MID-ATLANTIC
FISHERY MANAGEMENT COUNCIL

Research Set-Aside (RSA) Workshop Meeting 1 - Research

Thursday, July 15, 2021

Compiled by

Matthew Seeley and Andrew Loftus

SUMMARY OUTCOMES

Research Set-Aside (RSA) Workshop
Workshop Meeting 1 - Research
Thursday, July 15, 2021

Contents

Workshop Goals:

- Identify how research goals will be prioritized.
- Identify how projects will be screened.
- Identify how results will inform management/be communicated to the Council and stakeholders.
- No decisions will be made during this workshop. Ideas will be generated to inform the agenda for the November 16th workshop.

Discussion with the Economic Working Group (WG)

(**NOTE:** Full presentations are included in the appendices and key points of the question & answer dialogue are captured in the appropriate summary section of the discussions below).

The Economic Working Group of the Scientific and Statistical Committee provided input into 7 main topic areas that are applicable to the topic of "Research" aspects of the RSA program. Although only 7 of the 10 topic areas identified as priorities were presented during the workshop, all 10 will be included in the final report to the Council later this year. Topic areas addressed during the workshop were:

- Consistency with Stated Council plans/objectives; Linkages to Management Goals.
- Application of Benefit/Cost Principles in Proposal Evaluation.
- Peer Review and Principal Investigator (PI) Communications: Before, During, and After Completion of RSA Projects.
- Conflict of Interest.
- Universal Data Access and Transparency.
- Decoupling Allowances and Ecosystem Species (implication of tying RSA quota directly to the research and implications for research on species important for ecosystem services but not harvest).

Refer to the appendices for the individual topic presentations and the summary of discussion items below for issues addressed during the question and answer sessions.

Discussion Summary of Workshop Goal Discussions

How should research needs (to be fulfilled by RSA) be developed and prioritized?

Framing Presentation: Presentation by a previous RSA participant – Emerson Hasbrouck (Cornell University). See appendix V.

Past status: The Council's Scientific and Statistical Committee (SSC) ranks research priorities based on the Council's five-year research plan. The RSA Committee identified the top ten research and management needs.

Issues Identified:

- Details associated with the auction process were not publicly available. Therefore, it is very difficult to get an understanding of the value of projects.
- Data from research projects were not readily available for the public to evaluate the efficacy of projects that were conducted.
- Not all projects informed fisheries management.

Recommendations for Further Consideration

- Research priorities should be linked to a specific need to provide "utility" of research.
- Performance metrics should be attached to each identified research priority.
- A strong linkage/collaboration/partnership should be evident between the RSA researcher and the intended consumer of the research.
- Interactions with the fishing community should be fostered when identifying research topics/needs. Perhaps the Council's Advisory Panels can contribute to this.
- Funding should not be paid in a bulk amount but should be made payable based on a milestone basis.
- RSA priorities should be set by the Council.
- The process needs to be more dynamic to respond to items not in the 5-year plan. Input from Advisory Panels and committee process can help to provide this flexibility.
- The Council must keep research needs in mind when implementing management actions. Whenever the Council initiates an action, they should anticipate and identify research needs to feed into the RSA process.
- Available funding outside RSA should be identified and pursued whenever possible to allow better targeting of RSA projects for priority needs.

What criteria should be used to evaluate RSA applicants and research proposals?

RSA program goal: Support robust scientific research that will help inform important resource and management needs.

Issues Identified

- Past perceived conflicts of interest of funded researchers.
- Unclear process for turning the quota into funding dollars and concern that researchers should not be responsible for this.
- Time delays in the decision process; burdensome application process that may have dissuaded some researchers from applying.

Recommendations Made for Further Consideration

- Proposal Process
    - The amount of allowable funding should be identified up front in the request for proposals, including direct and indirect funds that will be allowed.
    - Specific and measurable performance measures should be part of the evaluation criteria.
    - A comprehensive data sharing plan should be part of the evaluation criteria.

- Pre-proposals
    - Historically, a low number of proposals have been submitted, possibly due to the time and cost involved with developing a full proposal that may stand little chance of being funded.
    - Pre-proposals reduce the burden on researchers and therefore may actually increase participation in this program.
    - However, pre-proposals will increase the administrative burden on NOAA and may slow down the RSA funding process.
- Full proposals should be reviewed and funded in a timely manner under an established and publicized timeline.
- Peer review proposals and results.
    - Review criteria should reflect scientific merit and Council priorities.
    - The current "technical review" should be accompanied by a "management review" that evaluates the proposal application and importance to the fishery management purposes.
    - To the extent possible, proposals should incorporate a testable hypothesis, recognizing that some important research does not lend itself to this (e.g., development of mortality rates).
- The SSC is the "in-house" peer review process that certifies Best Scientific Information Available (BSIA).
- Conflicts of Interest
    - Utilizing the Grants.gov review process helps to reduce conflicts of interest between reviewers and applicants.
    - Explicit Conflict of Interest policies should be established and publicized for this process.
    - The review process for National Science Foundation awards should be considered for the RSA process. This requires applicants to disclose their prior collaborations with reviewers or potential reviewers.
    - The Council should discuss that any commercial fishing entity participating in RSA should, at a minimum, hold a federal operator's permit. However, Workshop participants expressed concern that this would eliminate state vessels. Group consensus is that the pool of eligible potential fishing entities should be kept as broad as possible.
- Should RSA be open to both recreational and commercial fishermen?
    - Yes. Particularly the for-hire. Workshop participants expressed concern that an auction would benefit the haves but not the have nots.
        - Need to discuss this more; perhaps establish the foundational aspects of an RSA program first and broaden it out from there.
    - The RSA program should be focused on providing research results, not just available RSA quota, so the most qualified researcher to generate and provide these data is eligible.

What criteria should be developed for how project results will be reviewed and articulated to the Council?

Current Status: Progress reports must be provided to the Council every 6 months and a final report within 90 days. Since 2013, a data sharing and management plan has been required for all federally funded projects.

Issues Identified

- RSA projects should address a data need or research priority. Unclear communication on the application of results from past projects has brought the value of the program into question.
- Transparency and data sharing are essential to regain public trust.

