Atlantic States Marine Fisheries Commission

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TESTIMONY OF

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Before the U.S. House of Representatives Committee on Natural Resources Subcommittee on Fisheries, Wildlife, Oceans and Insular Affairs

Oversight Hearing on data collection issues in relation to the reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act

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Chairman Fleming and Members of the Subcommittee,

I am Robert Beal, Executive Director of the Atlantic States Marine Fisheries Commission (Commission). The Commission is comprised of the fifteen Atlantic coastal states and carries out a diverse array of programs for its members with the goal of restoring and sustaining Atlantic coastal fisheries. The Commission provides a forum for interstate cooperation on fisheries that cross state borders and thus cannot be adequately managed by a single state. Congress authorized the Commission in 1942; and granted us increased management authority in 1984 with the Atlantic Striped Bass Conservation Act, and again in 1993 with the Atlantic Coastal Fisheries Cooperative Management Act (Atlantic Coastal Act). I hope to be a resource to the Subcommittee as it continues the process of reauthorizing the Magnuson–Stevens Fishery Conservation and Management Act (MSFCMA).

I commend the Chairman for holding the second MSFCMA reauthorization hearing of 2013 on the issue of data collection. Data, both fishery-dependent (as in catch and effort) and fishery-independent (as in data collected through scientific surveys), provide the basis for the marine fisheries management in the United States. The Commission alone relies on data to conduct and assess its 25 fishery management programs. The ultimate success of these programs in terms of sustainable management and stakeholder confidence lies in the accuracy, reliability, and timeliness of the data we use to inform our stock assessments and decision making. Given that Atlantic coastal fishery resources generate billions of dollars of economic activity to the nation and hundreds of thousands of jobs in our coastal communities, it is essential that we continue to invest in the collection and management of high quality and timely data. Without good data, there is no successful management of America's fisheries.

ATLANTIC STATES MARINE FISHERIES COMMISSION FISHERY-RELATED DATA COLLECTION ACTIVITIES

The Commission and its member states support various fishery-dependent and fishery-independent data collection methods, and use data compiled by those methods to conduct stock assessments and develop fishery management plans (FMPs). Fishery-dependent and independent data collection methods and the data that they provide are critical to our stock assessment and fisheries management processes. Operating with insufficient data could cause the

Commission and the states to implement overly conservative management measures to address increased uncertainty in landings and population estimates and ensure species sustainability.

Fishery-Dependent

Fishery-dependent data is collected directly from commercial and recreational fishermen through harvester and dealer reports, observer programs, and broad surveys of the recreational sector. The Commission and its member states participate in and use three primary data collection programs: the Atlantic Coastal Cooperative Statistics Program (ACCSP), NOAA Fisheries Commercial Fisheries Statistics, and the Marine Recreational Information Program (MRIP).

ACCSP

ACCSP is a cooperative state-federal marine fisheries statistics data collection program that integrates data from multiple state/federal sources into a single data management system to meet the needs of fishery managers, scientists, and fishermen. ACCSP was established to be the principal source of fishery-dependent information on the Atlantic coast. The ACCSP provides data for a number of fisheries management purposes. These include: FMPs, dealer reporting compliance; quota and compliance monitoring; stock assessments; landings history and trends (e.g., track past commercial catch levels by state, revenue data by vessel); quality control against other sources; fisheries characterizations; develop catch-per-unit-effort indices; and fishery participant information (counts of fishermen, dealers, and/or vessels). ACCSP is housed within the Commission but functions separately. The Commission is a partner within ACCSP, and provides administrative and logistical support services to the ACCSP.

NOAA Fisheries, Fisheries Statistics Division

ACCSP created the Data Warehouse, an online database populated with fishery-dependent data supplied by their program partners. These publicly searchable data are also used by the NOAA Fisheries, Fisheries Statistics Division and compiled as part of the Fisheries of the US data set.

MRIP

MRIP was mandated by the last Magnuson-Stevens Reauthorization to replace Marine Recreational Fishery Statistics Surveys (MRFSS) and improve the collection, analysis, and use of recreational saltwater fishing information. Overseen and conducted by NOAA Fisheries, MRIP is a two part survey comprised of a field intercept component and an effort survey. Field interviews are generally conducted at the end of an angler's fishing trip at fishing access sites, while the effort survey is conducted via telephone interviews to individual households. I will discuss MRIP in greater detail in a following section.

