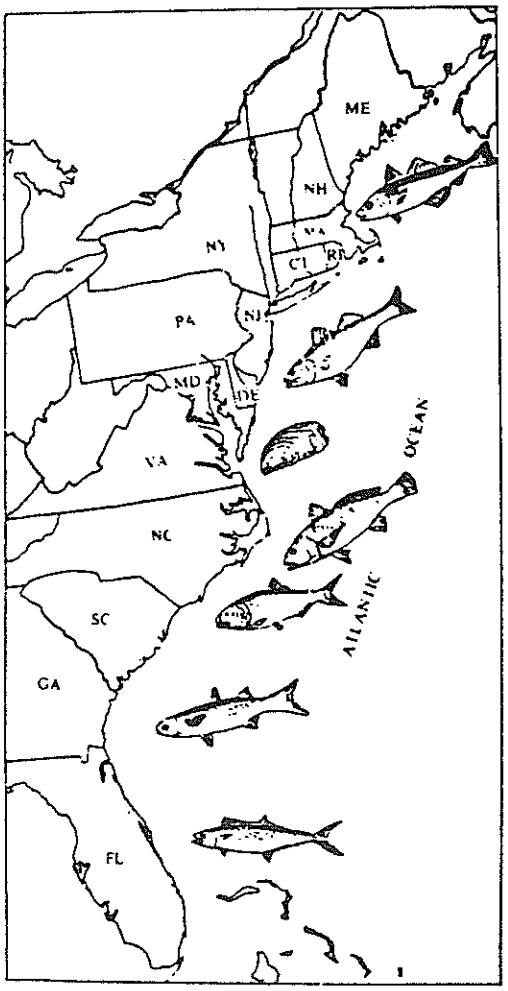
Special Report No. 12
of the

ATLANTIC STATES MARINE FISHERIES COMMISSION



MARINE RECREATIONAL FISHERIES PROGRAMS OF THE ATLANTIC COAST

June 1988

This project was conducted in cooperation with the U.S. Fish and Wildlife Service, and funded by Federal Aid in Sport Fish Restoration administrative funds.

MARINE RECREATIONAL FISHERIES PROGRAMS

OF THE

ATLANTIC COAST

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June 1988

PREFACE

The Sport Fish Restoration Program of the Atlantic States Marine Fisheries Commission

The Wallop-Breaux Amendments to the Federal Aid in Sport Fish Restoration Program are some of the most significant measures in the history of sport fishery development and management. The Amendments have led to a significant increase in funds that are dedicated to the improvement of sport fishing. With the help of Wallop-Breaux legislation, the Atlantic States Marine Fisheries Commission (ASMFC) has initiated a Sport Fish Restoration Program on "Cooperative Interstate Fishery Management in the Territorial Sea of the United States." The goal of the program is to coordinate and provide administrative support to the 15 east coast states in their efforts to conserve and enhance marine and anadromous sportfish, and to provide public use and benefits from these resources.

The ASMFC Sport Fish Restoration program involves a wide variety of fishery planning, assessment, enhancement, and evaluation activities. These activities are described in a series of Recreational Fisheries Reports which includes the present publication. For more information on ASMFC sport fish restoration projects, please contact Joseph McGurrin at the Atlantic States Marine Fisheries Commission, 1400 Sixteenth Street NW, Suite 310, Washington, DC 20036 (202) 387-5330.

TABLE OF CONTENTS

Preface i

Introduction 1

Overview of Recreational Fisheries Programs 2

Priority of Recreational Fisheries Issues 19

Table 1 21
(Ranking of Issues of Importance)

Table 2 22
(Priority Listing of Issues of Importance by Member Organizations)

List of Recreational Fisheries Committee Members 23

ATLANTIC STATES MARINE FISHERIES COMMISSION
ATLANTIC STATES MARINE RECREATIONAL FISHERIES PROGRAMS

Introduction

In 1987, the Atlantic States Marine Fisheries Commission (ASMFC) and its member states formed an interstate Marine Recreational Fisheries Committee to address priority issues in recreational fishery research, development and management. Committee objectives include:

1) To provide a forum for continuing discussion of problems, issues, and opportunities relating to the conservation, management, and development of marine recreational fisheries;

2) To encourage full consideration of marine recreational fisheries issues and concerns in ASMFC programs;

3) To assist in coordination of state and federal recreational fisheries research, development, and management programs; and

4) To help secure the involvement and support of the marine recreational fishing community in ASMFC fisheries management programs.

As a start for meeting these objectives, the committee has compiled baseline information on existing recreational programs and activities. The result is the present reference document that provides an overview of existing east coast marine sport fisheries programs. In addition to the overview, the report includes a contact list of committee members as well as the results of a survey on priority issues for marine recreational fisheries programs. The survey results will be used to develop future interstate activities to improve recreational fisheries programs and projects.

Atlantic States Marine Fisheries Commission
Marine Recreational Fisheries Committee

AN OVERVIEW OF RECREATIONAL FISHERIES PROGRAMS

The Marine Recreational Fisheries (MRF) Committee held its first meeting in Norfolk, VA on April 13-14, 1987. To acquaint members of the committee on what was occurring in other states and federal agencies on a recreational basis, each member presented a brief outline of their respective recreational programs.