Recommendations for Further Consideration

- Review and revamp the data sharing policy to require data sharing.
    - Develop a data sharing system and process to facilitate data sharing in a format that is accessible and usable by others.
    - Define the time limits for when data need to be shared (e.g., immediate, 6 months, 1 year, etc.)
- Reporting
    - Tie the release of funds to progress reports and final reports.
    - Consider whether the SSC should be the first to review reports.
    - Requiring progress reports every 6 months may be excessive. If they are this frequent, they should be brief updates.
- Expand public venues for presenting research results.
    - Researchers should provide presentations to the Council. This requires that the Council be open to, and integrate these presentations into their regular meeting process and not relegate it to a discretionary meeting activity.
    - Improve communications between MAFMC, NMFS, states, and ASMFC for identifying research priorities and communicating the results.
- Integrate communication as part of the selection process.
    - Identify communication pathways from researchers to management entities as part of their proposal criteria. Have management be a part of the proposal review process to ensure that they are comfortable with how results will be communicated.
    - If researchers were previously funded through RSA, when applying for funding again, the PIs should be required to demonstrate how their projects were used to inform management.
- Consider a specific "communication plan" to inform stakeholders of RSA results.
    - RSA Show/Share Day (as conducted by the NEFMC). These days are very important to communicate to the stakeholders but not to the general public.
    - Routinely schedule webinars for the public.
    - To improve transparency and support for the program, it is important to demonstrate the direct linkage between the use of RSA quota to fund research and the results of that research.

- PIs need to be aggressive in getting the word out to the public and management during all phases of their project, not just during their obligated reporting periods.

Next Steps

Material generated through this workshop and the following two virtual workshops ("Funding" on August 31 and "Enforcement" on October 14th) will be used to generate the discussion topics for the in-person workshop on November 16th during which final recommendations will be generated for presentation to the Council.

Appendix I. Workshop Agenda

Research Set-Aside Workshop

Workshop Meeting 1 (Research)

Thursday, July 15, 2021
10:00 a.m. – 4:00 p.m. EST

Webinar Link

Meeting Number (Access code): 179 522 6122; **Password:** mafmc

Meeting Page: https://www.mafmc.org/council-events/rsa-workshop-1

Purpose

The Mid-Atlantic Fishery Management Council and its Research Steering Committee (RSC) are hosting a Research Set-Aside (RSA) Workshop, which will consist of 3 webinars from June to October and 1 in-person meeting in November. The goal of the four workshops is to have the RSC develop a recommendation to the Council with public input on whether and how to redevelop the Mid-Atlantic RSA program. *The goal of Workshop Meeting 1 (Research) is to identify how research goals will be prioritized, projects will be screened, and results will inform management/be communicated to the Council and stakeholders.* For additional background information and details on the other workshops, please visit: https://www.mafmc.org/workshop/rsa.

Briefing Materials

- RSA Workshop Overview
- Comprehensive Mid-Atlantic RSA Timeline
- RSA Numbers by Species and Year

Agenda

10:00 a.m. – 10:30 a.m.

Welcome
- Adam Nowalsky (RSC Chair) and Mike Luisi (Council Chair)

Ground rules
- Andrew Loftus (Facilitator)

Presentation: "What is RSA?"
- Ryan Silva (GARFO Staff)

Presentation: "RSA in the Mid-Atlantic"
- Matt Seeley (MAFMC Staff)

10:30 a.m. – 12:00 p.m.	Discussion with the SSC Economic Working Group (WG) • Presentation by the WG – Mark Holliday (MAFMC SSC) • Discuss topics on lessons learned with focus on future economic outcomes • Public questions/comment
12:00 p.m. – 12:45 p.m.	Lunch
12:45 p.m. – 1:40 p.m.	How should research needs (to be fulfilled by RSA) be developed and prioritized? • Presentation by a previous RSA participant – Emerson Hasbrouck (Cornell) • Discussion of previous issues and proposed revisions • Develop recommendations with public input • Public questions/comment
1:40 p.m. – 2:35 p.m.	What criteria should be used to evaluate RSA applicants and research proposals? • Discussion of previous issues and proposed revisions • Develop recommendations with public input • Public questions/comment
2:35 p.m. – 2:50 p.m.	Break
2:50 p.m. – 3:45 p.m.	What criteria should be developed for how project results will be reviewed and articulated to the Council? • Discussion of previous issues and proposed revisions • Develop recommendations with public input • Public questions/comment
3:45 p.m. – 4:00 p.m.	Next Steps and Public Comment
4:00 p.m.	Adjourn

Appendix II. Presentation: What is RSA?

Science, Service, Stewardship

Research Set Asides (RSA)

Ryan Silva
Cooperative Research Liaison
Sustainable Fisheries Division, Greater Atlantic Region

