





### **Mid-Atlantic Fishery Management Council**

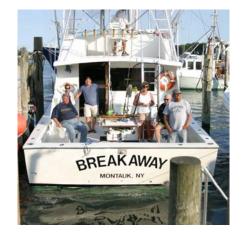
### Potential Redevelopment of the Research Set-Aside (RSA) Program

Riverhead, New York June 8, 2022



## **Presentation Overview**

- Overview of original RSA program
- Background on program suspension
- Process to consider RSA program redevelopment
- SSC Economic Work Group Report and Feedback
- Revised draft RSA framework
- Research Steering Committee recommendations









## **Background of MAFMC RSA Program**

- Developed as Framework I to the following FMPs
  - Mackerel, Squid, Butterfish
  - Summer Flounder, Scup, and Back Sea Bass
  - Bluefish
  - Tilefish
- Mission: Meet unaddressed research needs (gear studies, surveys, and mesh studies) and increase science/industry collaboration and build public trust
- Final approval in 2001 and first projects funded in 2002



## **General RSA Program - Funding**

- Need to convert fish into funding available for research
- Funding was generated through the sale of a portion of each species' quota (0-3% of a fishery's TAL)
  - Each species spec cycle the Council would identify % of TAL set-aside
- Compensation fishing
  - Defined under MSA essentially fishing to offset costs of research activity in support of management. Typically done independent of science
  - Incentives to participate
    - Need for vessel owners to pay for additional fishing opportunities to pay for research
    - Fishing during closed season or directed fishery quota closures
    - Higher trip/possession limits
- Federal EFP and state EFP equivalent needed given incentives



## **General RSA Program - Participation**

### Grant recipients

- Principal investigators awarded RSA quota from different species, depending on research
- Identified partners/vessels to participate and how to generate funds

### Methods

- Bi-lateral agreements between P.I. and vessel(s) share proceeds or vessel purchases outright
- A 3<sup>rd</sup> party auction vessels bid on species specific quota lots
  - Note: NMFS or Council do not have authority to conduct/run auctions

### Sectors

- Commercial vessels
- For-hire vessels
- State and federally permitted







## **General RSA Program Roles**



- Program creation
- Set aside specifications
- Priority setting
- Proposal review support
- Application of results



- Program/grant administration
- Project selection
- Project oversight
- Technical support
- Compensation fishing permitting and oversight
- Proposal reviews
- Application of results





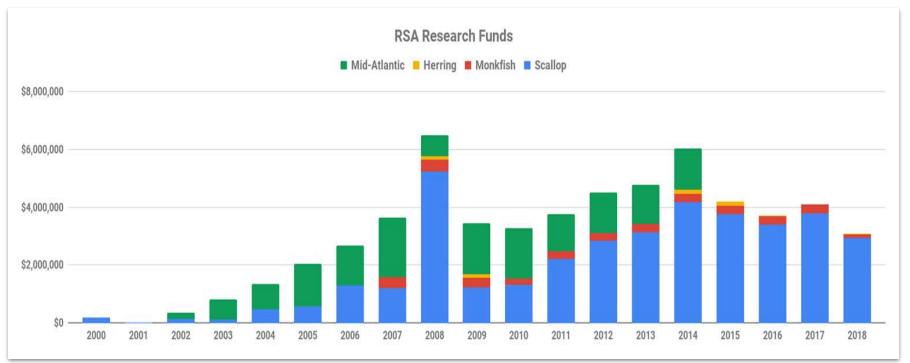


- Dockside enforcement
- Compensation fishing permitting and administration
- Quota monitoring, reporting and reconciliation



## **RSA Program: Funding and Research**

- 6 10 proposals per year, 2 5 funded each year
- Generated on average between \$1 \$2 million per year
- From 2002 2014, 39 projects were funded totaling \$16 million





## **RSA Projects Informing Management**

### Example Studies

- Gear conservation projects focusing on black sea bass and scup trap vent sizes and shapes
- Northeast Area Monitoring & Assessment Program (NEAMAP) survey have been incorporated into numerous stock assessments