Maine

At the present time, the Maine Department of Marine Resources has no organizationally discrete MRF program. Species of major recreational significance include Atlantic salmon, rainbow smelt, striped bass, bluefish, Atlantic mackerel, groundfish, and to a lesser extent, American shad. With the exception of Atlantic salmon, limited current activities regarding marine recreational fisheries are carried out by the Division of Anadromous Fish. Atlantic salmon are managed by the Maine Atlantic Salmon Commission, of which the Commissioner of Marine Resources is one of five commissioners who formulate policy on Atlantic salmon management. Programs dealing with anadromous/marine recreational fisheries within the Anadromous Fish Division include:

1) Habitat protection/enhancement - provide recommendations to state and federal permitting agencies concerning minimum flows/fish passage at hydropower dams, wetlands alterations, stream bank modification, and waste discharge applications.

2) Fishway construction and stream improvement - improve access over natural barriers, remove debris and deteriorated dams, and construct fishways in non-hydro dams for salmon, shad, alewife, and rainbow smelt enhancement.

3) Fish Stocking - stock juvenile striped bass and adult pre-spawner shad and alewives to reestablish spawning populations in selected Maine waters.

4) Public access - provide information to the Department of Conservation on potential boat and shore access sites for marine recreational anglers.

5) Information services - publish charter/headboat directories, marine recreational fishing regulations, and provide information on marine recreational fishing to the general public.

New Hampshire

New Hampshire's MRF program is housed in a field office in Greenland, New Hampshire, within the New Hampshire Fish and Game Department, Division of Inland and Marine Fisheries. The MRF program is not organizationally discrete. It is an add-on to an anadromous fish program. The Department has regulatory authority over all marine species except lobster. No saltwater recreational finfishing license is required except that a freshwater fishing license is required to take smelt through the ice in Great Bay or to take any species of trout or salmon in state waters. Anglers, residents only, must

obtain a recreational license for shellfish, crabs and lobsters (5 pots). Major program activities include:

1) MRF statistics - state personnel (2 to 4) have been conducting surveys of the marine recreational finfish fishery since 1979 estimating catch, effort, length frequency of harvest, and species distribution in the catch and/or harvest during the summer months and all year round starting in 1986. There were some earlier surveys starting in 1970 which were directed toward the coho salmon fishery. The salmon fishery is still evaluated in the months of September, October and November, as a separate survey.

2) Coho salmon have been stocked annually as part of a research project since 1969 primarily in the Lamprey River. The number released has ranged between 79,000 and 355,000, with the largest release providing the largest return to the fishery and fishway trap of 3,029 in 1984. The 14 years average return, prior to a decision in 1983 to try alternative species, was 0.73%. The alternative species currently being released along with a reduced number of coho salmon include steelhead rainbow trout, brown trout, and age 1 Chinook salmon. The objective is to provide a marine and estuarine recreational trophy fishery which would not otherwise be available. The goal is one trophy fish per 20 angler hours of fishing.

3) American shad gravid adults have been transported from the Connecticut River and released to spawn naturally in the Cocheco, Lamprey and Exeter rivers each year starting in 1980, in the hope of providing a recreational fishery.

4) A marine rainbow smelt population assessment was conducted from 1978-80 to 1982-83. The spawning run is evaluated each year and the winter ice fishery is being evaluated starting in 1986 as part of the MRF statistics.

5) Anadromous fish restoration in the Merrimack River - cooperative program with the U.S. Fish and Wildlife Service, NMFS, U.S. Forest Service, Massachusetts Division of Fisheries and Wildlife, and New Hampshire Fish and Game. The purpose is to restore, manage, and monitor anadromous fish in the Merrimack River:

A. Stocking of Atlantic salmon and monitoring return.
B. Transportation of shad to spawning areas upriver from impoundments.
C. Develop a comprehensive fish passage plan for the Merrimack and its tributaries.
D. Ascertain if shortnose and Atlantic sturgeon utilize the Merrimack River. Determine distribution, feeding and breeding areas and movement.

Massachusetts

Massachusetts' MRF program is organizationally discrete and housed in the Department of Fisheries, Wildlife and Environmental Law Enforcement, Bureau of Recreational Fisheries, Bureau of Shellfisheries. All shellfish and crustacean programs, whether commercial or recreational, are under the Bureau of Commercial Fisheries. Eleven people are assigned to MRF programs.

Resources are managed primarily by regulation by the Marine Fisheries Advisory Commission. The Director of the Division of Marine Fisheries can issue emergency regulations which can remain in effect up to 45 days. Law prohibits any regulation which would require a license for the taking of finfish from coastal waters for non-commercial purposes. A license is required to take lobsters recreationally.

Major program activities include:

1) Anadromous fish management - stocking of shad and river herring (alewives and bluebacks) and fishway construction in coastal streams.

2) Anadromous fish population dynamics - assess populations of river herring, and smelt in selected coastal streams. Assess shad populations and stocking success in Taunton and Charles rivers.

3) Anadromous fish restoration in the Merrimack River - a cooperative program with the U.S. Fish and Wildlife Service, NMFS, U.S. Forest Service, Massachusetts Division of Fisheries and Wildlife, and New Hampshire Fish and Game. The purpose is to restore, manage, and monitor anadromous fish in the Merrimack River:

A. Stocking of Atlantic salmon and monitoring returns.
B. Transportation of shad to spawning areas up river from impoundments.
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D. Ascertain if shortnose and Atlantic sturgeon utilize the Merrimack River. Determine distribution, feeding and breeding areas, and movement.

4) Coho salmon introduction - development of a fishery for coho salmon. Since 1971, 5,000 to 140,000 smolts have been stocked annually. Returns have ranged from 0.02 to 1.45% (8 - 1700 fish). These figures are combined reported sportfish catches and parent stock recaptures. The program is hatchery dependent and natural spawning contributes little if anything to the population. All fish are spawned and raised to smolts at our hatchery in East Sandwich.

