MAFMC RSA Committee Meeting
Port Jefferson, NY
June 14, 2011
Agenda

Review outcome of May 23, 2011 RSA WG Conference call

MAFMC Staff and NEFSC Review of RSA Project Results

Draft Decision Tree for RSA Program Review

Options for future of RSA Program

Next steps

Other business

Research Set-Aside Program Review Working Group
Conference Call
May 23, 2011

Working Group: Preston Pate, Peter deFur, Pete Himchak, Steve Heins, and Greg DiDomenico.
Others: Ryan Sylva, John Boreman, and Eleanor Bochenek.
Staff: Rich Seagraves and Kathy Collins

The MAFMC RSA Program Review Working Group held a conference call to review the RSA program. The main purpose of the call was to discuss how the program is working and look at the outcome of projects to determine what useable information for management and stock assessments has been derived from the RSA program. The Working Group was also asked to address administrative issues related to the RSA program.

The Working Group discussed how to rate projects that are submitted. They suggested looking at a project to see if it has usable information, if so, what is it? And, if not, why did it fail to meet objectives?

Pete Himchak noted that New Jersey originally voted against an RSA of up to 3%.

Rich Seagraves discussed the timeline for the RSA review. The ED has requested a report for the RSA program review by October 2011.

MAFMC Staff was asked to review the programs funded to date under the RSA Program and to identify projects which yielded results which were incorporated into management or informed a stock assessment for MAFMC managed species. In addition, a letter was sent to Nancy Thompson, then NEFSC Science Director, requesting the Science Center to identify instances where information derived from MAFMC RSA funded programs was used to inform stock assessments for MAFMC managed species.

Rich Seagraves then presented the results of the staff and NEFSC review. The following is a list of instances where RSA funded project results informed a stock assessment or MAFMC management program:

1. NEAMAP Survey data informed an SSC deliberation in January 2011 when the SSC was requested to re-evaluate the 2011 ABC recommendation for butterfish.
2. Results of Project No. 06-RSA-005 on the mortality of summer flounder discarded from trawls were used to confirm that the discard mortality rate for this gear type that was being used in the summer flounder stock assessment was appropriate.
3. Results of a black sea bass trap vent study (Project No. 03-RSA-005) were also used by the Council to specify escape vent size in the BSB commercial trap fishery.
4. NEAMAP survey data were used in swept area biomass calculations for inshore areas in the most recent Loligo squid stock assessment (i.e., in areas too shallow for the Bigelow to sample) (Project No. 08-RSA-002).

Pete Himchak asked if the Scup Ventless Trap Survey was used by the Data Poor Working Group when conducting the most recent Scup Stock Assessment. Rich Seagraves responded no, the Southern Demersal Working Group requested the raw data from the University of Rhode Island but the request was denied. The raw data was required in order for the data to be incorporated directly into the assessment. John Boreman noted that providing access to raw data should be identified as a requirement to receive funding under the RSA Program and the Council needs to develop a policy on it.

Rich Seagraves then reviewed the RSA Decision Path (Figure 1) which is a draft strawman of the various options the RSA Committee and Council could pursue with respect to the RSA Program. One of the options discussed was to reprogram the RSA set aside to directly fund increased at-sea observer coverage for Mid-Atlantic fisheries where needed.

John Boreman identified the need to consult with the SSC on what is the best use of RSA money? The Council needs to consider the difference between ABC and OFL which results from scientific uncertainty and prioritize RSA funding based on the degree to which proposed research would reduce scientific uncertainty and hence the buffer between OFL and ABC. He added that there would be funding coming in from MRIP.

Rich Seagraves suggested that we need to more fully integrate the SSC into the process. The SSC should be directly involved in setting priorities.

Pete Himchak stated that the ACCSP gets $3.5 million every year. The Rec Tech Committee has always put in a proposal for field intercepts. That has ended. There will be less sportfishing information.

Ryan Sylva stated that regarding the report, it should be looked into how money can be procured, etc. He served on a Committee set up by the NRCC to identify alternative ways to fund at-sea observer programs and will make the Committee's Report available to the Working Group (Attached).

Rich Seagraves noted that a lot of problems identified in the NMFS RSA program evaluation stem from the fact that the program is administered as a grants program. This has resulted in less cooperative research being conducted than was originally envisioned by the Council. There was general consensus that the SSC should be involved in setting future research priorities and evaluate which projects get funded and the Council should look at other cooperative research models which have been successful.

The working group then discussed administrative issues related to the RSA Program. Greg DiDomenico stated that his group has been tasked with running the auction and raising money. Improvements need to be made to the auction.

Based on Greg's suggestion, another option could be to make the RSA set aside apply to the commercial side of the fishery and provide RSA quota to commercial fishermen only. This is an option that will be added to the list.

Greg DiDomenico stated that the Service said there needed to be a smaller number of applicants for the auction.