Fisher and Rudders 2003, RSA





## Funding Opportunities vs Research Needs

- <u>Not all</u> species have the same "value"

   both in actual price and incentives
   available to support participation but
   <u>all</u> have research needs
- 75% of funds raised by a species was to support research on that species; 25% for other species
  - Exceptions for multispecies research
- However, value today might not be the same in the future (+/-)

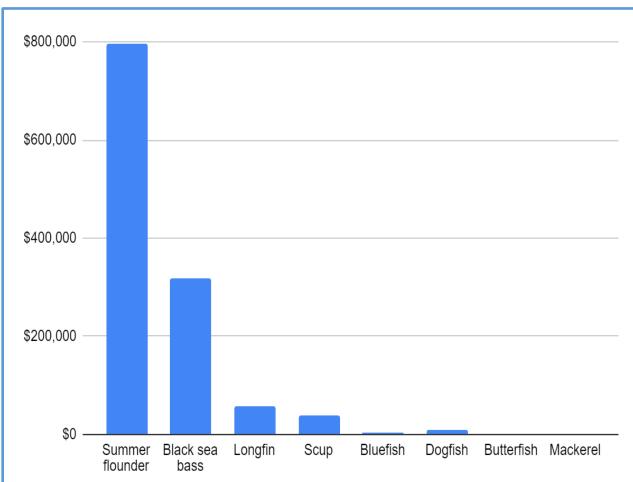


Figure from R. Sylva, GARFO – data from 2014



## **Program Strengths**

- Funds high priority research that is supported entirely by the industry (no Federal dollars)
- Empowers the Councils in the decision process on what research gets carried out
- Gets fishermen and researchers working together (cooperative research)
- Gives NOAA Fisheries Service a new way to work with the Councils and fleet to solve problems









## **RSA Program – Issues**

### Costs:

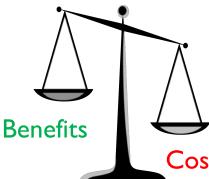
- Large administrative and enforcement costs not considered initially
- Value of fishing opportunities very different across species
- Costs outweigh benefits forgoing up to 3% of harvest
- Enforcement:
  - Uncovered financial incentives to not report trips/all RSA landings leading to noncompliance
    - National Standard I (prevent overfishing) concerns
  - Recreational landing reporting is not verifiable through dealer reporting
  - Capacity to monitor and enforce all RSA trips
    - 2014: 103 vessels, more than 2,000 trips
- Research:
  - Number of projects failed peer review
  - Application and utility to management
  - P.I. interest limited number of projects, some long-term



All leading to a lack of









## **Council Interest in Possible RSA Redevelopment**

- Research needs and priorities continue to grow and funding needs remain
- Council agreed as part of 2020 Implementation Plan to "Initiate a workshop to review and consider redevelopment of the RSA program"
- Series of four exploration workshops in 2021-2022
  - Review operation and issues of old program, identify potential new/revised approaches to address concerns of old program
    - I. Research
    - 2. Funding
    - 3. Law Enforcement, Monitoring, and Administration
    - 4. Review and Recommendations
- SSC Economic WG engagement technical information and strategic advice on economic considerations and trade-offs of a revised program



## Economic Work Group

Mid-Atlantic Fishery Management Council Update June 8, 2022



### MAFMC SSC **Economic Work Group Proposal**

October Joint Council SSC Meeting

• Propose development of 2-3 Case Study alternatives

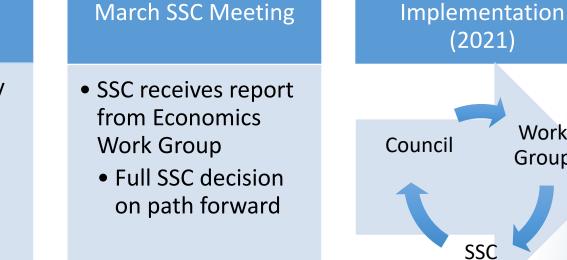
• Based off Council Priorities

• Present Case Study alternatives Council Selects

**December Council** 

Meeting

one preferred case study for development or status quo



**Case Study Outlines** Developed

**RSA Case Study Selected** 



Case Study

Work

Group

## **Final Report**

- Structured around 4 SSC functions
  - 1. Review
  - 2. Scientific Specifications
  - 3. Focused Analyses
  - 4. Scientific Advice