5) Massachusetts saltwater fishing derby - promotes recreational fishing in coastal waters. Awards are given to all entries for 19 species which meet minimum weight requirements. Trophies are given to largest fish in each category at the end of the derby year. We also maintain a list of state records.

6) Striped bass monitoring - characterization of fishery for striped bass in Massachusetts waters. Determine age, sex, length and weight of fish taken commercially. Maintain records of monthly landings by county.

7) Marine recreation survey - expansion of National Marine Recreational Survey in Massachusetts to provide more reliable estimates of catch, effort and participation by Massachusetts anglers.

8) Information and education - contract with University of Massachusetts, Cooperative Fishery Unit to produce information/education materials directed to increasing appreciation of fisheries resources, their utilization and their management.

9) Regional biologists - system of district biologists who conduct surveys, investigations and studies necessary to assist management planning, protect habitat, resolve user conflicts and to interact and communicate with the sportfishing public.

Rhode Island

Rhode Island's MRF program is housed in the Department of Environmental Management, Division of Fish and Wildlife, Marine Fisheries Section. The marine recreational fisheries program is not organizationally discrete but is functionally discrete to a great degree. Marine fisheries resources are managed primarily through the regulatory authority of the Marine Fisheries Council and to a lesser extent by legislation. No MRF license is currently required to take finfish with rod and reel, however, a feasibility study regarding such a license is being conducted.

Marine sportfish investigation activities include:

1) Recreational fishing survey - an expansion of the National Marine Recreational Fishery Statistics Survey to provide estimates of catch, effort and participation by anglers in Rhode Island waters.

2) Sportfish resource investigations - a long-term program to inventory the marine resources of Rhode Island's bays and rivers.

3) Conducting life history and stock assessment studies on marine species such as tautog and winter flounder.

4) A juvenile fish survey is being conducted in Narragansett Bay.

5) Fishing access - State bond issues, commercial license revenues, W-B funding and mitigation for development projects are being used to acquire, construct and maintain shoreline access, fishing ramps, fishing piers and parking facilities.

Connecticut

Connecticut's MRF program is housed within the Connecticut Department of Environmental Protection's Bureau of Fisheries. The MRF program is not organizationally discrete. The Department has regulatory authority over marine fisheries and is working to upgrade regulations for anglers. No MRF finfish license is required but recreational fishermen must obtain a $25 lobster license which includes a 10-pot limit for sportfishermen. Party boats must

obtain a $10 vessel license and participate in mandatory trip reporting program. Additional MRF program activities include the following:

1) MRF statistics - Connecticut has conducted a Volunteer Angler Survey for striped bass and other species since 1980. Since 1979, both in cooperation with the NMFS Marine Recreational Fishing Statistics Survey (MRFSS) and on a DJ-funded effort, Connecticut has conducted its own Marine Angler Survey to obtain catch and effort statistics and to estimate participation in marine recreational fisheries. In 1987, Connecticut will cooperate with the MRFSS and conduct 3X the intercepts and fund 3X the telephone interviews (beginning July 1, 1987).

2) Fishery independent sampling initiated April 1, 1984 using otter trawls.

3) Fishing access - using Wallop-Breaux funds to renovate boat ramps and asking localities to put up land to build parking lots and for small shoreline access points. Planning to build 150-foot pier with 60-foot T-head.

4) Aquatic Resource Education Program - prompted by the Connecticut Sportsmen's Alliance with freshwater/urban thrust, the program is being expanded into saltwater.

New York

New York's MRF program is housed in the Department of Environmental Conservation (DEC), Division of Marine Resources, Bureau of Finfish and Crustaceans. The MRF program in New York is not organizationally discrete. At least eight staff members spend part of their time working on projects involving marine recreational fisheries. Marine finfish resources are managed mainly by legislation, although limited regulatory authority was granted to DEC over striped bass in 1985. A MRF license does not exist in New York at present. Discussions of the needs for a MRF license have occurred. Major MRF activities include the following:

1) Wallop-Breaux funded activities - in process of developing a coastal fishing access plan, draft to be available June 15, 1987. W-B funds are being used to expand staff to conduct research on weakfish, winter and summer flounder, habitat protection and enhancement programs. A cooperative anglers program has existed since 1985 using MRF under Anadromous Fish funding to collect size, weight and scales from striped bass. This program was expanded with W-B funding to include weakfish for 1987. Summer flounder research included hook and line catch and release mortality on sub-legals, less than 14-inches - low mortality found.

2) Artificial Reefs - New York has six sites and plan to expand program to include approximate 18 sites. W-B funded program being used to develop state artificial reef siting plan in 1987.

3) MRF statistics - New York was planning to use W-B funds to augment NMFS MRFSS in 1987 to double number of intercepts May-December. New York cooperated in NMFS MRFSS in 1983, 84, 85 and 86. Collecting catch statistics on billfish, shark and tuna.

4) MRF Economic Studies - DEC using W-B funds to assist a SUNY Binghampton study to document the social/economic importance of MRF in New York.

5) DEC jointly administers a state record fish program, and an annual award program with the privately-owned magazine "The Fisherman".

6) Communication/Education efforts - assists in annual MRF forum with Sport Fishing Federation. Publishes various MRF information items. Assists the Long Island State Parks and Recreation Commission in annual "sea fest" celebration. DEC periodically publishes articles on marine species in state agency magazine "The Conservationist". Also periodically publishes results of research on MRF in the privately-owned magazine "The Fisherman".