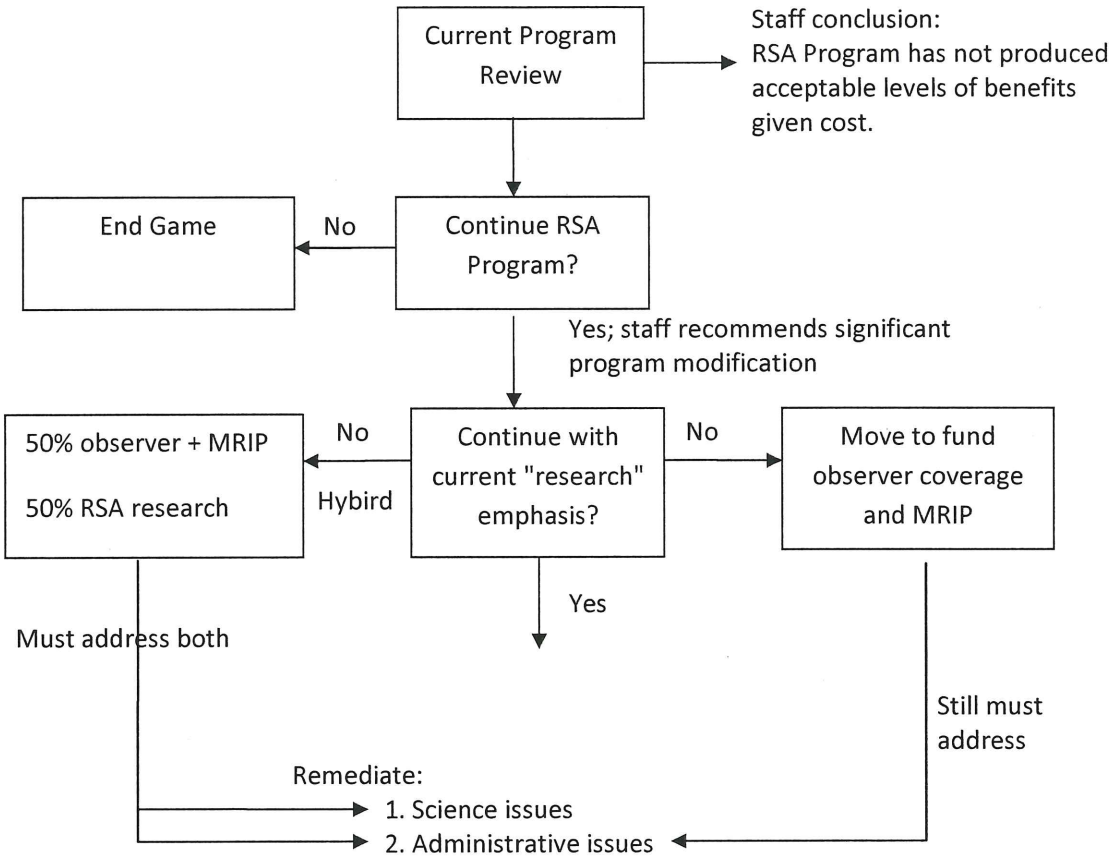
Preston Pate stated that even if the Council moves forward in a different research direction the Council will still have administrative issues to deal with. One option would be to eliminate recreational use of RSA. Other administrative issues might be solved by setting of multi-year RSA quota set-asides and priorities.

Regarding oversight of the program - the question was raised "Can it be run directly by the Council?" This is a legal question and staff will consult with General Counsel on this issue.

Peter deFur stated that we need to reinforce the need for this program to produce useful results. Any data collected under this program need to be made available to the Council. He noted that the Council has requested to have project awardees give a presentation of projects after they are completed. Rich Seagraves noted that Council policy is that projects must pass peer review before having the presentations of the projects come before the Council.

Staff will summarize the discussion of the WG meeting and report out to the full RSA Committee at the June Council meeting in NY. Staff will continue to develop the program review narrative and options for the RSA program for RSA Committee and Council consideration.

Figure 1. Decision Tree for RSA Program Review



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May 18, 2011

Mr. Preston Pate, Chairman
Research Set-Aside Committee
Mid-Atlantic Fishery Management Council
800 N. State Street
Dover, Delaware 19901

Dear Preston:

Your Research Set-Aside Committee meets in New York next month to perform a review of 2012 RSA proposals and then to update the ongoing RSA Program review. Recognizing your Council appreciates there are problems with the RSA program and the recreational fishery for fluke, scup and black sea bass is increasingly taking advantage of the Program through the NFI auction, we offer the following perspective based on increasing numbers of requests for LOAs exempting fishermen from Massachusetts fishing rules and regulations.

We know other states share our concerns about this phenomenon that places a burden on states to monitor fishermen with LOAs and to deal with questions of fairness. Telling fishermen, who feel unfairly impacted by commercial or recreational fishermen taking advantage of the auction, that they should buy fish too and join the pool of LOA fishermen is an inappropriate way to deal with RSA fish and greatly complicates state and interstate fisheries management.

The attached memo from Paul Diodati to our state Marine Fisheries Commission details our concerns and what we have done this year. It also indicates LOAs for recreational fishermen who have bought auction fish will not be granted next year. This is the last opportunity.

We hope your Committee's review will identify these and other issues and offer some solutions.

Thanks for your attention to this important Council and interstate issue that has taken on such great importance for the funding of NEAMAP and other research activities. A wag might suggest we auction far more of available ACLs to fund all sorts of fisheries research activities, perhaps even fund at-sea monitoring especially for NE groundfish sectors. A rascal might suggest it all be auctioned off. Of course that might face Magnuson-Stevens problems. Nevertheless, the bigger question is where are the Councils and ASMFC headed with the auction concept and research set-asides in general?

Sincerely yours,

David Pierce, Ph.D.
Deputy Director

NRCC Observer Funding Working Group Report

Revised October 26, 2010

Contributors

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I. Introduction

The Northeast Region has insufficient funds to meet all of its catch and bycatch monitoring needs. It is expected these needs will continue to increase and diversify, and that adequate appropriations will not be available to fully meet ongoing needs. In response to this issue, the Northeast Regional Coordinating Council (NRCC) established a working group comprised of a representative from each of the NRCC member organizations to evaluate funding methods that could potentially be used to supplement catch data collection programs in the Northeast Region. The findings of this group are summarized in this report.

Due to the diversity of catch data collection programs in the Northeast Region, the scope of this report is constrained to catch sampling efforts that are designed to quantify commercial catch, including shore-based sampling, at-sea catch sampling, at-sea observer data collection, and electronic monitoring. It does not include biological sampling that is conducted strictly for stock assessment purposes, recreational catch data collection, or activities focused on non-commercial fishing activities. This report does not assess all potential funding mechanisms, but focuses on those that the group deemed to have the greatest potential utility in this Region. It does not attempt to evaluate critical considerations when developing a catch monitoring program, such as data quality and observer safety needs. This report does not include a robust analysis specific to any given fishery management plan or fishing mode as defined by the Standardized Bycatch Reporting Methodology (SBRM) , although there are some basic evaluations made to illustrate the potential use and or limitations of a given funding mechanism.

Consistent funding for ongoing catch data collection programs was identified as a critical need for any observer program. Observer programs are extremely operationally complex. Contractual agreements for service providers may take months to be approved and put in place. In addition, field coordination, observer training, and debriefings are very dynamic, and data processing programs are complex and labor intensive. Without consistent funding, classroom or building leases would not be constant, and the quality of training and hands on tools would be compromised. Without stable funding, observers would not have steady employment, and would not be able to maintain their full-time job as an observer. The industry suffers when experienced observers are lost and when new, inexperienced observers must be brought in. Editors, debriefers, and data entry staff also require a considerable amount of time and training to become efficient. With interruptions in funding, these positions would also be lost and then re-trained.