NOAA FISHERIES SERVICE

NOAA FISHERIES SERVICE

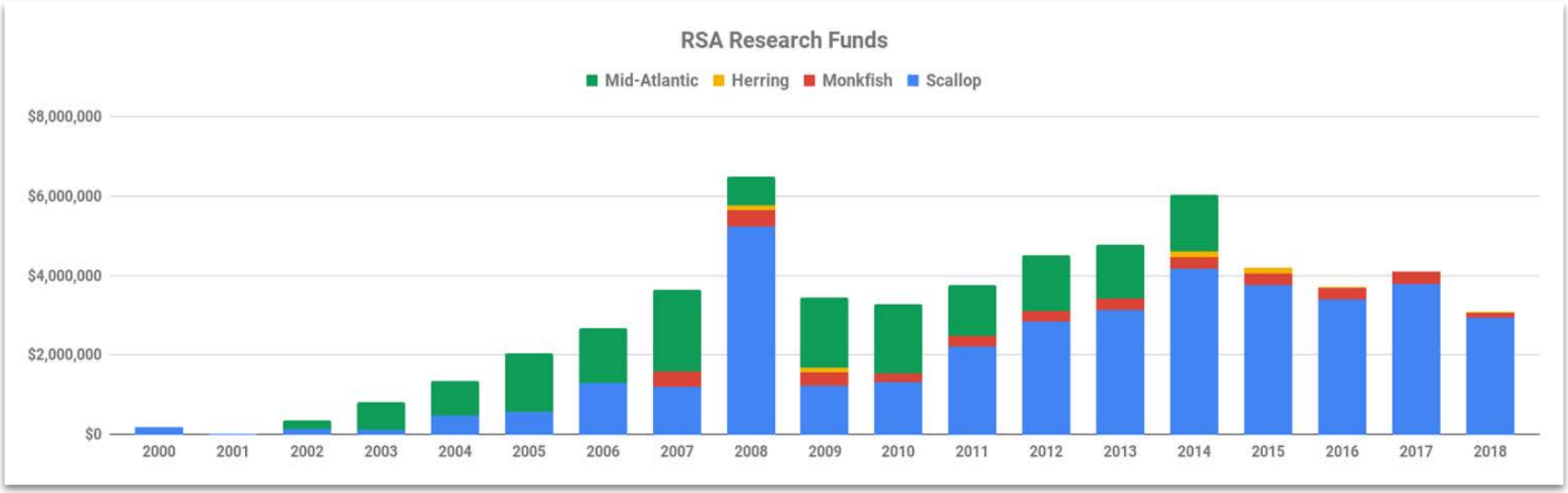
Research Set Aside - Background

- Origins - 1999 experimental scallop fisheries
- Fishery Management Plan based
- Competitive grant programs
- Compensation fishing generates funds

NOAA FISHERIES SERVICE

Research Set Aside - Background

Program	Est.	Set aside	Research $
Scallop	1999	1.25 M lb	$2.5-$3.5M
Mid-Atlantic	2002	3% ACL	$1-$1.5M
Monkfish	2005	500 days at sea	$100k-$300k
Herring	2008	3% ACL	$0-$150k



NOAA FISHERIES SERVICE

RSA Implementation Roles

New England Fishery Management Council

MID-ATLANTIC FISHERY MANAGEMENT COUNCIL

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

NOAA FISHERIES
Northeast Fisheries Science Center

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

NOAA FISHERIES SERVICE

Comparing New England and Mid-Atlantic RSA Programs

Fundamentally the same:	But some differences:
• FMP-based, with RSA allowable catch • Council driven research • Grant programs • Compensation fishing principles	• Single vs multiple FMPs • Diversity of fishery sectors • State vessel permitting • Fixed vs variable RSA specifications • Management panel review event

NOAA FISHERIES SERVICE

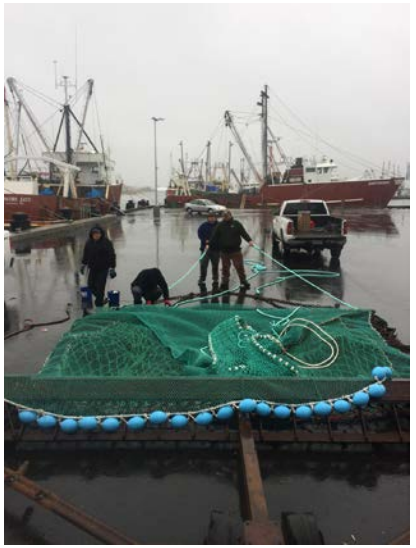
RSA Compensation Fishing

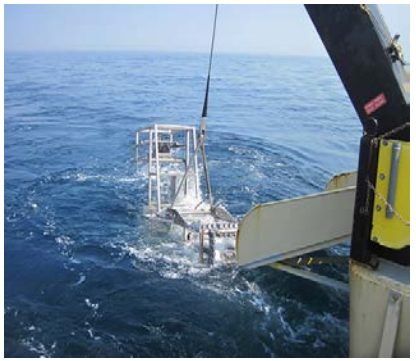
- What is RSA compensation fishing?
- Permitting and effort control exemptions
- Monitoring and oversight

NOAA FISHERIES SERVICE

Grant Cycle Overview

- Priority development and approval
- Notice of Funding Opportunity (60 days)
- Proposal review (60 days)
- Selection and negotiation (45 days)
- NOAA Grants Management Division review (30-60 days)
- Research Performance Reporting (every 6 months)
- Final Report and Peer Review





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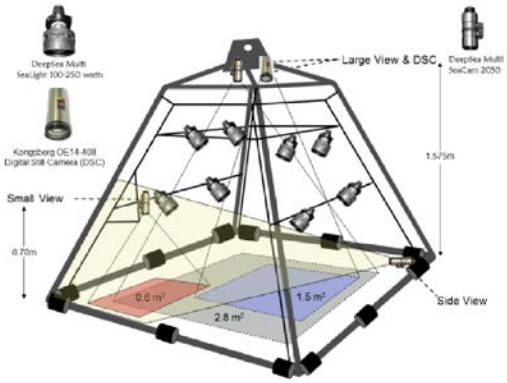
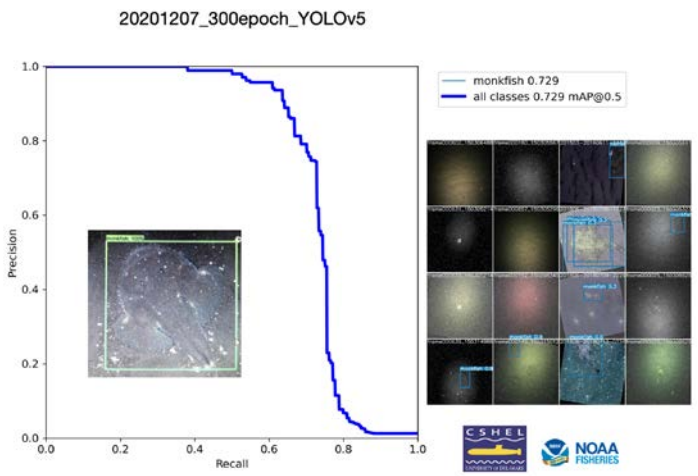
RSA Proposal Review Process

- Technical review
  - 5 evaluation criteria
  - At least 3 subject matter experts
  - Panels or individuals
- Management Panel review
  - Non-consensus
- Both reviews carry equal weight
- Proposals and review events are confidential





NOAA FISHERIES SERVICE

RSA Proposal Selection Process

- Technical and Management Panel reviews
- Project negotiations
- Assigning value to set aside quota