New Jersey

New Jersey's MRF program is housed within the Department of Environmental Protection, Division of Fish, Game and Wildlife, Marine Fisheries Administration. The marine recreational fisheries program is not organizationally discrete, but has approximately five to nine people working either full or part time on various phases of the program.

The Department has had regulatory authority over all marine species except striped bass since 1979. No saltwater finfishing license is required, but a license is required to recreationally harvest shellfish or crabs with commercial-style gear. Major MRF programs include:

1) MRF statistics - New Jersey cooperated in NMFS MRFSS in 1980 through 1983. Currently collecting catch/effort statistics on billfish, shark and tuna and working with the State of Delaware to collect catch/effort and biological data on the sportfishery in the Delaware Bay.

2) MRF economics - studied big game offshore sportfishery in 1987. Plan to research economic value of the party-charter boat fishery in 1988.

3) Conducting bio-profile work on summer and winter flounder, bluefish and blue crabs.

4) Habitat conservation - considerable portion of staff time devoted to assure marine resource needs are considered in developmental programs. Requesting public access as partial mitigation for major shoreline, pier and marina construction.

5) Fishing access - State bond issues and Wallop-Breaux funds are being used to construct and maintain facilities.

6) Artificial reefs - New Jersey maintains seven sites. Conducting research on stability and effectiveness of tire units. State artificial reef plan is drafted and in final review/adoption stage.

7) Information services - publishes charter/party boat and bait/tackle shop directories, fishing maps and "how-to" brochures. Administers state citation program including an annual awards banquet.

Delaware

Delaware's MRF program is housed within the Delaware Division of Fish and Wildlife. The Division had had regulatory authority since 1984. Major program elements are as follows:

1) MRF statistics - conducted surveys since 1955 estimating total catch and effort. Planning to phase out state survey and participate in NMFS MRF survey.

2) Conducts fishery independent surveys to determine stock abundance and trends.

3) Access - State has developed and maintained boat ramps since the 1960's. Planning to put more emphasis on shore access for anglers, as boat access currently meets or exceeds needs.

4) Life history studies - currently working on weakfish populations in Delaware Bay.

5) Marine Angling Catch Citation Program.

Considerable discussion surrounded existing commercial licensing programs and need for a MRF license.

Maryland

The Maryland Sportfishing Project is within the Recreational/Commercial Fisheries Program, Fisheries Division, Tidewater Administration, Maryland Department of Natural Resources. The program is largely coordinative, with specific project staffing for the Chesapeake Bay Sportfishing License management and surveys to characterize sportfishing in Maryland, artificial reef development and evaluation, anadromous sportfish management research and restoration, tidal largemouth bass population studies, and access for fishermen.

The sportfishing program gained an identity when the Chesapeake Bay Sportfishing License was enacted in January 1985. A sportfishing license is required to fish the Maryland portion of the tidal Chesapeake Bay and tributaries.

Major program highlights:

1) Established four sites for artificial reef development in the Chesapeake Bay. Placed bottom material at two sites, including the construction, placement and monitoring of tubular high cross-sectional flow fiberglass reinforced plastic reef modules. Placed fish aggregating devices (FAD's) in two sites (half mile trolling alleys), and evaluated same through charterboat activity. Have examined previously existing rubble concrete reefs by means of a remotely operated underwater video system.

Established a new reef site in the Atlantic Ocean offshore of the port of Ocean City, MD. A large construction barge was modified and sunk at the site. A fully configured World War II submarine has been obtained from the Navy to place as an addition to the Maryland offshore reef project.

Bids will be awarded for the placement of our first major rock reefs and manufactured concrete module reef in the Chesapeake Bay.

2) Completed the analysis of the 1985 NMFS/DNR survey of sportfishermen. Completed the evaluation of the individual impact on sportfishing in Maryland of the striped bass moratorium, and the Chesapeake Bay sportfishing license. Evaluated a Catch-a-Fortune Contest held annually in Maryland Chesapeake Bay for the last three years.

3) Implemented a project to estimate largemouth bass populations in the tidal Chesapeake system, inventory the critical habitat areas, and characterize the tidal largemouth bass sportfishery in terms of catch success rates, impact on specific bass stocks, economics of the fishery, the value of stocking programs, and the adequacy of regulations to protect the species.

4) Funded and participated in management research to determine the effects of pH (acidic deposition), temperature, osmolality and synergystic effects of contaminants, such as metals, on striped bass and yellow perch. Initiated an acidic stream neutralization project in the coastal plain streams of Maryland to determine whether yellow perch egg hatching and larval survival would be significantly increased. Funded the State evaluation of the role of the Infectious Necrotic Pancreatic Necrosis Virus (IPNV) in wild populations of striped bass adults and larvae, and screened every brood striped bass used in the cooperative DNR/USF&WS cooperative hatchery striped bass effort to increase the stocks. Equipment to tag fingerling striped bass and sense the microwire tag upon recapture has been purchased.

5) Two fishing piers, one of 4,000 feet and the other of 2,800 feet, have been creased through conversion of a retired two-lane bridge crossing the lower Choptank River. The piers have been made safe, comfortable, and secure through this program, while other DNR agencies have purchased adjacent lands for eventual comprehensive state parks with the piers as key components. A fishing pier has been constructed in the Baltimore metropolitan area to benefit urban

fishermen. A 600 foot T-pier has been designed and bid for the lower Maryland portion of the Chesapeake Bay at Point Lookout. Construction is anticipated for fall 1988.

