Project 3** ▶▶ **Atlantic HMS Regional Coordinators will coordinate with leadership within NMFS Office of Sustainable Fisheries to evaluate the Atlantic HMS Action Plan on an annual basis. This includes regular meetings with the MAFAC working group for feedback.**

**Metric** ▶▶ Briefing / presentation for NMFS OSF leadership

**Timing** ▶▶ Ongoing (annually).

## Summary

The Atlantic HMS Management Division will continue to integrate recreational considerations into the management of tunas, sharks, swordfish, and billfish and provide for recreational fishing opportunities. The Atlantic HMS Management Division recognizes the need for balanced communication, decision making, and AP panel representation across sectors. The HMS Management Division will continue to actively share information with stakeholders through a variety of mechanisms, and will continue to seek the input of all sectors. The actions listed above will enable progress in achieving the plan's objectives and goals for Atlantic HMS recreational fisheries in keeping with the NMFS Recreational Fishery Action Agenda. Dates listed above indicate expected timeframes for each action. Input about this plan and its execution will be solicited from the Atlantic HMS AP. Outcomes from the actions above will enable the Atlantic HMS Management Division to better address the needs of the Atlantic HMS recreational fishery.

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