Fishery-Independent

Fishery-independent monitoring provides insight into the status of fish stocks without the biases inherent to commercial and recreational catch information. The Commission coordinates two regional fishery-independent data collection programs – the South Atlantic component of the Southeast Area Monitoring and Assessment Program (SEAMAP) and the Northeast Area Monitoring and Assessment Program (NEAMAP), as well as several species-specific research surveys for horseshoe crab, American lobster, red drum, and northern shrimp.

NEAMAP

NEAMAP is a cooperative state/federal fishery-independent research and data collection program established in 1998 for the coastal waters from Maine to North Carolina. Its partners include the states from Maine to North Carolina, the Commission, NOAA Fisheries Northeast Fisheries Science Center (NEFSC), the Mid-Atlantic and New England Fishery Management Councils, and the U.S. Fish and Wildlife Service (USFWS). The program was developed to respond to the lack of adequate survey coverage and coordination in the coastal waters of the Mid-Atlantic/Northeast Region. In particular, its Southern New England/Mid-Atlantic (SNE/MA) NEAMAP Nearshore Trawl Survey was designed by scientists and stakeholders to address a void in shallow water sampling created when the federal trawl survey changed research vessels and decreased sampling coverage in nearshore waters. Piloted in 2006, the SNE/MA Nearshore Trawl Survey is about to complete six full years of surveys. The survey samples inshore waters from Cape Hatteras, North Carolina, northward to Martha's Vineyard, Massachusetts in the spring and fall of each year. As of 2012, the survey has sampled over six million fish, representing 173 species. In total, it has collected over 800,000 individual length measurements and age and diet information for more than 80,000 fish. The survey data complements results from the NOAA NEFSC Trawl Survey, which samples in deeper, offshore waters of the Mid-Atlantic and New England. NEAMAP also includes the Maine-New Hampshire Inshore Trawl Survey, as well as the Massachusetts Inshore Trawl Survey.

In addition, the use of a commercial fishing vessel has enhanced public acceptance of the survey approach. The scientific, industry, and public acceptance of the survey and its results confirm its value. Having successfully completed 13 fishery-independent surveys, NEAMAP has established a solid start to a long-term series of fishery-independent data. With additional years of sampling, NEAMAP will become an increasingly valuable source of fishery-independent data to support and improve stock assessments.

SEAMAP

SEAMAP is a cooperative program that facilitates the collection, management, and dissemination of fishery-independent data in the Southeastern U.S. and Caribbean through long-term surveys. Implemented in the early 1980s, SEAMAP represents one of the longest running fishery-independent data series in the nation. The Commission manages the South Atlantic region of SEAMAP. Partners in SEAMAP-South Atlantic include the state marine fisheries agencies of North Carolina, South Carolina, Georgia, and Florida; the South Atlantic Fishery Management Council; NOAA Fisheries; and USFWS. SEAMAP provides funds to involve regional member organizations in the coordination of fishery-independent sampling activities in light of the fact that no single state or federal fishery management agency has the resources to meet the objectives of existing management plans alone. SEAMAP's integrated approach to fishery-independent data collection can fulfill priority data needs for the development of FMPs in the Southeast region. The long-term goal is a web-based information system that facilitates data entry, error checking, data extraction, dissemination, and summary of fishery-independent data and information for all ongoing SEAMAP-South Atlantic surveys and special studies. It is envisioned that the data system would be a relational database for simultaneous access to a number of fishery-independent data programs. Spatial presentations of SEAMAP and other South Atlantic fishery-independent data will be available through a developing regional GIS Service managed by the Florida Fish and Wildlife Research Institute for the South Atlantic Fishery Management Council.

Species-Specific Surveys

The Commission also coordinates a number of species specific surveys along the Atlantic coast, including horseshoe crab, lobster, red drum, and northern shrimp surveys.

The Horseshoe Crab Trawl Survey is the only fishery-independent survey designed to sample the horseshoe crab population in coastal waters. Its data are a critical component of the Commission's coast wide stock assessment and the newly adopted Adaptive Resource Management (ARM) framework that incorporates both shorebird and horseshoe crab abundance levels to set optimized horseshoe crab harvest levels for the Delaware Bay area.

The American lobster stock was recently evaluated through a stock assessment, and the need for more data on juvenile lobster data was apparent. To address this need, the states of Maine through New York performed a collaborative Ventless Lobster Trap Study from 2006 to 2011. Currently, the study has been discontinued due to a lack of funding.