Virginia

Virginia's MRF program is spread among a number of state agencies and institutions. The Virginia Institute of Marine Science (VIMS) of the College and Mary is responsible for the majority of research and advisory activities related to MRF interests. Regulatory and resource management programs affecting the MRF are under the jurisdiction of the Virginia Marine Resources Commission (VMRC). The state sponsors the Virginia Saltwater Fishing Tournament, whereby handsome citation plaques are awarded anglers catching any of 22 species of fish exceeding minimum weights. This program is under the Department of Economic Development and primarily promotes recreational marine-estuarine fishing in the state. The state also sponsors a one-weekend Governor's Cup Chesapeake Bay Fishing Tournament to provide assistance to the state's various programs aimed at restoring Chesapeake Bay water quality and resources. This activity is coordinated under the Office of the Secretary of Natural Resources. Additional educational activities related to marine resources are included in materials published by the Commission of Game and Inland Fisheries. No MRF license is presently required in the state; it does appear to be coming up for consideration, however, in the 1988 legislative session.

With the availability of Wallop-Breaux funds, administered by the VMRC, VIMS has been able to expand research programs of direct benefit to the MRF. Presently underway are Wallop-Breaux funded projects involving side scan sonar composites of artificial reef sites, catch and effort data from fishermen frequenting reef sites, catch and effort data on Virginia's offshore recreational fishery for billfish and tuna, fish handling practices affecting dockside quality in the recreational tuna fishery and flounder tagging studies to differentiate possible sub-populations within the Atlantic coast flounder stock.

Research projects on striped bass are in progress. These include tagging studies in two major tributaries as well as the capturing of brood stock for hatchery-related stocking efforts. A study to determine the ages of juvenile striped bass through otolith examination is underway. A beach seine survey monitoring program for juvenile striped bass provides a juvenile abundance index for use by management agencies (VMRC and ASMFC). Monitoring of commercial catches of striped bass in the pound and gill net fisheries provides management agencies with year-class composition of the fishery and assists in determining Virginia's compliance with the Striped Bass Management Plan. A unique laboratory devoted to biochemical stock identification of estuarine species has been established with striped bass being the first finfish to be studied.

The VIMS Sea Grant Marine Advisory Services Program provides MRF interests with educational publications and information ranging from charts of wrecks off the mouth of Chesapeake Bay to brochures and booklets addressing popular recreational-commercial species, graphical tide tables, marine weather, nuisance marine organisms, recipes, etc. Several series of special seafood preparation seminars have proven particularly popular to MRF interests. The program periodically sponsors special seminars and workshops aimed at recreational fishermen while annually organizing a popular Sport Fishermen's Forum. Since 1983 annual assessments of Virginia's recreational pelagic fishery for billfish and tuna have been coordinated by the program as part of a cooperative effort with the NMFS Northeast Fisheries Center.

North Carolina

North Carolina's MRF program is housed within the North Carolina Division of Marine Fisheries. The program includes ten positions and has an operating budget of $700-$750,000 but is not organizationally discrete. The North Carolina Marine Fisheries Commission has regulatory authority over all species and gear types. North Carolina has no MRF license. Major program activities include the following:

1) Habitat protection.

2) Artificial reefs - the reef program began in 1973 and now includes 67 sites. A general permit has been implemented jointly by North Carolina and the Corps and an artificial reef siting plan is being developed for the state.

3) Wallop-Breaux - North Carolina is expanding its MRF research, data collection and development efforts.

4) Life history studies - currently focusing on king and Spanish mackerel, summer flounder and red drum.

5) MRF statistics - have expanded NMFS MRFSS intercept sampling by four times for 1987 and hope to also increase telephone survey sampling.

6) MRF bulletin - publishing bi-monthly bulletin covering MRF landings.

7) Public access - initiated project to expand fishing access for shore-based anglers by constructing 2-3 piers per year, along with ramps. bridge catwalks, jetty caps, etc.

8) Social/economic studies - initiated background research to established social/economic value of MRF.

9) Administers state saltwater sportfishing tournament citation program.

South Carolina

South Carolina's MRF program is housed within South Carolina's Wildlife and Marine Resources Division's Office of Fisheries Management. As such, the Recreational Fisheries Group was established in 1974, includes 11 positions and has an operating budget of $200,000 plus salaries. The artificial reef development was the impetus for the program, but the program has broadened out to include three major organization/program units:

1) Liaison and services unit - includes the sport fish tournament program, gamefish tagging program, state record marine gamefish program, the master angler certificate program, information/education service program, and the billfish monitoring/certificate program.

2) Recreation resources development unit - operates the artificial reef program (which manages 22 reef sites) and the recreational shellfish program.

3) Recreational fisheries statistics unit - conducts the marine access/facility survey and coordinates state involvement in NMFS MRF Statistics Survey (MRFSS).

Current hot issues in the state include shrimp baiting, enactment of gamefish status for speckled trout and red drum, and the possible enactment of a state saltwater sport fishing license.

Georgia

Georgia's MRF program is housed within the Department of Natural Resources, Coastal Resources Division, Coastal Fisheries Section. The Department has regulatory authority over marine species. No MRF license is required. The MRF program is organizationally discrete. Their major activities include:

1) Finfish life history studies - tagging studies are being conducted on spotted sea trout and red drum. Some of the tagged drum are also being tracked utilizing ultrasonic transmitters and receivers. Specific work is also being conducted to determine occurrence and habitat preference of juvenile red drum.

2) Marine recreational fisheries survey - program personnel are conducting the intercept portion of the NMFS MRF statistics survey.