NOAA FISHERIES SERVICE

Project Reporting, Peer Review

- RSA reporting requirements
- Site Visits
- Final peer review and closeout
- Sharing project results

NOAA FISHERIES SERVICE

RSA program - Strengths

- Engaged science partners
- Applied research
- Cooperative research
- Responsiveness to emergent issues
- Independent of federal appropriations

NOAA FISHERIES SERVICE

RSA program – Challenges

- Funding risk and uncertainty
- Intersection of council and grant processes
- Compensation fishing permitting and monitoring
- Access to RSA compensation fishing opportunities

NOAA
FISHERIES
SERVICE

Photo Credits:

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- University of New England
- Virginia Institute of Marine Science

Appendix III. Presentation RSA in the Mid-Atlantic

MID-ATLANTIC
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RSA in the Mid-Atlantic

Research Set-Aside

7/15/2021

Outline

- Timeline (2001-2014, 2014-2021)
- Projects Funded
- Outcomes
- Program Issues
- Suspension
- Potential Program Redevelopment

Funded Projects (2002-2014)

- Program was initiated in 2001
- Funding was generated through the sale of a portion of each species' quota (0-3% of a fishery's TAL)
  - Provided a grant in the form of fish
- Projects were funded from 2002-2014
  - 41 projects (2 not completed/funded)
  - $16 million
  - 39 final reports are available online

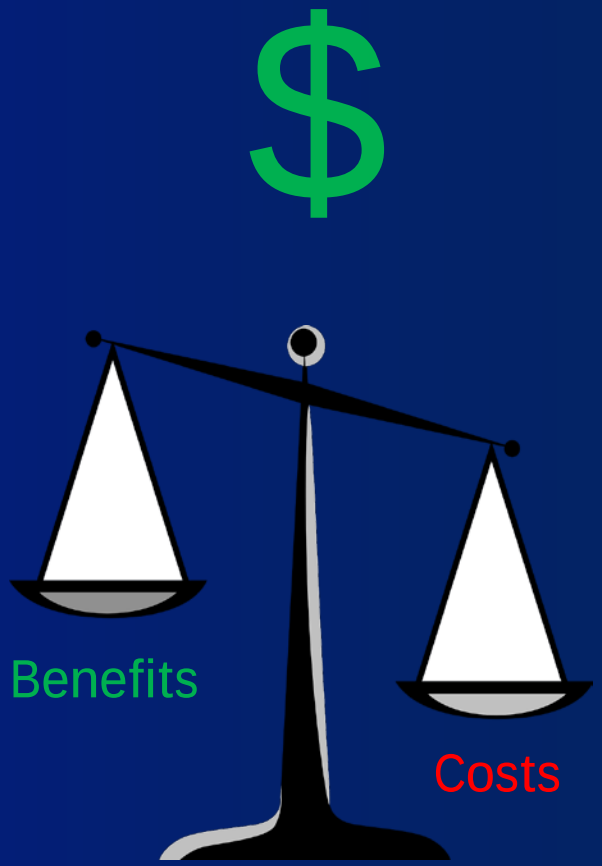
RSA Projects Informing Management

- Example Studies
  - Gear conservation projects focusing on black sea bass and scup trap vent sizes and shapes
  - NEAMAP RSA studies have been incorporated into stock assessments

Fisher and Rudders 2003, RSA

Program Issues - Costs

- Large administrative and enforcement costs not included in initial development
- Value of fishing opportunities
- Costs probably outweigh benefits



Program Issues - Enforcement

- **Failure to report RSA trips leading to noncompliance**
- Around 2014, Council and state reps noted the lack of sufficient enforcement resources.
- Final NEPA document did not analyze repercussions of RSA related overages due to non-reporting
  - FW 1 developed prior to 2006 Reauthorization of Magnuson Act (i.e., prior to ACL/AM requirements)
    - Jeopardizes compliance with NS1 (prevent overfishing)

RSA Criminal Investigation (as of July 10, 2019)

- **Total dollar amount of fines/penalties** *(ordered, not necessarily paid)*:

Criminal Fines - $511,000
Restitution- $1,428,600
Community Service Payments- $70,000
Court Special Assessments- $4,200

Program Issues – Policy/Science Concerns

- The public is forgoing up to 3% of the harvest from the existing fisheries to fund scientific research
- The Council should be equal partners in deciding what research gets funded under RSA Program
- Current decision made by the Regional Science Center Director
- Voluntary research programs (RSA) must satisfy NS 2 (BSIA) to be used in management

Program Issues – Peer Review

- All projects passed peer review
  - Not all projects informed management
- Concerns about RSA review/vetting process for proposals and project oversight after funding

NOAA FISHERIES
Northeast Fisheries Science Center

Research Set-Aside and Cooperative Research Programs

Project Search

This page provides a way to search final reports generated by the Research Set-Aside and Cooperative Research Programs.

To search for one or more projects, select and/or enter the types of projects you wish to search for and then click search.

Year:	All Years
Funding Source:	All Funding Sources
Project Category:	All Project Categories
Fishery:	All Fisheries
State:	All States
Organization:	All Organizations

RSA Program Public Trust

- Lack of public trust in the RSA Program identified in Council's Visioning Project
- Need to evaluate the program and implement measures/changes to restore that trust is imperative





