

EXECUTIVE SUMMARY

The National Marine Fisheries Service (NMFS), fishery management councils, and states rely on fishery data to make decisions regarding the stewardship of the Nation's living marine resources. Citizens of the United States also rely on fishery statistics to make decisions regarding their participation, investment in, and use of commercial and recreational fisheries. In addition, fishery statistics can be used to measure how effectively governmental agencies are meeting stewardship goals and objectives. The quality of resource stewardship decisions and the predictability of the outcomes are strongly dependent on the quality of the data being used.

Given the increasing complexity of fisheries management, the current state of fisheries statistics needs to be greatly improved. Despite some regional successes, it is clear that the current overall approach to collecting and managing fisheries information needs to be re-thought, revised, and reworked. The quality and completeness of fishery data are often inadequate. Data are often not accessible in an appropriate form or a timely manner. Methods for data collection and management are frequently burdensome and inefficient. These drawbacks result in the inability to answer some of the most basic questions regarding the state of the Nation's fisheries, such as: How many vessels and people participate in various fisheries? Do our policy decisions improve the economic and biological sustainability of our fisheries - by how much? How are different people (harvesters, consumers, coastal residents, non-consumptive users) affected by these stewardship decisions? An ability to answer these kinds of questions is essential to sound resource stewardship. Simply put, to manage fisheries at local, state, regional, or national levels requires a much better fisheries information system than the one in place.

To address these shortcomings, the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act required NMFS to "develop recommendations for implementation of a standardized fishing vessel registration and information management system" to improve the state of our fisheries statistics programs. This Report to Congress provides the recommendations for implementation of this "System."

The benefits of such a system would be seen on several levels. At the most basic level, answers to fishery performance questions similar to those above would be immediately available. The ability to evaluate the status of all managed fish stocks would be enhanced. Scientists working with fishery data would be freed of the inordinate amount of time now spent on searching for, cleaning, checking, and reconciling data prior to use. Fishery participants would have an enhanced ability to make decisions on their participation and production. The entire system would be more efficient in the collection of data and the delivery of useful information to those who need it. Just as a business requires data on raw materials, inventory, cash flow, employees, product quality, and capital investments to be successful, this fisheries statistics system is designed to deliver the analogous decision-making information to those who manage and depend on the Nation's living marine resources for their livelihood, food or recreation.

The Magnuson-Stevens Act required that the system be implemented on a regional basis. Since several major regional information systems already exist or are being planned, NMFS recommends creating a system that improves, expands and integrates ongoing regional activities under a nation-wide "umbrella."

As specified in the Magnuson-Stevens Act, the system will have two main components. The first component, the Vessel Registration System (VRS) will enable fisheries managers to uniquely identify every US vessel engaged in commercial and recreational for-hire fishing. To implement the VRS component of the system, NMFS recommends utilizing a system already being developed by the U.S. Coast Guard (Coast Guard). The Vessel Information System (VIS), includes nearly all of the information needed for the VRS and is based on combining data from the Coast Guard vessel documentation and state vessel numbering files into one Coast Guard database.

A pilot implementation of the VIS, with data from two states and the Coast Guard, is now online and undergoing testing. State participation in the VIS is currently voluntary. However, an expansion of this system to require coastal states and territories to participate would fulfill the requirements for a VRS as set forth in the Magnuson-Stevens Act in the least costly and least burdensome manner. The modifications to the Coast Guard VIS that would allow it to serve as the VRS include:

- Requiring that coastal states and territories participate in the VIS
- The placement of a Hull Identification Number (HIN) on all undocumented vessels participating in commercial or charter fishing that did not have one upon manufacture
- Creation of a "charter fishing" endorsement and principal use category

A new separate system to include recreational vessels in the VRS is not recommended. However, since pleasure craft are already in the VIS, conditionally including them in the VRS is recommended. The recommendation is contingent on there being no additional costs or burdens to participants or the state numbering agencies to include VIS pleasure craft in the VRS. Otherwise, the net benefits of inclusion would no longer outweigh the costs.