The Adult Red Drum Longline Survey began in 2006 and covers the waters of North Carolina, South Carolina, and Georgia. The main purpose of the study is to determine annual abundance estimates for the adult offshore component of red drum, a critical but missing ingredient in evaluating the status of the red drum population, especially the adult portion, and developing a successful red drum management program.

An annual trawl survey for northern shrimp is conducted in the western Gulf of Maine each summer aboard the *R/V Gloria Michelle*. The survey is a collaboration of the NEFSC's Ecosystems Survey Branch, the Commission, and biologists from Maine, New Hampshire, and Massachusetts. The survey is a valuable tool for consistently evaluating the stock's condition and forms the basis of the management program's annual specification setting process. It is funded wholly through Atlantic Coast Act funding.

In addition to these broad cooperative surveys, numerous nearshore surveys are conducted by the states. These surveys, which are largely funded by the Atlantic Coastal Act and the Interjurisdictional Fisheries Act, provide critical nearshore fisheries data for use in interstate and regional stock assessments. These surveys include: American lobster sampling in New England; monitoring state quotas of black sea bass, summer flounder, and striped bass in the Mid-Atlantic; and surveying flounders, drum, shrimp and crabs in the South Atlantic.

MRIP

The Commission has participated in the redesign and implementation of MRIP. State marine fisheries agency representatives and Commission staff serve on several MRIP committees (National Registry, Data Management, Operations, Executive Steering Committee) to guide the Program redesign. Committee responsibilities include technical aspects like field survey design and catch estimation methodology, as well as making annual funding recommendations to NOAA Fisheries on priority pilot studies to support. The Commission has taken on an additional role by administering a number of MRIP grants to the Atlantic states to build and maintain state and federal angler registries (participant information), and field survey site registries (boat ramps, ports, etc. where anglers are interviewed by MRIP). Finally, the Commission also

provides a venue for MRIP to communicate progress and receive stakeholder feedback at its quarterly meetings where NOAA Fisheries staff periodically present the latest MRIP developments.

For several recreationally important species managed by the Commission, MRIP data are used to estimate annual and bi-monthly catch levels in order to monitor landings and develop annual regulations. Data are also utilized in a number of Commission stock assessments, again to characterize harvest and discards, the sizes and ages of fish caught recreationally, and as indices to track trends in stock abundances.

Despite the Commission's reliance on MRIP data and its involvement in the Program redesign, the states and Commission share continuing concerns about the implementation and utility of the recreational survey and resulting data. A primary concern is the high magnitude of uncertainty in the catch estimates. This uncertainty undermines stakeholder confidence and the ability of fishery managers to make informed decisions.

Finally, the pace at which MRIP is progressing has been slow. Following the 2006 National Research Council review of the old recreational survey program (MRFSS), it has taken several years to conduct pilot studies, perform follow-up studies, independently peer review the results, and complete the logistical, legal, and information management steps needed in order to implement the new field survey and catch estimate methodology. Until very recently (this year), the Commission and the states continued to use MRFSS estimates for its fisheries management planning.

With ever decreasing funding levels for fisheries management and data collection, the ACCSP has been increasingly relied on to provide funding support for MRIP improvements. Since 2008, ACCSP has committed over $2.6 million to projects that seek to achieve sufficient precision at the state level. MRIP is designed to meet federal standards by providing good precision at a regional level (Regional Fishery Management Council). Unfortunately, this federal standard falls far short of what the Commission and states require to meet stakeholder demands for state-specific regulations.

CURRENT DATA COLLECTION PROGRAMS AND THE ROLE OF NEW TECHNOLOGIES IN IMPROVING THE MANAGEMENT PROCESS

With regards to how new technologies can help fishery managers achieve better and more timely information, I will speak to the program that the Commission knows best – the ACCSP. In the past ten years, the ACCSP has made significant advances in electronic reporting on the Atlantic coast. In 2003, ACCSP created the Standard Atlantic Fisheries Information System (SAFIS), an online electronic reporting system designed to meet the increasing need for real-time commercial landings data. In 2004, NOAA Fisheries Northeast Region adopted SAFIS for federally permitted seafood dealers, encompassing dealers from Maine to North Carolina. Over time, the use of SAFIS has expanded throughout the Northeast (implemented by Maine, New Hampshire, Massachusetts, Rhode Island, Connecticut), the Mid-Atlantic (New York, New Jersey, Delaware and Maryland) and South Atlantic (South Carolina and Georgia) to become the de-facto dealer reporting system.