II. Federal Funding Models

Observer programs can be funded fully or partially by the Federal Government. The Government may hire at-sea observers directly as personnel (i.e., observers as NMFS staff), or submit payment to an observer service provider. Typically, observer program administrative and analytical costs are handled through appropriations, while at-sea observer funds may come directly from appropriations or another source, such as the fishing industry.

Funds for Federal models are dependent on congressional appropriations. Although appropriations are clearly not an alternative funding mechanism, the working group agreed that a review of Federal models

could potentially improve the efficacy of designated appropriations. The primary recipient of appropriations in the Northeast Region is the Northeast Fisheries Science Center's Northeast Fishery Observer Program (NEFOP). Appropriations are either directed to general program support, earmarked for the Northeast multispecies fishery, or are available on a competitive basis.

The basic challenge regarding Federal funding models is insufficient appropriations to implement or support the diverse data collection needs in the Region. In addition, the restrictive nature of funds earmarked for a specific fishery further inhibits the ability to optimize the use of available funds to address management and scientific needs. Although there are some funds available on a competitive basis, such as those awarded through the National Seabird Program, the limited nature and uncertainty surrounding those funds is not considered further in this report.

The group identified the following steps that could assist programs reliant on appropriations, to more effectively meet catch monitoring program needs:

1. Increase appropriations;
2. Reduce restrictions on how appropriations may be used; and
3. Refine program efficiencies and maximize cost/benefit ratios.

Although substantially increasing appropriations would clearly help achieve catch monitoring needs, the basic premise for establishing this group was that this is unlikely to happen. The 2nd and 3rd steps were identified as ways that could allow NEFOP to more effectively utilize available appropriations.

Reducing restrictions on appropriations would allow NEFOP to optimize the utility of such funds. Implementation of the SBRM Amendment formalized and brought greater transparency to the process for allocating observer sea days to designated fisheries. As part of the allocation process a prioritization "performance standard" is developed that identifies the number of sea days needed to achieve a 30% CV. This is an important step and particularly germane to the focus of this report. Ideally, funding would be available to achieve the 30% standard for all fleets, species, and regions. As envisioned by the SBRM Amendment, however, funding is often limited such that only a subset of sea days is available for a number of fleets. The Mid-Atlantic region typically falls short of needed sea days. As stated in the NRCC's 2010 Response to Comments:

"...the shortfall in the Mid-Atlantic region has been an on-going issue since the beginning of the sea sampling program in the late 1980's. Constraints associated with Congressional/Headquarters funding restrict its use to a particular region. These restrictions limit re-distribution of sea days between the Mid-Atlantic and New England regions. The concerns expressed in the comments are directly related to a lack of funding. Any revisions of funding are policy matters beyond the scope of the Agency. Unrestricted funds would support of all FMPs under the SBRM Omnibus Amendment. The roles and responsibilities of NRCC agencies to identify funding sources or admissible changes in funding allocations are important policy considerations. "

In 2009, the performance standard corresponded to a total of 15,125 sea days while funding was available to achieve 6,161 sea days. In 2010, aggregate funding was greatly improved such that

compared to a 14,147 sea days standard, there was funding available for 13,950 days. The bulk of the increase, however, was dedicated to compliance monitoring for New England groundfish fleets (longline, otter trawl, and gillnet). Compared to the SBRM standard of 4,230 days, these fleets were allocated 9,000 days (Attachment A). The purpose of SBRM is to provide a precision basis for optimizing sea day allocation for bycatch estimation. Compliance monitoring of sector operations clearly falls outside of the SBRM design and purpose. Nevertheless from a bycatch estimation perspective it is interesting to note that the level of coverage for the trawl and gillnet groundfish fleets resulted in estimated CVs of 3.5% and 5.6%, respectively, compared to a CV for the small mesh Mid-Atlantic SMB fleet of 34.7%. Increased funds for groundfish sector compliance monitoring is not expected to increase the accuracy of bycatch estimation except, incidentally, in the groundfish fleets.

Improving program efficiency through a programmatic review could identify ways to optimize the utility of appropriations. An area that could create inefficiencies is specialized data collection programs, which may not maximize the opportunity to collect useful data. A programmatic review could also identify methods to improve general program cost-effectiveness.

III. Industry Funding Models

All industry-funded observer programs currently have some form of cost-sharing structure with the Government, whereby the Government assumes administrative and analytical costs, and the industry pays for data collection costs. Existing industry-funded programs include the North Pacific Groundfish Observer Program (NPGOP), At-Sea Hake Observer Program (A-SHOP), and Atlantic Sea Scallop Observer Program. Currently under NPGOP and A-SHOP, vessel owners submit payments directly to the observer provider for rendered services. The North Pacific Fishery Management Council is currently proposing to restructure the NPGOP and replace the existing observer service delivery model, in which industry contracts directly with observer providers. Under the restructured program, NMFS would contract directly with observer providers and determine when and where observers are deployed. Vessels and processors under the restructured observer program would pay either a fee based on a percentage of ex-vessel revenue (not to exceed 2%), or a daily observer fee, to fund the program.
Under the Atlantic Sea Scallop Observer Program, vessel owners submit payments directly to the provider, but are compensated with additional fishing opportunities to offset the cost of carrying the observer. In this report, industry-funded models are separated into two groups: (1) Indirect payment models, and (2) compensatory models.

A. General industry-funded program challenges

Industry-funded programs are not appropriate for all fisheries or groups of stakeholders. Low profit-margin fisheries may not be able to remain viable with the additional cost of paying for catch data collection. Factors such as fishing capacity and available fishing allocations will create variability in how able various elements of a fishery or group of stakeholders are to pay for catch data collection.

Industry-funded programs are often created in response to an explicit catch data collection program, such as yellowtail flounder bycatch in the scallop fishery. Such programs do not optimize data collection opportunity, and therefore may not be the most cost-effective data collection method.

Due to the cost-sharing structure, new industry-funded programs create a financial burden on NMFS. Although industry pays for at-sea data collection costs, there are substantial administrative and analytical expenses that must be covered by NMFS. As a result, NMFS may not have resources to adequately support new industry-funded programs.