3) Resource enhancement - enhancement and promotion of sportfishing opportunities in coastal Georgia involve a variety of activities including: permitting, supervising, and/or assisting in the construction of inshore artificial reefs, fishing platforms, and boat ramps; serving as weighmasters in fishing tournaments; printing "how-to" fishing brochures; conducting fishing workshops and seminars; presentations to civic, school, and scientific groups; and supplying brood stock red drum to the U.S. Fish and Wildlife Service to determine the feasibility of operating an Atlantic red drum hatchery.

Additional MRF activities are being carried out through the Coastal Fisheries Section's Outer Continental Shelf Program, including:

4) Offshore artificial reef development/maintenance - construction and expansion of seven offshore artificial reefs established in the early 1970s. As part of its efforts, the program acquires and places materials (i.e., surplus vessels) and encourages/supports private donations and club efforts. Seven buoy systems are also maintained at the reef sites to help offshore user groups locate and utilize the areas.

5. Saltwater gamefish records/tournament weighmaster programs - Division's Saltwater Gamefish Records Program awards certificates to anglers landing state record fish in accordance with program regulations, which are designed to encourage sportsmanship and an appreciation of coastal resources. Coordinated by OCSP, the volunteer Tournament Weighmasters Programs solicits assistance of Division staff to participate as weighmasters for annual coastal fishing tournaments.

Florida

Florida's MRF program is housed within the Department of Natural Resources (DNR), Divisions of Marine Resources (Bureaus of Marine Research, Marine Resource Regulation and Development, and Marketing and Extension Services), Recreational and Parks (Office of Recreation Services) and Law Enforcement (Bureau of Operations Regions 1-6) and the Florida Marine Fisheries Commission are involved in MRF activities within their realm of statutory responsibility. The MRF program is not organizationally discrete. The total budget is several million dollars. Some of the more significant activities include:

1) Research - DNR researchers are conducting bio-profile studies on snook, redfish, and mackerels and fish pathology studies, in concert with major studies on relationship of habitat and fishery productivity.

2) Hatchery research - DNR researchers are developing and implementing a hatchery and stocking program for key MRF species like snook and redfish. The program is designed to determine costs and effectiveness of such activities.

3) Artificial reefs - while not directly involved in reef construction, DNR provides coordination support and grants to local coastal governments to help defray construction costs. Anyone wishing to build a reef in Florida may do so after obtaining permits from the Department of Environmental Regulation (DER), DNR (for use of sovereignty submerged lands) and/or the U.S. Army Corps of Engineers (COE), as appropriate. Both the DER and COE have a general reef permit.

4) Record Florida catch recognition program - the International Game Fish Association conducts this program under a contract with DNR.

5) MRF statistics - Florida is augmenting the NMFS MRFSS to obtain improved mackerel landings data.

6) Fishing access - DNR provides grants to county governments for construction of boat ramps, fishing piers and associated facilities.

7) Fisheries management - policy and regulations for species specific fisheries are developed by the Florida Marine Fisheries Commission; enforcement is through DNR.

National Marine Fisheries Service

A. NORTHEAST REGION

The MRF program of the NMFS' Northeast Region presently is conducted jointly by the regional Office (NERO) and the Northeast Fisheries Center (NEFC), through a jointly funded full time MRF Coordinator, located at the Woods Hole Lab. The MRF Coordinator serves as the principal contact on MRF matters for NERO and NEFC, and is responsible for a variety of program activities. In addition, NERO's Constituent Affairs staff has responsibility in relation to some MRF outreach activities. Pending joint NERO/NEFC development of a MRF Program Development Plan, the program goals and activities outlined in a five-year MRF Program Plan developed by NERO in 1982, serve to guide the program. In January 1986, a 10-member Northeast MRF Steering Committee was established to obtain constituency participation in the program. Some of the more significant program activities include:

1) Communication/information -- regular distribution of a variety of informational materials to approximately 1500 MRF organizations and individuals. Distribution of the "Shark Tagger" newsletter to over 3,000 clubs and individuals. Annual participation with a MRF exhibit in at least one major sportsman or outdoor/camping show, in the Northeast. Participation in numerous local MRF fisherman forums and meetings. Provide assistance to selected MRF tournaments (no monetary awards).

2) MRF research and data collection - conducts a shark tagging program in cooperation with anglers. Conducts a cooperative program with the states to collect statistical data on the recreational fishery for large pelagics in the Northeast. Conducts a program of cooperative stock assessment workshops with the states, regional councils and others relative to species such as bluefish, weakfish, and summer flounder. Participates in the Emergency Striped Bass Study and represents NMFS in the Atlantic Salmon Conservation Organization.

3) MRF development - applied Saltonstall-Kennedy funds to assist states in survey of offshore recreational fishery for large pelagic species and to disseminate information on the developing fishery. Funded a study of party/charter boat marketing and advertising practices in the Northeast, and

preparation of a "how-to" kit for use of party/charter boat operators in developing a marketing plan. Distributed over 300 copies of the kit to requesting fishermen from around the country.

4) MRF management - in addition to working with the states and fishery management councils in the development and implementation of management plans, NERO administers the Atlantic bluefin tuna quota established under ICCAT.

B. SOUTHEAST REGION

MRF program in Southeast Region (SER) includes personnel at both the Regional Office (SERO) and Southeast Center (SEFC). SERO and SEFC jointly developed and implemented a MRF Program Development Plan in 1983 which outlines major program goals and activities. Two full time SERO staff and one full time SEFC researcher direct the region's program and are responsible for specific program activities. A 19-member MRF Steering Committee was established in the Spring of 1984 to obtain policy and program guidance and to assist in MRF Program Development Plan implementation. Major program activities include the following:

1) Communication/information services - SERO maintains a 3000+ MRF mailing list and distributes newsletters, research, findings, and news releases regularly to list. SEFC conducts annual charter/headboat canvass. SERO manages two national MRF meetings, and hosts/participates in numerous regional, state and local meetings/workshops. SERO publishes annual MRF club and charter/headboat directories. A video on catch/release techniques and a brochure on federal MRF regulations is being developed in 1987.