## 1. Review

- 9 topics covered in 6 one-page synopses
  - 1. Peer review & Principal Investigator Communications
  - 2. Approved Statistical Design
  - 3. Financial Integrity/Conflicts of Interest
  - 4. Consistency with Council Objectives
  - 5. Data Access & Transparency
  - 6. Benefit/Cost Principles
  - 7. Social Equity
  - 8. Coordination
  - 9. Decoupling Allowances from Research



## 2. Scientific Specifications

- Highlighting need for specific goals/objectives
  - Developed by Research Steering Committee
- Collaborative development of decision tree
  - Who is involved in the RSA program
  - How would RSA quota be allocated/divided
  - What does an RSA trip look like
  - Trade-offs across goals/objectives
- Framed discussion in Workshop 4



## 3. Focused Analyses

• Hypothetical assessment of revenue raised

Table 1. Comparison of additional revenue generated from an auction relative to bilateral agreements, under alternate assumptions on market structure.

Scenario	Comparison (Excess Revenue in the Auction)
Baseline Case	28%
Separate Com. & Rec. RSA Auctions	15%
Auction with high Admin/Entry	
costs	17%
Auction with Collusion	20%
Separate Com. & Rec. RSA Auctions	
with High Admin/Entry costs	5%



## 4. Scientific Advice for Decision Making

- Workshop 3 Monitoring & Enforcement
  - Expected Cost of Mislabeling
    - Prob. Caught, Indicted, & Convicted x penalty
  - Expected Benefit from Mislabeling
    - Prob. Not Caught, Indicted, or Convicted x additional profit
  - Mislabel if Expected Cost < Expected Benefit
  - Increased monitoring & enforcement only option



## Key recommendation

- Data Dependent Quality of Analyses, Recommendations, & Advice
  - Measures to Collect Economic Data Needed
    - Bid Data key to Understanding Program Performance
      - Federal Timber, Oil & Gas, Offshore Wind Leases all Public
    - Assessment of Program Expenditures vs. Revenue Raised



## Economic Work Group Members

- Dr. Lee Anderson
- Dr. John Boreman
- Dr. Geret DePiper (Chair)
- Dr. Mark Holliday

- Dr. Jorge Holzer
- Dr. Olaf Jensen
- Dr. Yan Jiao
- Dr. Paul Rago



# We hope to continue these efforts on behalf of the Council

- 1. Review
- 2. Scientific Specifications
- 3. Focused Analyses
- 4. Scientific Advice



## **Research Steering Committee Process**

- From Nov 2021 April 2022 RSC met on 3 occasions to consider workshop & Economic WG input and develop a draft framework for a revised program
- Goals & Objectives help shape
   program and limit possibilities
  - Decision Trees specify structure and detail in support of goals
    - Comparison between old and revised program – are we addressing issues