Program Suspension

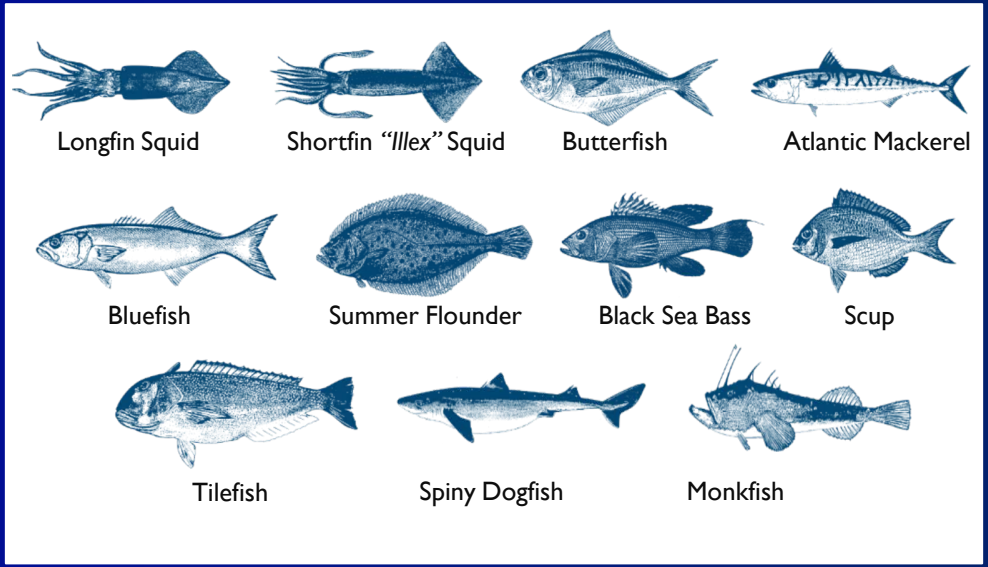
- In 2014, all RSA quotas were set to 0, ultimately suspending the MAFMC RSA program.
- Collaborative Research Program
  - Funded studies from 2016-2017 with goals to enhance the science used in the management of Mid-Atlantic fisheries and to facilitate collaboration among scientists, fishermen, and other fishery stakeholders.

Potential Program Redevelopment

- Post suspension, potential redevelopment was first discussed in 2018.
- Added to the Council's implementation plan in 2019
- **Goal: Develop a recommendation for the Council with public input on whether and how to redevelop the Mid-Atlantic RSA program.**
  - 1) Research, 2) Funding, 3) Enforcement, 4) Final Summary

Questions?

- In-person workshop has been scheduled for November 16, 2021
  - Sheraton Baltimore Washington Airport Hotel – BWI, 1100 Old Elkridge Landing Road, Linthicum Heights, MD 21090



Appendix IV. Presentation: SSC Economic Working Group

Research Set-Aside Workshop
July 15, 2021
SSC Economic WorkGroup Session

Role of the SSC Economic Workgroup

- Provide scientific economic advice and perspective through a case study approach (as selected by the Council)
- Work in collaboration with the Research Steering Committee (RSC); participate in the RSA Workshops
- Provide a final written report to the Council

RSC Goal for RSA Workshops

"Develop recommendations with insight provided from the list of participants and members of the public outlining how a revised RSA program can be successful."

The SSC Workgroup goal is to support a thoughtful, informed, and participatory dialogue

For Today's Workshop Research Topic

- The SSC Economic Workgroup identified many RSA project selection criteria, some with unique economic relevance relative to proposal and peer review.
- Ten issues were chosen with most saliency to the lessons learned from the historic RSA program and the most economic consequences to any future RSA
- We only have time to present 4-5 today, all 10 will use the workshop outputs and be in our final report to the Council at the end of the summer

SSC Economic Workgroup: Process for Workshop

- Four(Five) concise facilitated 10-15 minute interactive discussions, each using a common approach
- Each topic supported by a written "one-pager" laying out essential information
  1) Define issue
  2) Summarize past RSA experience
  3) Recommendations
- SSC author gives 3-5 minute overview, then facilitates audience reaction, comments, ideas, suggestions

Topics and Authors

TOPIC 4. Consistency with stated Council plans/objectives; Linkages to management goals. TOPIC 6. Application of Benefit/Cost principles in proposal evaluation. Dr. Mark Holliday

TOPIC 1. Peer Review and Principal Investigator (PI) Communications: Before, During, and After Completion of RSA projects. Dr. Olaf Jensen

TOPIC 2. Conflict of Interest. Dr. Geret DePiper

TOPIC 5. Universal data access and transparency. Dr. Yan Jiao

TOPIC 10. Decoupling allowances and TOPIC 9. Ecosystem Species. Dr. Jorge Holzer (Presented by Dr. DePiper)

Research Set-Aside Workshop
July 15, 2021
SSC Economic WorkGroup

Consistency with Stated Council Plans/Objectives & Linkages to Management Goals

Application of Benefit/Cost Principles in Proposal Evaluation

Dr. Mark Holliday

The Issues

- RSA program not designed for economic performance, efficiency, or revenue outcomes
- Did value of the resultant research meet or exceed what the quota would sell for if not set-aside? *No economic data exist to tell us*
- Science “quality” v. “utility”
- Inadequate research/application linkages re: people and timing
- Missing performance metrics

Recommendations

- Ample raw material exists to form a consensus of research criteria to sit alongside stated management goals
- Ensure a strong linkage/collaboration/partnership between the RSA researcher and the intended consumer of the research
- Collect sufficient economic and financial data to measure the return on Council investment.
- Adopt tools that measure proposed reductions in model uncertainty, potential impacts on ABC, relaxation of gear and other fishing restrictions, etc. of RSA research

Questions and Discussion

Peer Review and Principal Investigator (PI) Communications: Before, During, and After Completion of RSA Projects

Dr. Olaf Jensen

The Issue

- National standard 2 requires that management actions be based upon the best scientific information available
- For a revised RSA program to maximize benefits to stock assessment and management, the program must:
  - Elicit and select proposals with both high scientific merit and high relevance to management
  - Ensure that research is completed, communicated, and reviewed in a timely manner
- Peer review - of proposals and of research results - while not without its problems, is the accepted method for establishing scientific validity

Past RSA Experience

- The historical RSA program widely solicited proposals in a competitive process, with each proposal initially reviewed by an internal NOAA subject matter expert, an external subject matter expert, and an industry subject matter expert.
- Progress reports and a final completion report were required of each grant recipient (or Principal Investigator, PI). The final report was certified and approved by NOAA science staff after review and necessary revisions.

Past RSA Experience (impressions)

- Proposals were widely solicited but most of the money was always going to go to NEAMAP.
- Final reports were required, but were often delayed, inadequate, or failed peer review.
  - 42 out of the 44 projects have final reports that were accepted following some level of review by NOAA Fisheries.

Question 1 - What is the structure of the proposal selection process?