2) Expanded MRF research and data collection - SEFC conducts regionwide charterboat and headboat surveys and will soon implement a charter/headboat vessel permit program. SERO/SEFC are coordinating implementation of an expanded and refined MRFSS in the region. SEFC conducts dockside and tournament sampling programs, extensive fish tagging efforts, stock assessments, special surveys and other research and data collection activities on species of MRF importance. SERO/SEFC personnel help ensure application of Saltonstall-Kennedy, MARFIN, Sea Grant and Wallop-Breaux funds to resolve MRF research and development problems.

3) MRF management - SERO and SEFC personnel work both internally and with fishery management councils, states and regional marine fishery commissions to help conserve and manage recreationally important species.

4) MRF development - activities include technical and financial assistance in permitting, siting, developing and monitoring artificial reefs, in implementation of regionwide program to help anglers make better use of their catches (underutilized species), and marketing/business structure studies to help charter/headboat businesses stabilize, grow and diversify. Assistance is also provided to states in enhancing MRF access facilities.

C. WASHINGTON OFFICE

The Washington Office has several major MRF-related responsibilities, as follows:

1) National MRF statistics survey - includes all aspects of design, technical contract negotiations, data editing, analysis and report preparation.

2) MRF data collection coordination - assistance is provided to NMFS regions and states in developing MRF data collection programs. In particular, assistance is provided to encourage and assist states to participate in coordinated NMFS/state MRF data collection program through expansion of the NMFS MRF survey. Currently, 8-9 Atlantic states are participating in the 1987 MRFSS.

3) Data collection initiatives - personnel work to find appropriate means and methods for addressing MRF data collection needs. For example, staff are working cooperatively with EPA, FDA and the U.S. F&WS to examine PCB levels in bluefish. Similarly, they have entered into a MOU with EPA on an MRF economic initiative. EPA has issued a MRF for a study to measure economic impacts on MRF of pollution abatement management measures.

4) General MRF coordination - located in the Recreational and Interjurisdiction Fisheries Division. Division responsibilities include oversight of efforts to carry out the NMFS MRF Policy, providing program guidance for the Emergency Striped Bass Research Study, coordinating activities conducted under the Atlantic Striped Bass Conservation Act, policy and technical guidance on artificial reef activities, working jointly with the MRF community, reviewing all management plans with MRF components, working with other countries on MRF development and various other activities.

5) Saltonstall-Kennedy program - coordinated by the Utilization Research and Services Division. It provides funding for selected recreational and commercial fishery development projects.

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service conducts marine recreational fisheries activities through its Washington office and a system of regional offices. On the Atlantic coast, Region 4 (Southeast) and Region 5 (Northeast) are involved in a wide variety of anadromous and marine recreational fisheries projects. Anadromous fish activities are particularly important with regard to the restoration of striped bass, shad and herrings, Atlantic sturgeon, and Atlantic salmon.

Marine fisheries activities are conducted through a cooperative program with the Atlantic States Marine Fisheries Commission. The Sport Fish Restoration Program on "Cooperative Interstate Fishery Management in the Territorial Sea of the United States" involves a diversity of fishery planning, assessment, enhancement and evaluation activities. The goal of the program is to coordinate and provide

administrative support to the 15 east coast states in their efforts to conserve and enhance marine and anadromous sportfish, and to provide public use and benefits from these resources.

A major new initiative recently completed by the U.S. Fish and Wildlife Service has been its role as the lead agency in the development of a National Recreational Fisheries Policy. The Policy focuses on the specific issues and social and economic benefits related to recreational fisheries. It represents the collective efforts of State, Tribal, and Federal governments, private sector constituency groups, and the recreational fishing industry. The Policy is not a strategic plan or action plan, but rather it provides long-term common goals for conserving and enhancing the Nation's recreational fisheries. The document's guiding principles, goals, and objectives provide a conceptual foundation for each interest to build upon.

While the National Recreational Fisheries Policy has led to a new emphasis on sport fisheries, it does not provide any additional funding sources for recreational fisheries programs. Other Federal legislation has provided some of the needed funds. The most notable funding source is through the Federal Aid in Sport Fish Restoration Program. Administered by the U.S. Fish and Wildlife Service, these funds result from a 10 percent manufacturers' excise tax on sport fishing equipment. More recently, the Wallop-Breaux amendments derived additional funds from the sale of tackle boxes, electric trolling motors, flasher type fish finders, import duties on yachts and pleasure crafts, and motor boat fuel taxes. These funds are collected at the Federal level and apportioned to the State agency that is responsible for managing the State's sport fishery resources. Moreover, coastal states must distribute the additional Wallop-Breaux funds between marine and freshwater projects based on the relative proportion of their resident fresh and saltwater anglers. The Federal Aid in Sport Fish Restoration Program is a matching grant program with the Federal government providing 75 percent of the funds and the states supplying the remaining 25 percent.

In fiscal year 1987, more than $140 million was apportioned from the expanded Sport Fish Restoration Program to states for work on sport fish management. It is expected that more than $160 million will be available to states in FY 1988. Increasingly, states are developing their 25 percent share of project costs through in-kind contributions such as services, equipment, material, and labor, not only from the state, but also from private organizations such as the Fish America Foundation.