B. Indirect Models

Under indirect models, the observer service provider or NMFS is paid through the transfer of funds from an account established exclusively for covering data collection costs. This account, which is comprised of funds that are generated from a group of common stakeholders, such as a fishery, fishery sector, or regional fishery management organization, would be managed by NMFS or a third party that is under the direction of NMFS or the stakeholder group. These funds are derived from a common source, such as the following:

- Sector fees or permit fees;
- landings tax; or
- set-aside auction proceeds.

Sector fees and permit fees: Under this model, all sector members or permit holders must submit a fee to participate in the fishery, which would be used to cover data collection costs.

Landings tax: Under this model, a percentage or fixed amount of a vessel's landings revenue is reserved to pay for data collection costs. This "tax" would apply to all vessels with a Federal Northeast permit, or could be limited to certain fisheries (e.g., by taxing landings of specific species). Additional factors affecting the tax could include permit category and vessel capacity.

Observer set-aside auction proceeds: Under this model, permit holders within a fishery would be allowed to bid on or purchase set-aside quota or days-at-sea (DAS). Quota recipients could be allowed to exceed effort controls by the amount of quota they received. Quota recipients could be authorized to exceed possession limits or harvest quota during quota closures, similar to the Mid-Atlantic Research Set-Aside program.

Indirect model challenges

The two primary challenges to implementing models that involve the collection of fees by the Government are: (1) Low profit-margin fisheries that may not be able to bear increased overhead; and (2) fee collection restrictions resulting from the Miscellaneous Receipts Act.

An economic assessment strategy would need to be developed to determine whether a given fishery or other group of common stakeholders could assume the cost of catch data collection. The scope of this report is limited to funding models applicable to the Northeast, and does not include such an assessment.

The Miscellaneous Receipts Act prevents Executive Branch agencies from bypassing the Congressional appropriations process by augmenting their budgets through other means. The following exceptions

that apply to the Northeast Region allow the collection of fees: Limited Access Privilege Program (LAPP) cost recovery fees, the Fisheries Conservation and Management Fund (FCMF) (Attachment A), and permit fees.

Under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), cost recovery fees cannot exceed 3% of the value of fish landed under a LAPP, and may only be used to cover incremental administrative costs established by the LAPP, and not existing program needs. However, if a LAPP establishes new at-sea observer requirements, cost recovery fees could be used towards these costs.

Section 208 of the Magnuson-Stevens Reauthorization Act stipulates that the Secretary of Commerce shall establish and maintain the FCMF. Available funds would be disbursed by the Secretary for the purpose of addressing objectives defined under this provision, one of which includes improvements to harvest data collections. Potential sources for this fund include quota set-asides, appropriations, or other public, private, or non-profit organizations. Consequently, this new fund may allow NMFS to collect funds under a quota set-aside, or from one of the other listed resources, for the purposes of improving or implementing catch data collection programs. Further consideration is needed to determine the utility, if any, of this fund with respect to generating funds. Limiting factors of the FCMF include its general applicability to observer funding models, and the provision that no region shall receive less than 5% of the fund in each allocation period.

Permit fees may only be collected to offset the administrative cost of the permit program, and therefore, have no current utility with respect to augmenting data collection costs.

There are several challenges associated with set-aside programs. Foremost, the set-aside resource must have sufficient value. There are substantial vessel costs and uncertainties associated with harvesting set-aside quota. The costs of administering a set-aside program and harvesting fish under the set-aside may preclude the ability to generate a significant amount of funds. Additionally, there must be effort controls that constrain the fishery, thereby providing access to an otherwise restricted resource. Constraints include possession limits, quota closures, and vessel effort allocations. If such constraints do not exist, there is no incentive for vessel owners to bid on set-aside quota (or DAS). Even if constraints exist, access to set aside quota must generate sufficient proceeds to cover the cost of harvesting the set-aside quota and the data collection costs.

Another primary challenge of set-asides is the uncertainty associated with many effort constraints, particularly quota closures. There is a financial risk of purchasing set-aside quota because if effort constraints do not occur, vessel owners may not regain the cost of purchasing set-aside quota.

Potential indirect model solutions

Currently, the ability to collect fees in support of catch data collection is very limited in the Northeast Region. However, there are a few applications that warrant further consideration.

Easing fee collection restrictions would be the most direct way to allow for the implementation of a robust indirect model. There are two apparent ways that NMFS could collect fees to support data

collection programs: (1) Revise the FCMF, or (2) support a specific provision within MSA that would allow for the collection of funds to be used in support of catch data collection programs. To have any utility, the FCMF would need to be revised, either through an amendment to MSA or possibly through a policy directive. To have utility, the requirement that at least 5% of the fund needs to be distributed to each region each year would need to be changed, and it would need to be established that funds could be used to fund catch data collection programs. Until these issues are resolved, the FCMF has little applicability in the Northeast Region. A longer term, but more direct solution, would be to create the authority through an amendment to MSA for the Northeast Region to collect funds for the purpose of implementing catch data collection programs. This provision already exists under the North Pacific Fishery Observer Fund, at §313(d) of MSA (Attachment B). Although this provision is specific to the North Pacific Council and the Alaska Region, a similar model could be developed for the Mid-Atlantic and New England Fishery Management Councils and the Northeast Region.

A Memorandum of Agreement (MOA) between NMFS and a state, and potentially an academic institution or other organization, has been used as a means for an organization to pay NMFS to execute a catch data collection program. An MOA between the Maine Department of Marine Resources (DMR) and NEFSC was signed April 22, 2010, in which DMR paid NEFSC to collect and process catch data from vessels participating in a small-mesh fishery. The MOA established a vehicle by which DMR could take advantage of the robust program infrastructure and expertise of NEFOP for their catch data collection program needs. It would be beneficial to establish what entities NMFS may enter into an MOA with.

Although the utility of LAPP cost recovery fees are relatively limited, such fees could be used to implement LAPP catch monitoring programs.

Grants and/or no cost-contracts could potentially be used to operate a set-aside auction. Under this scenario, NMFS would establish operational criteria of the auction and then solicit contract applications. The successful applicant would then conduct a set-aside auction, retain an administrative fee, and deposit the remaining funds in an escrow-like account, to be accessed conditionally by an observer service provider for rendered data collection services. It has not been determined whether such a scenario is legal.

A potentially simple solution to fee collection challenges would be to have industry collect fees independent of a government program. A group of stakeholders would anticipate the common cost of catch data collection and submit a fee as determined by the group. The funds would be collected and managed by the group. The government would simply identify the level of observer coverage that would be required. This approach would provide industry with the greatest flexibility in determining the most appropriate way to derive funds for catch data collection.