Initially developed as a dealer reporting system, SAFIS has grown to include five distinct applications, and not just for commercial landings, but also recreational. These five SAFIS applications (eDR, eTRIPS, e-1 Ticket, eLogbook, and SMS) function independently, but all are maintained within the same database and share standards and codes that are ACCSP compliant. To date, SAFIS includes over four million dealer records, approximately 465,000 trip records, and over 6,700 volunteer angler records.

In 2010, ACCSP launched a completely revised version of SAFIS. Staff and program partners listened to the needs of users for the updated system to be faster and more flexible. Some of the major enhancements included the ability to collect highly migratory species data; a much faster interface; automatically generated pricing information; flexibility in creating favorites (species, gear, fishermen, dealers, disposition); and overall improved reporting capabilities.

Benefits SAFIS provides to the state, regional, and federal partners on the Atlantic coast include:

- Up-to-date information on species caught and their impact on fisheries and quotas;
- Confidential access to data-of-record by fishermen and dealers;
- Access to state and federal reporting requirements through online data entry that eliminates duplicative reporting;
- Integrated highly migratory species reporting;
- Automatically generated pricing information;
- Flexibility in creating favorites (e.g., species, gears, fishermen, dealers, and disposition) so reporting is quick and easier than ever; and
- Management tools to facilitate maintenance of partner-owned data such as participants, online permits, and vessels.

Below is a description of each of the SAFIS applications, as well as the partners that are implementing the application as of February 28, 2013.

1. Electronic Dealer Reporting (eDR)
The electronic dealer reporting application was the first application developed and implemented. It was first launched in the Northeast Region for federal fisheries. This application is now employed by Maine, New Hampshire, Massachusetts, Rhode Island (the first state to implement eDR), Connecticut, New York, Delaware, New Jersey, Maryland, and NOAA Fisheries– NE and SE. Fields that must be entered for a completed report include fisherman, port, date landed, time landed, date purchased, vessel number, species, disposition, gear, quantity, and price.

2. Electronic Trip Reporting (eTRIPS)
eTRIPS was developed to meet the complex needs of collecting catch and effort data from fishermen. This application is now employed by Massachusetts, Rhode Island, Connecticut, New York, New Jersey and Maryland. These trip reports, or log books in some fisheries, provide catch and effort data from a permitted fishing entity (fishermen or a vessel) or a single vessel. Trips may be categorized as commercial, party/charter, or recreational.

This application allows fishermen to create trip reports after entering in the required fields in the trip, effort and catch categories. Similar to the eDR application, interactive reports can be made to illustrate progress and history of catch and effort.

Currently the ACCSP is engaged in developing a Mobile App version of the eTrips system designed to run on tablet computers and smart phones. This should greatly reduce the reporting burden on fishermen, improve data accuracy, and result in timelier reporting.

3. Voluntary Recreational Logbooks (eLogbook)
eLogbook was first developed as a part of the Striped Bass Bonus Program in New Jersey. This application is now employed by Massachusetts, Rhode Island, New York, Connecticut, and Delaware. This application is a powerful way to empower anglers in the data collection process. eLogbook formulates summaries of information on all species caught by the angler. This valuable tool is a way to provide narrow strategies for any given set of conditions and is a more efficient way for anglers to take a look at the past and save the daily entries.

4. Single Trip Ticket Reporting (e-1Ticket)
South Carolina, Georgia, and NMFS – SE are currently employing the e-1Ticket application. e-1Ticket combines elements of both trip (vessel and/or fisherman) and dealer reporting into a single application that emulates the standard practice in the southeast.

5. SAFIS Management System (SMS)
SMS is a web-based application providing administrative tools to SAFIS administrators for management of information such as user accounts, participants, or permits. It is often used to monitor quotas.

Where electronic reporting has been comprehensively deployed, much of the need for more timely and accurate data in dealer and fisherman reporting has been resolved. Agencies that are using the system are better able to manage quotas and perform compliance monitoring. Improved data on the activities of individual license holders will make the creation and management of limited entry fisheries, when desired by the states, much more timely and accurate. The standardization of coding has greatly reduced the amount of time needed to create the consolidated data sets that are needed for larger scale management and assessment activities.