In summary, the U.S. Fish and Wildlife Service's program as it relates to Atlantic recreational fisheries, combines the following elements:

1) A national framework in terms of its work on the National Recreational Fisheries Policy and its own agency roles and responsibilities directed by the Washington offices.

2) Aregional approach through its cooperative efforts with the Atlantic States Marine Fisheries Commission and its Regions 4 and 5.

3) Funding programs through Anadromous Fish Grants and Federal Aid in Sport Fish Restoration.

Sport Fishing Institute

SFI is a non-profit organization financially supported by fishing tackle manufacturers, government grants and the public. SFI currently has 11 full time staff members. SFI serves as a strong national advocate for sport fishing both salt and fresh. Major marine activities include:

1) Legislative monitoring - follows legislative activity at federal and state level. Publishes newsletter "Sport Fishing News".

2) Wallop-Breaux coordination - developing computer data base to monitor and tract Wallop-Breaux projects nationwide. Publishing Wallop-Breaux handbook.

3) Economics - conducting various national, state and local research projects dealing with social/economic valuation of MRF. Publishing methodology guides for conduct of MRF economic research.

4) Artificial reefs - operating National Artificial Reef Development Center to conduct research on reef development issues/problems and assist states and others in their artificial reef efforts.

5) Research assistance - administers/manages Sport Fishery Research Foundation and Fish America Foundation which provide funds for recreational fisheries related research and development projects.

Atlantic States Marine Fisheries Commission
Marine Recreational Fisheries Commission

PRIORITY OF RECREATIONAL FISHERIES ISSUES

Due to the wide array of topics within the scope of any group dealing with recreational fishing, one of the first tasks of the committee was to develop a limited number of priority issues to address.

As a first step in this exercise, the committee generated the following list of possible items:

- Concern over Habitat Loss and Environmental Degradation.
- MRF Information and Education needs.
- Public Involvement in Fisheries Research and Management.
- Fishery Regulations (interstate coordination, public information, etc.).
- Catch-Tag-Release Programs (need for research, coordination, funding, public information).
- Fishing Access and Facilities (demand analysis, planning, design, funding, public information, coordination with Department of Transportation).
- Tournaments (logistics, coordination, resource conservation, public information).
- Licensing (issues, model language).
- Statistics and Data Base (methods, coordination, funding, contracting).
- Need for a universal definition of MRF.
- National and State MRF Policy.
- Contaminants (angler exposure, public information, impact on fishery resources).
- Underutilized Species (development, public information).
- Funding Initiative.
- Allocation Issues (equity concerns) regarding gamefish status, gear restrictions and special management areas.
- Coordination within the ASMFC MRF Committee.
- User Conflicts (nature, extent, resolution strategies).
- Non-Hook and Line MRF Issues (shellfishing, bait fishing, finfishing).
- Planning Needs (Fisheries Research and Development).

To determine which issues were of greatest concern to the member organizations, the committee was asked to review these topics with their representative staff and administrators. This was to be followed-up by a mailed response listing the four topics which most warrant the committee's attention in order of priority.

The following table includes a ranking of the issues by both the total of number of votes each issue received and by weighted vote. In determining the ranking by weighted vote, a topic assigned first priority received four points, second priority received three points, third priority received two points, and a fourth priority received one point.

Under both of these scenarios, the four highest ranked issues were the same and were obviously of more concern than any of the seven other issues that received votes. These were MRF Statistics and Data Base; MRF Licensing; MRF Fishing Access and Facilities; and Habitat Loss and Environmental Degradation.

Table I

Marine Recreational Fishing Committee
Ranking of Issue of Importance

Issues	Ranking by No. of Votes		Ranking by Weighted Vote	
	Rank	Score	Rank	Score
Statistics and Data Base	1	15	1	42
Licensing	3	10	2	31
Fishing Access and Facilities	2	11	3	25
Habitat Loss & Environmental Degradation	4	8	4	16
Management Plans/Fishery Regulations	5	3	5	8
User Conflicts/Allocation Issues	5	3	6	7
MRF Policy	5	3	8	4
Funding Initiative	8	2	7	5
MRF Information and Education	8	2	9	3
Catch-Tag-Release Programs	10	1	9	3
Contaminants	10	1	11	2

Table 2
Priority Listing of Issues of Importance by Member Organizations
Who Responded to the Survey

Maine:	Funding Initiative, Statistics, Access, Information/Education
New Hampshire:	Habitat/Environment, Access, Contaminants, Statistics
Massachusetts:	Licensing, Statistics, Access, Habitat/Environment
Connecticut:	Licensing, Access, Statistics, Habitat/Environment, Policy
New York:	Licensing, Access, Statistics, Habitat/Environment
New Jersey:	Statistics, Licensing, Policy, Access
Delaware:	Statistics, Licensing, Habitat/Environment, Funding, Access
Maryland:	Plans/Regulations, Conflict/Allocations, Statistics, Policy
Virginia:	Statistics, Tagging Program, Information/Education, Licensing
South Carolina:	Licensing, Access, Statistics, Habitat/Environment
Georgia:	Access, Licensing, Statistics, Conflict/Allocation
Florida:	Habitat/Environment, Conflict/Allocation, Statistics, Access
N.M.F.S. (N.E.):	Statistics, Habitat/Environmental, Plans/Regulations
N.M.F.S. (S.E.):	Statistics, Plans/Regulations, Licensing, Habitat/Environment
A.S.M.F.C.:	Statistics, Licensing, Access, Policy

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