The surfclam/ocean quahog fishery provides an example of a voluntary, industry-funded data collection mechanism. By agreement, clam processors pay a "tax" of either $0.03 (surfclams) or $0.01 (ocean quahogs) per bushel to the National Fisheries Institute (NFI). The collected funds are then distributed via NFI's Clam Subcommittee to various research projects to meet data collection needs. Prioritized data needs are communicated to the NFI subcommittee by the Northeast Fisheries Science Center's

Invertebrate Subcommittee. Typically, the projects involve offshore sampling and provide spatial abundance data to be incorporated into stock assessments. Research projects supported by this industry "tax" have been conducted through Rutgers University and the Virginia Institute of Marine Sciences.

Conceivably, any coalition of processors, boat owners, or other industry groups could establish a data collection funding agreement. However, successful establishment of these partnerships is challenged by the degree to which they serve a common interest. As successful as the clam program has been, each year a small number of clam processors do not contribute to the funding pool. As the focus of data collection become less complimentary of fishery operations (i.e., observer coverage in fisheries with known bycatch problems), voluntary funding is likely to become more difficult. A mandatory tax, such as that implemented through FMPs for West Coast fisheries would likely provide a more dependable revenue source for observer coverage.

Moreover, while the surfclam/ocean quahog fishery has seen some success using this approach in partnership with the NFI, other fisheries in the Northeast Region may face additional challenges due to fleet dynamics and organization/structure within the fishing industry. Fisheries that utilize systems that exist independent of the government usually include fishing fleets that are well-organized, and well-established; in some cases, the industry already has an infrastructure through which fees can be collected and operations can be managed in a more "bottom up" manner. In other cases, incentives for the industry to organize or form partnerships for data collection are provided within the management framework. Some fisheries that utilize industry-funded catch monitoring/observer coverage do so through a network of harvesting cooperatives that facilitate the collection and management of resources. The cooperatives may exist for a variety of reasons, and the industry may already work with an independent company to collect, review, and disseminate catch data to the fleet for some sort of catch management and/or bycatch avoidance program. For the most part, this infrastructure is currently lacking in the Northeast Region, so collecting fees through an independent mechanism may prove to be more challenging and/or less efficient, at least until such infrastructure can be established.

C. Compensatory models

Under direct-payment models, often referred to as "pay-as-you-go", the vessel owner is responsible for paying the observer service provider, or NMFS and assumes the data collection cost burden. The vessel owner may account for that cost as part of the business overhead, or may take the costs out of that particular trip's share, thereby affecting the captain's and crew's payment for the trip. Vessel owners that are required to directly pay an observer service provider or NMFS for all or part of the data collection cost may be compensated for this expense. A vessel owner may receive either reduced fees and/or set-aside compensation for carrying an observer.

Reduced fees: A vessel owner is compensated for carrying an observer by reducing or eliminating fees or landing taxes. Such waivers are based on the vessel owner's overall observer costs, the number of observed trips, or simply whether the vessel incurred any observer costs that year. Due to the complexity of such a model, this approach is likely to be less effective and more burdensome than other industry-funded models, and is not considered further in this paper.

Set-aside compensation: A vessel owner is compensated for carrying an observer by authorizing the observed vessel to exceed effort controls, as in the Atlantic Sea Scallop Observer Program. Such vessels may be authorized to fish longer than normally allowed, during closed seasons, or to retain catch they otherwise could not, whether retained as target or non-target catch. Revenue generated from this additional effort would provide compensation to offset the vessel owner's observer expenses.

Compensatory model challenges

There are several challenges associated with such set-aside programs. Foremost, the set-aside resource must have sufficient value to provide adequate compensation. Additionally, there must be effort controls that constrain the fishery, thereby providing access to an otherwise restricted resource. Constraints include possession limits, quota closures, and DAS allocations. Even if effort constraints exist, access to set-aside quota must generate sufficient proceeds to cover the cost of harvesting the set-aside quota and the data collection costs. Another challenge is the uncertainty associated with many effort constraints, particularly fishery closures. If a set-aside is reliant on a closure to generate value, and closures do not occur, or are limited in scope, the set-aside will not compensate vessel owners for data collection costs.

There is also the challenge of correlating compensation with the data collection costs, and ensuring set-aside quota is available for the entire fishing year, without leaving set-aside quota unharvested.

Some of the challenges identified above have recently become clear when trying to design a set-aside program to partially fund a catch monitoring program in the Atlantic herring fishery. A catch monitoring set-aside was considered but rejected by the New England Fishery Management Council during the development Amendment 5 to the Atlantic Herring FMP (still in progress). The herring fishery is a high-volume fishery, with a relatively low total value. Not all of the herring quotas are fully utilized. Set-asides have potential to be utilized only in management areas where the quota is fully utilized and the area closes. A catch monitoring set-aside, therefore, would be limited to only the management areas that close regularly, and could vary in amount from year to year, depending on the total quota and the percentage selected for the set-aside. Overall, it was determined that funds generated from a catch monitoring set-aside would be limited and uncertain, and may not be significant.

Compensatory model solutions

There is no clear solution to the challenges of a compensatory set-aside program. If a fishery has sufficient effort constraints and the resource has sufficient value a set-aside program may adequately compensate vessel owners for the cost of observer data collection. A thorough review on a case-by-case basis would be needed to determine the applicability of this approach to any given fishery.

IV. Third-Party Funding Models

An observer program may also be funded by a third party, such as a state management agency, environmental advocacy organization, international development agency, or international management

authority. Under such a scenario, the third party would pay for the collection of catch data, and possibly other program expenses, such as administrative and analytical costs.

Observer programs are very expensive to operate and consistent funding is critical. Consequently, the group feels it is unlikely that a non-government third party would be willing and able to implement a catch data collection program. It is possible that such a third party would contribute funds to help pay for a data collection program, and perhaps pay in-kind funds for observed trips. Because it is unlikely that a non-government entity would be willing and able to pay for a data collection program, and because there are many challenges that would result if such an entity did, the group did not feel it was necessary at this time to explore this model further. The remaining focus of this section is on third party bodies.