The VRS design requirement includes obtaining the identity of the owner and operator of each fishing vessel at the time of registration, but vessel operator data changes frequently over time. Several resource management agencies, regional statistics planning groups and industry members suggested that tracking vessel performance over time without information regarding the operator, and in some cases the crew, was insufficient to meet their needs. During development of the VRS proposal, it became clear that better data on fishermen, in addition to fishing vessels, was an important design criterion for many stakeholders. While many federal and state permitting and licensing programs contain information on vessel operators, there is no universally accepted means to identify fishermen across fisheries or states. More frequently than not, fishery performance data are not linked to the operator. While various regional statistics planning efforts have identified this issue for resolution, there has yet to be a consensus on how to do this. NMFS proposes that the regional statistics bodies be asked to continue to investigate the development of a regional operator identifier that would be included as part of the catch information.

The second component, the Fisheries Information System (FIS), will be implemented by integrating and expanding on the current regional fisheries cooperative statistics activities. Some of these regional activities are well developed, while others are in the early stages of implementation. Present control and management of these regional programs will remain local. The FIS will simply link and harmonize the data from these programs to each other to form a virtual national system. FIS implementation details are addressed under three major areas: Data Collection; Information Management; and Institutional Arrangements. Under the recommended FIS, regional detail data would continue to

be collected locally with minor adjustments in content, coverage, and quality control as required to meet both the Act's requirements and regional requirements. Access to data will be controlled regionally to ensure a balance in the need for access to data with the confidentiality constraints under which they were collected. Routine summaries of detailed data will be made available for the most frequent uses of data. Reciprocity agreements to satisfy multiple state and federal data submission and user access requirements are recommended. Adoption of common codes or creation of bridges between coding systems is recommended.

Using the unique vessel identifier from the VRS/VIS as a link, the FIS will associate with each vessel a record of its fishing activities, including landings, fishing location, gear used, time periods of fishing, and other data recorded in the regional data collection systems. In addition, data in the VRS/FIS system will be available as necessary to assist in the issuance of permits and for other systems requiring vessel and ownership data so that an applicant will not have to submit identifying information more than once.

Resolution of issues arising among the states, the marine fisheries commissions, and federal agencies (including NMFS) concerning the development of agreements, policies, regulations, and laws to collect and share information, or concerning budgets and planning for cooperative development of the System, will be jointly resolved by the System partners. Statistical committees and work groups, plus an annual statistics meeting of all System partners, are proposed for bringing together the relevant parties. These groups would:

- Facilitate coordination of data sharing among states, regions and NMFS, where such outcomes support fisheries stewardship; and
- Facilitate consensual formulation of regional and national policies concerning data collection and management.

The plan relies on existing regional statistics, industry advisory and marine fisheries policy groups to facilitate solutions rather than the creation of new entities.

Section 401(a) (5) of the Magnuson-Stevens Act requires that the Report to Congress provide for "funding (subject to appropriations) to assist appropriate state, regional or tribal entities and marine fisheries commissions" for implementing activities associated with this Report. The total cost for the nation-wide VRS/FIS system is projected to be \$51.9 million. This is the total incremental cost of implementing the system over and above current funding levels, and was derived through an extensive consultative process with the states, Regional Fishery Management Councils, and Marine Fisheries Commissions. Overall, \$43.1 million are for data collection, integration and harmonization, \$7.2 million for information technology and management and \$1.7 million for institutional infrastructure costs. Eighty percent of these costs are annually recurring, with full implementation phased in over a period of 5-7 years. The totals include \$23.7 million to fix or redesign data collection programs to fill gaps in current needs, including state-level commercial trip ticket systems, \$3.4 million for data quality and data integration improvements, \$6.8 million for economic and socio-cultural data collection, and \$1.7 million for improvements in state/federal information management communication and computer technology.

Three legislative/regulatory considerations associated with VRS/FIS implementation are recommended:

- 1) implement a fisheries statistics confidentiality sunset provision of 10 years coincident with the next Magnuson-Stevens Act reauthorization;
- 2) create a temporary VRS/FIS System liaison office within the Office of Management and Budget to obtain any Paperwork Reduction Act approvals coincident with VRS/FIS implementation in a comprehensive and expedited manner;
- and 3) strike prohibitions on collecting economic and financial fisheries statistics data in the Magnuson-Stevens Act coincident with its next reauthorization.