- Is there a pre-proposal stage?
- How is reviewing structured?
  - Are pre-proposals (if any) reviewed internally, perhaps just to confirm fit to RSA priorities, or externally to evaluate potential scientific merit (may be difficult from the short pre-proposal format)?
  - Are there separate written and panel review stages for full proposals?
- What are the review criteria and are these criteria well-matched to reviewer expertise?
  - Scientific merit
  - Council priorities

Question 2 How are requests by PIs for changes to proposed research evaluated?

- Who is empowered to approve or disapprove changes requested by PIs?
- What criteria should they use when making these decisions?
- To what extent should they rely on additional outside evaluation of such requests?
- Can the RFP require proposals to identify likely challenges and decision-points ahead of time and specify how they will be addressed?

Question 3: How are project outputs assessed for their scientific validity and use to guide management?

- Leave it to the journal peer-review process?
- Ask the SSC or a subgroup of SSC members to review results?
- Is there an iterative process of peer-review and response by the PI? Is this process in-person or written or some combination?

Question 4: What is the role of the SSC in reviewing (pre)proposals and RSA project reports?

- The SSC members are familiar with competitive grant processes and with research priorities for Council-managed species
- Many SSC members will also be PIs or Co-PIs on RSA proposals and colleagues from their home institutions will submit proposals. This represents a conflict of interest (COI) that will need to be managed.

Questions and Discussion

Conflict of Interest

RSA Workshop #1
July 15, 2021

Dr. Geret DePiper

The Issue

- Main objective of original RSA program:
  - Regain public trust in science and management
- Program eroded, instead of bolstered, this trust
- Avoiding conflicts of interest key in RSA design
  - MAFMC, NOAA Fisheries, & scientists as “honest brokers”

Recommendations

- Potential conflicts of interest identified in federal review
  - Department of Commerce form CD-571
- However, additional transparency needed
  - Persistent concerns about “veracity of research” (Seagraves 2014)
    - Priority setting (RSA Review Panel 2019)
    - Management Review Panels (RSA Review Panel 2019)
  - Perceived inequities in RSA quota auctions (NEFSC 2009)

Recommendations

1. Publicize existing Conflict of Interest policies

2. Develop explicit public Conflict of Interest policies for SSC, MAFMC, APs, and others involved in priority setting, review, and funding

Benefits: Transparency and adherence to general best business practices

Costs: Minimal - already employed broadly, must be codified

Questions and Discussion

Universal data access and transparency

Dr. Yan Jiao

Purpose of this topic

- Identify major problems of data sharing and transparency for RSA-funded projects,
- Define or redefine the data sharing policy and data management process for all the projects funded by RSA, and
- Create transparent policies and processes.

The issue

- The previous RSA program was a federal financial grant assistance program.
- Historically, data access was not a requirement of RSA-funded projects, and data stewardship plans were not weighed in the peer review and evaluation process.
- Some of the historically funded projects had constraints on data sharing for research and management purposes.
- Since 2013, a data sharing and management plan is required for all the federal funded projects (OSTP 2013; OMB 2013; NOAA 2013, 2016; EPA 2016).
  - NOAA. 2013. NOAA Plan for Increasing Public Access to Research Results.
  - NOAA. 2016. Data and Publication Sharing Directive for NOAA Grants, Cooperative Agreements, and Contracts.
  - Office of Management and Budget (OMB). 2013. Open Data Policy-Managing Information as an Asset.
  - Office of Science and Technology Policy (OSTP). 2013. Increasing Access to the Results of Federally Funded Scientific Research.
  - EPA. 2016. Plan to increase access to results of EPA-funded scientific research.

The issue

Data sharing and transparency are important for reaching the goals of RSA.

- The RSA program historically favored projects based heavily on those that would “acquire data for management that fills a data need”.
- The transparency of the data and repeatability of the research results are important for regaining public trust in the science and management of fisheries.
- Without a good data sharing and management policy, waste of resources can be a problem for the value of the investment.

  According to Whitehouse “*Publicly accessible weather and climate data from the National Oceanic and Atmospheric Administration (NOAA) underlie forecasts that are valued at more than $32 billion per year*.”

Past RSA Experience with the Issue

- Past RSA program did not have a mandatory data sharing and management policy for all the RSA-funded projects.
- RSA projects fell into the following categories of data sharing: fully shared, partially shared, shared with restriction, not shared.
- Currently, there is no unique data management system (such as sharing with a council or in a public data repository).
- Data requests require contacting Principal Investigators (PIs) individually.

Pros and Cons of Options the Council Could Consider

The progress of data sharing has been impeded because of multiple reasons such as:

- Confidentiality or privacy about business operations,
- Likelihood of misusing the data (e.g., not considering the survey design), and
- Professional advancement or publication/dissertation concerns by PIs.

It might be worth comparing with the federal requirements for data acquired by agencies, such as NOAA, to create a data sharing and management policy for RSA projects.

Pros and Cons of Options the Council Could Consider

- The deficiencies in economic data and capacities are widespread and have been identified by SSC many times, the latest in its report to the council meeting in 2019.
- Further, quota sale prices are key to understanding the benefits and costs of any research undertaken, and have proven important in the management of the Northeast Large Mesh Multispecies Fishery Management Plan (see, Section 7.4.1.2 of NEFMC 2019).

Therefore, it is important to look into strategies to deal with more effective data sharing of RSA-funded projects for the value of these investments.

NEFMC. 2019. Framework Adjustment 58 To the Northeast Multispecies Fishery Management Plan.

Pros and Cons of Options the Council Could Consider

It would be beneficial to

1) Identify reasons and types of projects of restricted sharing and not sharing;
2) Discuss rationale and potential adaptations for such projects;
3) Discuss the potential to have a mandatory data sharing and management policy for all projects;
4) Include data sharing policy in the peer-review and evaluation process.

Questions and Discussion

RSA Workshop #1

Decoupling allowances and Ecosystem Species

July 15th, 2021

Dr. Jorge Holzer (Presented by Dr. DePiper)

Decoupling allowances and Ecosystem Species: The Issue

- What are the implication of having RSA quota directly tied to the research (i.e., quota is used on research trips such that fishermen and fishing vessels become the research crew and research vessel)?

- The species under management by the MAFMC are not all high value commercial or recreational species. For example, forage species fisheries, important for their ecosystem services, may rarely get priority for their research needs through the RSA program because they cannot raise enough funds.