Given that there are a number of restrictions on the Federal Government's ability to collect fees from industry, it has been suggested that states may be in a position to collect fees from the industry to fund at-sea observers or port-side monitors. The states along the Atlantic Coast have a range of legal authorities relative to the collection of fees from the fishermen. The states were surveyed and had a number of themes that were consistent along the coast:

- States are experiencing large budget deficits, and revenue generated by the states is difficult to set aside long term for specific projects.
- Legislative action is often required to establish new fees collected from the industry.
- Legislative action is often time consuming and uncertain. Other options may be faster.
- New fees on industry may be politically difficult, given the number of "new" regulations being placed on the industry.
- State responses were tentative until a specific proposal was developed for consideration.
- Individual programs will likely vary by state, and will be difficult for industry to understand.
- Multi-state or regional programs may be a better approach, given the transient nature of vessels involved in many fisheries.

The collection of fees by individual states may result in a patchwork of observer funding programs. Any program involving the states will need to develop a standardized approach for collecting fees from fishermen that have permits in multiple states. In addition, it is important that catch data collection programs be coordinated as much as possible to maximize utility and reduce redundant or unnecessary expenses.

Due to the complications that states will likely have with collecting fees, another potential option would be for a third party, such as the ASMFC, to collect fees to support fishery monitoring. A program that used a third party to collect fees would have to be established through either state or Federal regulation. The third party would need to establish an MOA with NMFS as described above in order to pay NMFS for observer coverage.

V. Conclusion

This report responds to the request by the NRCC in 2008 that a working group be established to review funding methods that could potentially be used to supplement catch data collection programs in the Northeast Region. As noted in the introduction, this report does not include a robust analysis specific to any given fishery management plan or fishing mode as defined by the SBRM. Since the initial tasking, there have been several catch data collection program needs that have developed in the Region. The logical next steps would include how funding mechanisms identified in this report could potentially be applied to address these needs as well as other existing or developing needs.

Following is a synopsis of several potential ways to procure additional funds for catch data collection programs. There are also many challenges associated with all of these funding sources. This summary evaluates potential funding sources that are currently available, and sources that would require some change in regulation and/or policy to implement. This section only evaluates those mechanisms deemed by the working group to have the greatest potential utility.

The following models are currently available for implementation:

- Set-aside;
- State MOA; and
- LAPP cost recovery.

Although compensatory set-aside programs could be implemented currently, further consideration would need to be given to implementing an observer set-aside auction, as discussed in that section. Due to the limited ability of states to procure funds for catch data collection programs, it is unlikely state MOAs will be a comprehensive approach to procuring additional funds. However, MOAs are an important tool and the use of which could be expanded. As previously noted, LAPP cost recovery fees have limited utility, but should be considered in the development of LAPPs.

The following models could be implemented in the near-term, but would require substantive policy adjustments or program assessment:

- Appropriation flexibility;
- Cost effectiveness review; and
- FCMF flexibility.

Maximizing appropriation flexibility in the near term by removing fishery-specific restrictions could improve program efficiency. Additionally, performing a programmatic cost effectiveness review of catch data collection programs could also identify ways to improve program efficiency.

If the challenges cited for the FCMF are addressed it could be an effective tool for NMFS to collect funds from industry or other parties. Otherwise, MSA would need to be amended to resolve those challenges. Additionally, amending MSA to create a fund comparable to that of Fishery Observer Fund at §313(d) for the Northeast Region would be a relatively straight forward and effective step to improve the ability to procure catch data collection program funds.

VI. Attachments

A. Proposed 2010 Observer Sea Day Allocation

B. Fisheries Conservation and Management Fund

C. North Pacific Fishery Observer Fund

Mid-Atlantic Fishery Management Council
Research Set-Aside Program
MISSION STATEMENT

GOAL: The goal of the Research Set Aside (RSA) Program is to fund scientific research that provides information to improve the conservation and management of fishery resources under the purview of the Mid-Atlantic Fishery Management Council and those managed jointly with the Atlantic States Marine Fisheries Commission (ASMFC).

CORE PRINCIPLES: Recognizing the capabilities that both the scientific community and fishing industry can bring to the program, fisheries research funded under the RSA Program shall:

1. Directly address deficiencies in the information necessary for improved management of commercial and recreational fisheries through topic specific projects and the development and testing of prototype data collection/monitoring programs;

2. When possible and appropriate, be conducted cooperatively between the scientific community and the fishing industry;

3. Be of sufficient scientific/technical merit to meet the requirements set forth in the guidelines for National Standard 2 of the Magnuson-Stevens Act. Availability and distribution of research data shall be in accordance with existing applicable National Marine Fisheries Service (NMFS) and other federal regulations and procedures;

4. Be completed in a cost effective and timely manner;

5. Where appropriate, be conducted in cooperation with other management partners (e.g., Northeast Cooperative Research Program, Councils, NMFS, and ASMFC).

Mid-Atlantic Fishery Management Council
Research Set Aside (RSA) Program Evaluation Narrative
Draft

The Mid-Atlantic RSA Program was developed by the Council to fund scientific research conducted cooperatively with the fishing industry as a means to address data and information needs to improve management of the resources under its purview. The concept was to set aside a portion of the annual quotas for managed species (with the exception of ocean quahogs, surf clams spiny dogfish) and to fund scientific research projects through the utilization of the value or direct sale of "research quota". Framework Adjustment 1 to the Summer Flounder, Scup, and Black Sea Bass Fishery Management Plan (FMP), Atlantic Mackerel, Squid, and Butterfish FMP, Bluefish FMP, and Tilefish FMP was approved in 2001 and established a procedure through which RSA quotas were set-aside as part of the Council's annual quota-setting process. The set-asides may range between 0 and 3 percent of each species total allowable landings (TAL).

This program became operational in 2002 and funded 26 research projects through the period 2002-2009. The estimated total value of the species set aside and made available to fund these projects during this timeframe was approximately $9.1 million. The actual total estimated research and compensation values for the same period for those projects were $4.7 and $4.4 million, respectively. Thus, the Council has made a significant investment in terms of foregone harvest to fund research to address information gaps/needs for management of these resources. The primary purpose of this program evaluation is to determine if the benefits received from the research conducted to date are sufficient to justify their overall cost.

Framework for RSA Program Evaluation

MAFMC staff is currently evaluating the efficacy of the Council's RSA Program to answer two fundamental questions. First, has the RSA Program been successful in meeting its goals and objectives? Secondly, how effective has the administration of the RSA Program been and how can it be improved?