opic #1 - Who is involved in the RSA program
pp Tier/Highest Priority Questions
1A. Allow commercial sector participation only
1B. Allow commercial and for-hire sector participation (no private recreational fishermen)
1Bi. Phase-in participation by one sector
1C. Allocation of quota across sectors or keep separate
2A. Fixed percentage of ABC for each fishery (i.e., different percentages for each fishery)
2B. Fixed percentage of ABC across all fisheries
2C. Fixed number of pounds for each fishery
3
3 Topic #2 - How would you allocate/divide RSA quota
Top Tier/Highest Priority Questions
1A. RSA applies to all fisheries/species
<sup>3</sup> 1B. RSA only for select fisheries/species iddres
<ul> <li>2A. Allow specific percentage of projected revenue from species quota sale to be us</li> </ul>
species
2B. All revenue from species quota sale can only be used for research related to tha
34 Funding mechanism should include ability to use both bilateral agreements and
3 Topic #3 - What does an RSA trip look like
Top Tier/Highest Priority Questions
p 1A. Compensation harvest completely decoupled from funded research (i.e. vessels harvesting RSA
Secc vessels conducting research)
1B. Compensation harvest decoupled from research activity, but vessels harvesting RSA quota also p
4 research trips
1C. Where feasible, compensation harvest is coupled with research activity
2A. Require RSA harvest to occur on separate trips from non-RSA harvest
2B. Allow both RSA and non-RSA harvest on the same trip
3A. Limit RSA offloads to specific ports in each state 3Ai. Limit RSA sales to specific dealers in each state
3Ai(1). Limit RSA sales to only federally permitted dealers
3B. Require all RSA guota to be offloaded at the same port from pre-trip notification

## **Prioritized Draft Goals & Objectives**

- **Goall:** Produce quality, appropriately peer-reviewed research that maximizes benefits to the Council, management partners, and the public and enhances the Council's understanding of its managed resources (Research)
- 1. Support more applied, management-focused research activities
- 2. Higher priority on proposed RSA projects whose results would likely have timely application to species management
- 3. Discourage commitments to longer-term monitoring projects
- 4. Ensure all data collected (funding and research) through the RSA program is open access

## **Goal 2:** Ensure effective monitoring, accountability, and enforcement of RSA quota (Enforcement and Administration)

- 1. Apply enhanced, adaptive, and consistent enforcement standards and controls
- 2. Ensure compliance with the reporting and use of the RSA quota
- 3. Increase state-federal science, enforcement, and administration collaboration and cooperation
- 4. Minimize law enforcement and administrative (agency and researcher) burdens
- 5. Provide support for administrative and law enforcement activities
- 6. Improve states' ability to revoke RSA fishing privileges



## **Prioritized Draft Goals & Objectives**

- **Goal 3:** Generate resources to fund research projects that align with the priorities of the Council (Funding)
- 1. Maximize revenues from RSA quota
- 2. Provide equitable opportunity to fund research across all Council-managed species
- 3. Increase scientific and industry partnerships
- 4. Evaluate fairness in fishing community access to RSA quota

## **Goal 4:** Foster collaboration and trust between scientific and fishing communities and the general public

- 1. Ensure an open, accountable, and transparent process through all steps (funding and research) of the RSA program
- 2. Ensure all data collected (funding and research) through the RSA program is open access
- 3. Increase scientific and industry partnerships
- 4. Evaluate fairness in fishing community access to RSA quota



### **Areas of Consideration in Revised Program**

#### Administration/Enforcement

- Call-in/notification/reporting requirements
- Shore-side monitoring of RSA quota
- Number of landing locations
- Number of vessels participating
- Verification of for-hire harvest
- Administrative burden and costs relative to benefit

### **Funding**

- Species/FMP potential RSA allocation was available
- Portion of Acceptable Biological Catch (ABC) set aside
- Funding mechanisms

- RSA quota allocation
- Lack of trust in third party quota process
- Disconnect and less collaboration between researcher and industry

#### **Research**

- Principal investigator disinterest/lack of project proposals
- Perceived conflicts of interest
- Quality research/peer review
- Funding for species research
- Data availability/open access
- Projects not used in science and management



### **Potential Framework for a New RSA Program**

### **Administration/Enforcement**

- Call-in/notification/reporting requirements
  - Detailed pre-trip and landing with specific notification requirements
  - Standardized electronic reporting with specific RSA data fields

### Shore-side monitoring of RSA quota

- No mixing of trips for targeted RSA species
- Limit offloading to location on pre-trip report
- Require all vessels to have VMS or AIS
- States consider limits to offload hours

### Number of landing locations

States – consider limits to locations/ports, or dealers

### Number of vessels participating

 Continued support for commercial/for-hire and state/federal vessel participation

- States consider vessel limits/phase-in
- Limits to number of quota transfers between vessels