Decoupling allowances and Ecosystem Species: Past RSA Experience with the Issue

- The former RSA program decoupled the harvest of the RSA quota from the research and relied on the auctions implemented by the National Fisheries Institute (NFI) to generate revenue.

- Most of the revenue came from a handful of high value species (e.g., summer flounder, black sea bass, scup). Only up to 25% of the revenue from a given species quota could be used to fund research for a different species.

Decoupling allowances and Ecosystem Species: Pros and Cons of Options to Consider

Decoupling the data collection from the harvest of RSA quota has potential <u>benefits</u>:

i. RSA quota allocated through a market mechanism (e.g., an auction) allows for price discovery (how much is the quota worth?) and maximization of grant funds available (i.e., competition pushes the prices up).

ii. Assuming quota price information is available to the Council:
    i. Price data could inform decisions on intersectoral quota reallocation
    ii. Estimates the cost management measures impose on vessels not provided exemptions

Decoupling allowances and Ecosystem Species: Pros and Cons of Options to Consider

Decoupling the data collection from the harvest of RSA quota has potential <u>benefits</u>:

iii. Secondary lease market facilitates full use of the RSA quota. Harvesters realizing in-season that they are not able to harvest all their RSA quota can easily transfer it to other vessels.

iv. Auctions of quota for forage species unlikely to generate enough revenue to fund the research for those species. Auction design could overcome this problem.

i. Bundle forage species and high value species quota, auctioned off as a single unit

Decoupling allowances and Ecosystem Species: Pros and Cons of Options to Consider

Decoupling the data collection from the harvest of RSA quota also has potential drawbacks:

i. Benefits of a competitive market (i.e., auction) over other mechanisms relies on transparent process for allocating quota. Collusion, unclear rules for awarding winners, cheating, etc. can decrease an auction's revenue advantage.

ii. Information from auction is only valuable for management purposes if accurate and readily available to the MAFMC. The market for RSA quota should be run by third party following clear guidelines specified by the MAFMC.

Decoupling allowances and Ecosystem Species: Pros and Cons of Options to Consider

Decoupling the data collection from the harvest of RSA quota also has potential drawbacks:

iii. It makes enforcement significantly harder because:
   a) It increases the numbers of vessels landing RSA quota & landing ports
   b) Leasing makes tracking quota throughout the season challenging

iv. It may prevent researchers from developing long-term relationships with industry counterparts.

Questions and Discussion

Appendix V. Presentation: How Should Research Needs (to be fulfilled by RSA) be Developed and Prioritized

Mid-Atlantic Research Set Aside Program Workshop 1 – July 15, 2021

Emerson Hasbrouck
Cornell University Cooperative Extension Marine Program (CCE)
Riverhead, NY

Researcher's Perspective On 3 Items

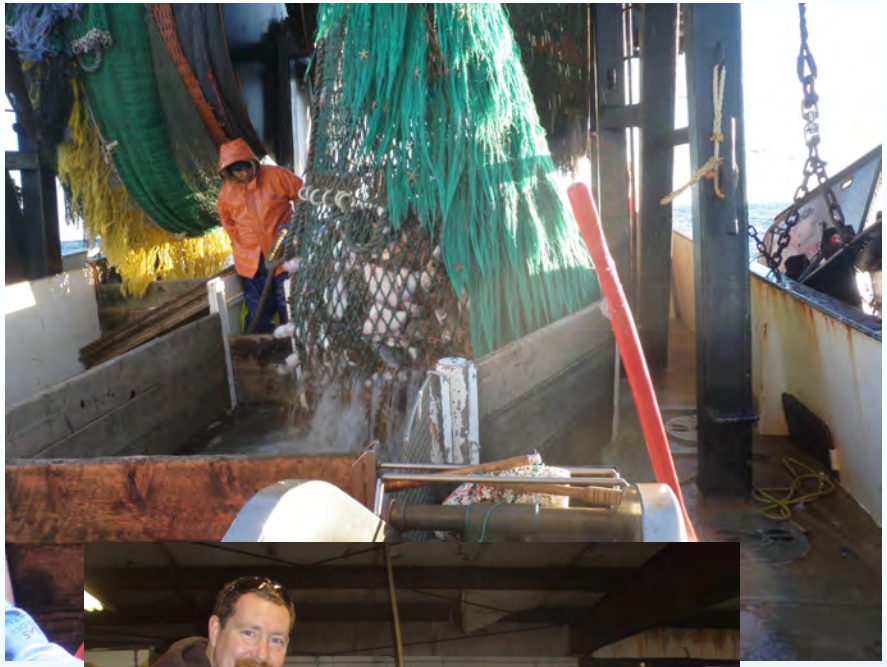
- Involvement in the Research Set Aside Program
- Positives/Negatives of MA-RSA
- Program Improvements to MA-RSA

Evaluation of the Effect of Vent Size and Shape on Black Sea Bass Behavior and Escapement from Pot Gear 2004

Evaluation of Summer Flounder Discard Mortality in the Inshore Bottom Trawl Fishery 2007

Evaluation of Summer Flounder Discard Mortality in the Bottom Trawl Fishery

Part II: A Study of the Offshore Winter Fishery 2009



A Method To Reduce Butterfish Retention In The Offshore Directed *Loligo* Squid Fishery Through The Use Of A Bycatch Reduction Device Adapted To Pre-Existing Gear 2010

Three Monkfish RSA Projects

- Coastwide Stock Structure of Monkfish Using Microsatellite DNA Analysis (2012)
- Fine Scale Genetic Population Structure of Monkfish – Expansion of first project (2016)
- Increasing Twine Thickness and Mesh Size to Reduce Skate Bycatch in Monkfish Sink Gillnets (2018, but taking place 2021)

How we develop RSA project proposals

- Based on RFP priorities.
- We use ideas provided by the fishing industry and design a scientific study around these ideas to conduct successful research projects.
- Fishermen supply gear and knowledge of fishing activities.