Part I: Evaluation of RSA program results relative to overall goals and objectives

Part I of the program evaluation relates primarily to how effectively the scientific research conducted using RSA funds has addressed the research and management needs articulated by the Council. This question will be addressed by consideration of the following:

1. RSA research needs identified annually since program inception (attachment 1)

2. RSA projects approved and funded by year (attachment 2)

3. Comparison of research needs articulated by the Council versus projects funded using RSA quota (In other words, has there been a disconnect between research needs and the research actually funded?)

4. On a project by project basis, did each funded project provide results of sufficient scientific merit such that they could be used for management and/or resource assessment? For each project for which the answer is no, characterize the reasons for failure

5. For projects which passed peer review, did the research results of the project ultimately result in tangible management measures or inform the Council during the formulation of management measures?

6. For projects where the answer is no under # 5 above, evaluate the primary reasons why the results could or were not translated into management measures or were not informative to the assessment and/or management process

Based on a stepwise evaluation of each project funded based on the framework described above, Staff will provide an overall evaluation of the efficacy of the RSA program in meeting its primary objectives. Implicit in this exercise will be an evaluation of the process for review of the projects prior to approval and funding as well as the process for technical review after completion. In addition, the process by which results are incorporated into stock assessment and/or management programs will be evaluated and potential remedial alternatives or improvements will be identified.

Part II: Administrative Issues

In addition to an evaluation of how well the RSA program has performed relative to science and management goals, the program evaluation will include the identification of significant administrative issues which need to be addressed and an exploration of potential remedies or alternative solutions. These include but are not limited to:

1. Issues related to or created by the use of the auction process to generate RSA funds

2. Single year v multi year RSA specifications

3. EFP permit issues/bottlenecks

4. Competitive grant process v. alternative cooperative research models

5. Other.

National Marine Fisheries Service (NMFS)
Mid-Atlantic Research Set-Aside Program

Proposal Number	Title	Description	Recipient	Principal Investigator	Project Period	Final Report
2002 Fishing Year						
01-RSA-005	The Effect of Circle and Square Escape Vents on Discard Reduction in the Black Sea Bass Trap Fishery	To evaluate the effectiveness of various sizes of escape vents, both of circular and square vent designs, in reducing discards as part of the black sea bass fishing mortality rate reduction strategy.	Virginia Institute of Marine Science	Robert Fisher	1/1/02 - 12/31/02	Full Text
01-RSA-011	Loligo Squid Gear Modification Study	To compare the 5.5" mesh square extension escapement panel and the standard 1 7/8" mesh without the extension for reducing bycatch of scup in the offshore winter Loligo fishery within and outside the Gear Restricted Areas (GRA).	National Fisheries Institute	Eric Powell	3/1/02 - 3/31/03	Full Text
01-RSA-012	Evaluation of Catch Efficiency and Size Selectivity of Inshore New England Fish Pots for Black Sea Bass and Scup as a Function of Escape Vent Size	To investigate the efficiency of four escapement vent sizes ranging from 2.38 to 3.4 inches in reducing the bycatch of sub-legal black sea bass and scup, while minimally affecting the catch of legal fish.	William Gell	Laura Skrobe	1/1/02 - 12/31/02	Full Text
2003 Fishing Year						
02-RSA-001	*Loligo* Squid: Extension of Gear Modification Study Through Scup Migratory Season	To test the effectiveness of the 5.5" square mesh extension, and/or other gear configurations recommended for reducing bycatch of scup (and potentially whiting) in the Loligo fishery during scup migration; 2) collect additional catch, discard and length-frequency data on black sea bass, summer flounder, whiting and other important commercial species; and 3) use of a Loligo study fleet to identify locations of high scup discarding for directed gear experimentation.	National Fisheries Institute	Daniel Cohen	4/1/03 - 5/31/04	Full Text
02-RSA-002	Development of a Supplemental Finfish Survey Targeting Mid-Atlantic Migratory Species	To supplement the survey database with information on the migratory behaviors of recreationally and commercially important species, so that the influence of this ever-changing spatial distribution can be included in the stock assessment.	National Fisheries Institute	Eric Powell	4/1/03 - 12/31/03	Full Text
02-RSA-005	Effects of Increasing Mesh Size in the Summer Flounder Fishery in Southern New England Inshore Rhode Island Waters	This project is designed to investigate the mesh size selectivity of summer flounder for 4 codend mesh sizes and shapes, 6.5 and 7.0 inch diamond, and 7.0 and 8.0 inch square.	University of Rhode Island	David Beutel	4/1/03 - 10/31/03	Full Text
2004 Fishing Year						
03-RSA-001	Fishery Independent Scup Survey of Selected Areas in Southern New England Waters	To develop a fishery independent scup survey that utilizes unvented fish traps fished on hard bottom areas in southern New England (SNE) waters to characterize the size composition of the population.	Charles Borden	Laura Skrobe	5/1/04 - 11/30/04	Full Text
03-RSA-003	Development of a Supplemental Finfish Survey Targeting Mid-Atlantic Migratory Species	To obtain second year support for the development/refinement of a commercial-vessel based survey program in the Mid-Atlantic region that tracks the migratory behavior of selected recreationally and commercially important species.	National Fisheries Institute	Eric Powell	1/1/04 - 12/31/04	Full Text
03-RSA-005	Evaluation of the Effect of Vent Size and Shape on Black Sea Bass Behavior and Escapement from Pot Gear	With the use of experimental pots and underwater video, various escape vent configurations will be investigated to help evaluate gear escapement and fish behavior. The project will also explore black sea bass mortality in pots left fishing during closed quota periods, and will also develop a sea sampling and dockside sampling program for black sea bass and supplement the NMFS black sea bass tagging program.	Cornell Cooperative Ext. of Suffolk County	Emerson Hasbrouck	4/1/04 - 12/31/04	Full Text