### Verification of for-hire harvest

- Standardized electronic reporting with RSA specific data fields
- Administrative burden and costs relative to benefit
  - States to opt in/out of shoreside participation
  - Develop guidelines and best practices for consistency across states
  - Pursue options and avenues for state administrative support
    - Federal funds
    - Joint Enforcement Agreement
    - Percent of revenue raised from RSA quota
    - Contracts versus grants



### **Potential Framework for a New RSA Program**

### **Funding**

- Species/FMP potential RSA allocation was available
  - Could be applied to all Council species/FMPs
- Portion of Acceptable Biological Catch (ABC) set aside
  - Fixed percentage cap of ABC for each fishery (percentage could be different for each species)

### Funding mechanisms

- Bilateral agreements and 3<sup>rd</sup> party auctions
- Feasibility of ASMFC to administer auction

### RSA quota allocation

• RSA quota would be allocated by sector

 Lack of trust in third party auction process

- Periodic review of funding mechanisms
- Develop best practices/guidelines for 3<sup>rd</sup> party to follow

## Disconnect and less collaboration between researcher and industry

• Where feasible, support opportunities to couple compensation harvest with research activity



### **Potential Framework for a New RSA Program**

### **Research**

- Principal investigator disinterest/lack of project proposals
  - Limited support and funding for longterm/monitoring projects

### Perceived conflicts of interest

 Develop internal COI policies for entities engaged in RSA prioritization

### Quality research/peer review

- Pre and full proposals and post project review
- Greater use of SSC and broader pool of experts for review
- Past performance of P.I.

### Funding for species research

• Revenue used for research on any managed

species (MAFMC, NEFMC, ASMFC)

### Data availability/open access

- All data collected (research and funding) open access (subject to laws), made available, and present results
- Data sharing plan part of proposal
- Projects not used in science and management
  - Greater use and input of SSC, AP, and RSC in priority setting process
  - Proposals need to include details on how project relevant to current management issue, how uncertainty will be reduced
  - Outreach/communication of project results



## **ASMFC/State Engagement & Cooperation**

- Any potential future program will require ASMFC and state partner support and cooperation
- Areas of state involvement in RSA redevelopment
  - Shoreside participation opt in/out provision
    - Vessel and sector participation caps, state/federal permit holders, and phase in options
    - Limits to locations, dealers, and timing of offloads
  - For-hire tracking of harvest
    - Staff as observers on RSA trips
  - Best practices or common/standard approaches for implementation across states
    - Use of ASMFC LEC to help develop
- Potential processes and areas for cooperation with RSC/Council
  - Engagement in process for potential future joint management action (e.g., framework/amendment development)
  - Future program priorities, evaluations, and updates



## **Research Steering Committee Recommendations**

- I. Given the general vision identified by the Committee, is there a viable path forward to redevelop the RSA program to appropriately address concerns of the prior program?
- 2. What would be the value of moving forward with a redeveloped RSA program vs. maintaining status quo?

### <u>Consensus by the RSC to conditionally recommended the</u> <u>Council consider redeveloping the RSA program</u>

- Value in program to produce science to support management
- Recognize a lot of work remains, details to be addressed, and questions answered
- Concerns about state administrative burden and cost-benefit of program



## **Potential Next Steps**

- Should Council support continuing process to consider redevelopment
  - Still more work ahead and not committing to implementing an RSA program
- Engage with the ASMFC Policy Board (August?)
- Future Research Steering Committee meetings
  - Funding/Administrative support details
  - Vessel monitoring VMS/AIS
- Development of appropriate management action (i.e., framework, amendment)
- Form FMAT to work begin working on specifics of program
- Currently not included in 2022 Implementation Plan
  - Complete final Research Set-Aside (RSA) workshop report with a recommendation on whether to redevelop the Mid-Atlantic RSA program



## **Outcomes for meeting today**

- Decide whether to continue process to redevelop RSA program
- If appropriate, provide any feedback and direction on next steps and/or program framework

### Questions??