Positives of M-A RSA Program

- Great opportunity for collaboration and cooperative research with fishing industry:
    a) Develop ideas and methods directly with industry
    b) Allows for direct participation of industry in needed scientific research
    c) Allows for better industry buy-in of results
- Great source of funding that is not dependent on Agency/Council/Commission/State budgets.
- Opportunity to direct that funding specifically to identified research needs.
- Managers and scientists develop and identify research needs.
- M-A RSA Program has been an overall positive experience for this researcher.

Negatives of M-A RSA Program

- The loopholes that existed and the few dishonest people that exploited them that led to the end of the program.
- Poor interaction between researchers/MAFMC/ASMFC/NMFS/others relative to communicating and using project results. This was a bi-directional problem.
- Program research priorities seemed to carry over across multiple years with little update.
- Perception by many that the M-A RSA Program = the auction and that the auction = the M-A RSA program.
    a) There are methods other than an auction (in any form) to convert fish into $$.
    b) Of the 4 M-A RSA projects, I only used the auction for one of them.
    c) Monkfish and sea scallop RSA's do not use an auction.
- Turning fish into $$ is not a negative.

Possible Program Improvements

- Improved oversight/requirements for RSA harvest.
- Develop research needs that are timely and relevant.
- Include the fishing industry in developing and prioritizing research needs.
- Successful applicants should have an industry partner.
- Proposals should have some discussion about how they will turn RSA allocation into $$.
- Better interaction between researchers/MAFMC/ASMFC/NMFS/States relative to communicating and using project results.
    - Research Steering Committee??
    - 2-way process.
- Envision that a future RSA program may not look like the previous version.
- Better coordination to track RSA harvest between researchers and NMFS.

QUESTIONS?

Appendix VI. Workshop Registrants

Note: This list reflects the individuals who had pre-registered for the workshop

First Name	Last Name	Affiliation
Panelists		
John	Almeida	NOAA General Counsel
Lee	Anderson	MAFMC Scientific and Statistical Committee (Econ WG)
Chris	Batsavage	MAFMC Research Steering Committee
Bob	Beal	MAFMC Research Steering Committee
Eleanor	Bochenek	NFI-SMC, Retired Rutgers University
John	Boreman	MAFMC Scientific and Statistical Committee (Econ WG)
Patrick	Campfield	ASMFC Staff
James	Cassin	NOAA Office of Law Enforcement
Joe	Cimino	Council Member and NJDEP
Peter	deFur	MAFMC Research Steering Committee
Geret	DePiper	MAFMC Scientific and Statistical Committee (Econ WG)
Tony	DiLernia	MAFMC Research Steering Committee
Michelle	Duval	MAFMC Research Steering Committee
Travis	Ford	NOAA Fisheries
Jim	Gartland	VIMS/NEAMAP
Matt	Gates	ASMFC Commissioner - CT
Emily	Gilbert	NOAA Fisheries
Jim	Gilmore	ASMFC Commissioner - NY
Laura	Hansen	NOAA Fisheries
Emerson	Hasbrouck	Cornell Univ.
Dewey	Hemilright	Council Member (Law Enforcement Committee)
Mark	Holliday	MAFMC Scientific and Statistical Committee (Econ WG)
Jorge	Holzer	MAFMC Scientific and Statistical Committee (Econ WG)
Peter	Hughes	Council Member
Shannah	Jaburek	NOAA GARFO Sustainable Fisheries Division
Olaf	Jensen	MAFMC Scientific and Statistical Committee (Econ WG)
Yan	Jiao	MAFMC Scientific and Statistical Committee (Econ WG)
Matthew	Kahley	Council Member (Law Enforcement Committee and USCG)
Toni	Kerns	ASMFC Staff
Kris	Kuhn	MAFMC Research Steering Committee
James	Lanning	NMFS GARFO
Scott	Lenox	Council Member (Law Enforcement Committee)
Michael	Luisi	Council Member - Chair
Dan	McKiernan	ASMFC Commissioner – MA

Brandon	Muffley	MAFMC Staff
Adam	Nowalsky	MAFMC Research Steering Committee
Jonathon	Peros	NEFMC Staff
Eric	Powell	Successful applicant/SCEMFIS
Paul	Rago	MAFMC Scientific and Statistical Committee (Econ WG)
Sean	Reilly	NYSDEC Police
Paul	Risi	MAFMC Research Steering Committee
Mary	Sabo	MAFMC Staff
Matthew	Seeley	MAFMC Staff
Ryan	Silva	MAFMC Research Steering Committee
Todd	Smith	NOAA Office of Law Enforcement
Jason	Snellbaker	NJ Marine Enforcement Unit/ASMFC LEC
Wes	Townsend	Council Member - Vice-Chair
Kate	Wilke	MAFMC Research Steering Committee
General Public		
Katie	Almeida	The Town Dock
Michael	Auriemma	NJ Bureau of Marine Fisheries
Carl	Benson	New Jersey hook and line summer flounder fishermen
David	Bethoney	Commercial Fisheries Research Foundation
Andrea	Bogomolni	Individual
David	Borden	AOLA
Bonnie	Brady	LICFA
Karen	Chin-Mancini	Fisherwomen
Scott	Curatolo-Wagemann	Cornell Cooperative Extension of Suffolk County
Julie	Evans	East Hampton, NY Fisheries Representative
Doug	Feeney	Noah fisheries
James	Fletcher	
Kristin	Gerbino	CCE
Mitch	Hatzipetro	University of Rhode Island
Annie	Hawkins	RODA
Jeff	Kaelin	Lund's Fisheries, Inc.
Dan	Kuehn	Cornell
Meghan	Lapp	Seafreeze Ltd., Seafreeze Shoreside
June	Lewis	
Sam	Martin	Atlantic Capes Fisheries Inc
Tara	McClintock	Cornell University Cooperative Extension-Marine Program
Cheri	Patterson	NH Fish and Game Dept.
Michael	Plaia	MAFMC, NEFMC, ASMFC
John	Punola	MAFMC AP

Robert	Ruhle	F/V Darana R
John	Schoenig	Imperial sportsman and Suffolk senior fishing clubs
Chuck	Shea	Fisherman
Michael	Waine	American Sportfishing Association
David	Wallace	Wallace & Associates
Judith	Weis	Rutgers University
John	Whiteside	MAFMC AP/NEFMC LEC
Steven	Witthuhn	Commercial/For-hire