2005 Fishing Year						
04-RSA-002	*Loligo* Squid Mesh Selectivity Study to Reduce Bycatch of Juvenile *Loligo* Squid and other Species	This project will address the need to increase escapement of submarket size silver hake, butterfish, and Loligo in the Loligo fishery using larger cod end mesh sizes. Codend mesh sizes to be tested are 2" (51mm), 2.375" (60mm), and 2.75" (70mm).	National Fisheries Institute	Sarah King	1/1/05 - 2/28/07	Full Text
04-RSA-003	Development of a Supplemental Finfish Survey Targeting Mid-Atlantic Migratory Species	To obtain third year support for the development/refinement of a commercial-vessel based survey program in the Mid-Atlantic region that tracks the migratory behavior of selected recreationally and commercially important species.	National Fisheries Institute	Eric Powell	1/1/05 - 12/31/05	Full Text
04-RSA-005	2005 Fishery Independent Survey of Selected Hard Bottom areas in Southern New England	This project continues efforts to develop a fishery independent scup survey that utilizes unvented fish traps fished on hard bottom areas in southern New England waters to characterize the size composition of the population.	Charles Borden	Laura Skrobe	5/1/05 - 12/31/05	Full Text
2006 Fishing Year						
05-RSA-003	2006 Fishery Independent Survey of Selected Hard Bottom areas in Southern New England	This project continues efforts to develop a fishery independent scup survey that utilizes un-vented fish traps fished on hard bottom areas in southern New England waters to characterize the size composition of the population.	Charles Borden	Laura Skrobe	5/1/06 - 12/31/06	Full Text
05-RSA-005	Evaluating Size and Bag Limits in the Summer Flounder Recreational Fishery	To determine, through a combination of field experiments, angler surveys, and numerical modeling, if changes in size and bag limits can reduce discard mortality and increase angler satisfaction while reaching management goals of meeting recreational harvest limits, ensuring sustainability of populations, and sustaining a robust age/size structure.	Fisheries Conservation Trust	Eleanor Bochenek	1/1/06 - 12/31/06	
05-RSA-007	Development of a Supplemental Finfish Survey Targeting Mid-Atlantic Migratory Species	To obtain forth year support for the development/refinement of a commercial-vessel based survey program in the Mid-Atlantic region that tracks the migratory behavior of selected recreationally and commercially important species.	National Fisheries Institute	Eric Powell	1/1/06 - 12/31/06	Full Text
05-RSA-008	An Evaluation of Size Selectivity and Relative Efficiency of Black Sea Bass, *Centropristis strata* Habitat Pots Equipped with large Mesh Panels.	To 1) estimate the selectivity of an experimental design of black sea bass habitat pot comprised of large mesh panels on the top, bottom and posterior end of the pot (opposite the bridal). Three different sizes of large mesh panel will be tested (2", 2.5" and 3") and compared to a pot conforming to current regulations at the time of study; and 2) to compare the catch-per-unit-effort of the three experimental pot variations and legal pot.	Virginia Institute of Marine Science	David Rudders and Robert Fishers	1/1/06 - 12/31/06	Full Text
2007 Fishing Year						
06-RSA-001	Development of a Supplemental Finfish Survey Targeting Mid-Atlantic Migratory Species	To supplement the survey database with information on the deep-water extent and migratory behavior of important species by developing a supplemental multispecies survey program. This project is now entering its fourth year.	National Fisheries Institute	Eric Powell	1/1/07 - 12/31/07	Full Text
06-RSA-002	Bycatch Reduction and Gear Development in the Mid-Atlantic: Evaluation of Optimal Codend Mesh Size in the Loligo Fishery	This project will address discards in the small-mesh Loligo squid fishery by evaluating intermediate codend mesh sizes above the present legal size of 1.875" and below 2.5". Researchers will also attempt to determine the influence of these intermediate mesh sizes on the catch of other species such as butterfish and silver hake and accompanying bycatch species.	National Fisheries Institute	Eric Powell	1/1/07 - 12/31/07	Full Text
06-RSA-005	Evaluation of Summer Flounder Discard Mortality in the Bottom Trawl Fishery	This project will implement a program to improve information relative to discard mortality of summer flounder in the bottom trawl fishery. Legal and sub-legal size summer flounder discard	Cornell Cooperative Ext. of Suffolk County	Emerson Hasbrouck	1/1/07 - 12/31/07	

		will be measured, tagged and kept in a live holding pen for mortality monitoring. Extended mortality and migration information will be collected upon recapture of tagged fish.				
06-RSA-007	2007 Fishery Independent Survey of Selected Hard Bottom areas in Southern New England	This project involves a fishery independent scup survey of ten separate hard bottom sites in Southern New England and two sites located on the scup spawning grounds in Vineyard Sound using fish pots.	Charles Borden	Laura Skrobe	5/1/07 - 12/31/07	Full Text
2008 Fishing Year						
08-RSA-001	Discard Mortality in the Summer Flounder Fishery: A New Approach to Evaluation	The goal of this project is to determine the discard mortality for summer flounder in the trawl fishery in the Mid - Atlantic Bight as it varies with length, age, reproductive status, and relative to predation. The rate of discard mortality will be determined with a combination of mortality estimates 1) on the deck of a fishing vessel after haul-back and the catch has been retrieved from the trawl, 2) as a result of tagging and tracking and 3) the result of diver observations.	National Fisheries Institute	Kenneth Able, Thomas Grothues, and Eleanor Bochenek	04/01/08 - 3/31/09	
08-RSA-002	Data collection and analysis in support of single and multispecies stock assessments in the Mid-Atlantic: Northeast Area Monitoring and Assessment Program Near Shore Trawl Program	This survey will follow the design for a new Mid-Atlantic near-shore trawling program (NEAMAP) for a spring and fall trawl survey in shallow waters between Gayhead, MA and Cape Hatteras, NC. This project plans to provide stock assessment data improvements for species including summer flounder, scup, black seabass, Loligo squid, butterfish, and Atlantic bluefish, and assessment-quality data for weakfish, Atlantic croaker, spot, skate and ray species, smooth dogfish, horseshoe crab, and several unmanaged but important forage species.	Virginia Institute of Marine Science	Christopher Bonzek	04/01/08 - 3/31/09	
08-RSA-009	2008 Fishery Independent Scup Survey of Hard Bottom Areas in Southern New England Waters	This project is a continuation of a fishery-independent survey to collect scup from ten hard bottom sites in Southern New England, and two additional sites located on the scup spawning grounds in Vineyard Sound. The length frequency distribution of the catch will be compared statistically to each of the other collection sites, to finfish trawl data collected by the National Marine Fisheries Service (NMFS), and to data collected during previous survey efforts.	Charles Borden and Eric Rodegast	Laura Skrobe	05/01/08 - 12/31/08	