However, many agencies still are using a mixture of conventional (paper) reporting and electronic reporting. Where this occurs, it becomes impossible to have data available in anything like the time frame that an all electronic solution provides. The data are limited by the slowest mechanism, paper. Paper reports can take several months or longer to receive and process. While they are in process, it's necessary for managers to estimate catch that is reported on paper. This can lead to errors that can have a negative impact on the fisheries and those that prosecute them.

The SAFIS system is designed specifically to be expandable so long as data are reported within the ACCSP standard. SAFIS can be deployed to its partners at no direct cost. It is estimated that coastwide SAFIS results in as much as $10 million in cost avoidance for data management and software development.

RECOMMENDATIONS FOR IMPROVEMENTS
While many of the current fishery-dependent and fishery-independent data programs are adequate to support species stock assessments and responsible stewardship, there is opportunity

for improvements. As stated earlier, sound fisheries data is the foundation of robust fisheries science and management, as well as stakeholder confidence.

The recommendation for improvements would be to provide funding opportunities to restore the state survey work that has been discontinued or significantly reduced over the past five years. The species-specific surveys require dedicated and predictable long-term funding. These surveys are for important species such as American lobster, red drum, and horseshoe crab. The most stark example is the Horseshoe Crab Trawl Survey that will not occur this year due to lack of funding. This survey was historically funded by NOAA Fisheries and then through private donations for the past two years. This gap in horseshoe crab data will directly impact the Commission's ability to assess the crab population and establish appropriate harvest quotas.

Regarding recreational data collection, the implementation and refinement of MRIP must be supported by adequate resources and state/federal partnerships. Over the past five years, the focus of MRIP has been the development of new methodologies to address survey shortcomings. Many of the new methodologies have been implemented on a small scale through various pilot studies. As these methodologies are implemented along the Atlantic coast, MRIP staff and the states need to be in close coordination to address any issues that may arise.

As noted earlier, MRIP is designed to meet federal standards by providing good precision at a regional level (Regional Fishery Management Council). The survey is not designed to provide robust state level recreational harvest estimates. To address this unmet need, many Atlantic coast states have diverted state, ACCSP, and Interjurisdictional Fisheries Act funds to support increased MRIP sampling. These diverted funds reduce the states' ability to collect other critical fisheries data. Support should be provided to MRIP to produce harvest estimates with reasonable precision for each state along the coast.

The ACCSP has made significant progress during the past 15 years, however, the program still requires additional funding to become fully operational coastwide. The ACCSP has made significant progress during the past 15 years. As this program continues to mature, resources will be needed to expand its scope and value to fisheries managers and scientists. ACCSP can be expanded to include fishery-independent surveys to bring both fishery-dependent and independent data into one data warehouse. This will reduce the time and effort needed to conduct stock assessments by allowing scientists to access the majority of fishery data in one warehouse. This step currently takes many months or longer to complete. Also, ACCSP can be expanded to include traceability of Atlantic seafood products with the goal of improving the economic return of domestic fisheries. This program could be similar to the Gulf Seafood Trace program that has successfully implemented by Gulf States Marine Fisheries Commission.

SEAMAP has been level funded since 2009 despite increasing fuel and other operational costs for on-the-water surveys. The result, in most recent years, has been cutbacks in days at sea and sampling intensity, which over the long-term can decrease the value of SEAMAP data and accuracy of stock assessments for South Atlantic species. Additional funding could also be used to initiate new surveys for pelagic species, plankton, and crustaceans to address information gaps currently inhibiting stock assessments of several species like wahoo, bluefish, and blue crab in

the South Atlantic. SEAMAP partners have formally outlined new survey designs and budgets, if funds become available

In closing, it is important to reiterate that good data supports sound science and informed decisions. We will never fully understand every detail of the complex marine environment; however, we can improve our understanding to ensure the responsible stewardship of the shared Atlantic coast fisheries resources. The lack of resolution in fisheries science leaves prudent managers with the need to make more precautionary decisions. These decisions can lead to forgone harvest and reduce the economic returns to the coastal communities and states that depend on them. The Commission looks forward to working closely with you, our other federal partners, and our stakeholders to ensure timely and complete data is collected to support successful fisheries management. I would be pleased to answer any questions you or the Committee might have.