RSA Program Review Final Report (Draft)

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RSA Review Panel

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How RSA was born

From controversy and finger pointing, to cooperation and successful fisheries management.

- 1994 Large areas on GB and NS closed to protect groundfish.
- Depleted scallop fishing grounds quickly recovered.
- Everyone knew it but didn't know the absolute amount of harvestable scallops and areas of low bycatch.
- 1998 Cooperative Surveys paid for with scallops to address unknowns.
- 1999 Closed area access trips authorized, scallops paid for observers.
- 2004 Scallop RSA program expanded, and following a successful cooperative survey, the monkfish RSA program established as well.
- 2007 Atlantic herring RSA established.

Executive Committee Guidance (ToR) Issued February 2018 (Appendix II)

- RSA widely viewed as successful, but Council and NMFS agreed to conduct review as a matter of good governance.
- Categories of ToR (24 individual questions)
 - I. Program Administration
 - 2. Program Structure
 - 3. Results
- Consensus not required present all ideas.

ToR: Program Administration

- I. Roles of the NEFMC, GARFO, and the NEFSC?
- 2. Priorities- how are they set?
- 3. Identifying technical reviewers?
- 4. Identifying management reviewers?
- 5. Process used to make awards?
- 6. Is conflict of interest an issue?
- 7. Can the award decision process be improved?
- 8. Is there financial accountability?
- 9. Problems program administrators have experienced?

ToR: Program Structure

- 10. Is the RSA program used for research or to supplement agency funding? (Role of RSA?)
- 11. Factors that limit or promote interest in RSA?
- 12. Extending the period funding?
- 13. Is there enough RSA?
- 14. Alternatives to competitive grants?
- 15. Can RSA cover program administration?
- 16. Are State needs taken into account?
- 17. Increasing the value of RSA?
- 18. Consistency of RSA fishing with FMP objectives?

ToR: Results

- 19. Projects evaluated relative to goals?
- 20. Are projects used for management?
- 21. Number and amount of awards by recipient?
- 22. Are program results meaningful for fisheries?
- 23. Is RSA cost effective?
- 24. Project performance- metrics and consideration in future awards?

RSA ToRs addressed:

- Implicitly in Report.
- Explicitly (one by one) in Appendix VII.
- Some addressed later in presentation.

Review Methodology

- One year process interrupted by gov. shutdown!
- Based on:
 - Knowledge and experience of review panel
 - Written documents about RSA
 - Communications with PDTs, APs, Committees
 - On line survey
 - Select confidential interviews
- Report outline designed to address ToR.
- Review panel held about a dozen webex meetings.
- Face to face meeting to prepare Findings and Recommendations (Note: not consensus on all rec's – rich diversity of ideas more valuable).

RSA Review Panel Report (Doc. #8a and 8b) Table of Contents

- 1.0 Overview
- 2.0 Introduction (History, roles, methodology)
- **3.0 RSA programs by FMP** (amount, priority setting, implementation, awards to date, etc.)
- **4.0 What makes federal grants unique** (monetizing RSA, funding vehicles, project selection, etc.)
- **5.0 RSA program deliverables and outreach** (monitoring, RSA results, communication and participation, administrative challenges)
- 6.0 RSA review panel findings and recommendations
- 7.0 References

RSA Review Panel Report - Appendices

- I. RSA review panel membership
- II. Terms of Reference from Executive Committee
- III. Online survey results
- IV. RSA projects funded to date and overall impact on management and scientific information
- V. Sample of RSA process and timeline
- VI. RSA review panel response by term of reference
- VII. Templates used at NEFMC Scallop Share Days
- VIII. Funding of federal fisheries management
- X. Evolution of fisheries science and who pays for it

How Research Set Aside Functions

- FMP specifications set amount of RSA:
 - Weight of scallop (1.25mil lbs.) and herring (in lbs., 3% of total)
 - Days at Sea (DAS) of monkfish effort (500 days)
 - RSA accounted for as reduction from annual catch limit (ACL).
- RSA priorities in rank order initiated by PDTs, refined by APs and Committees, and approved by Council.
- NEFSC runs competitive grants process to award RSA:
 - Grant solicitations based on priorities (typically not very specific)
 - Proposals subject to technical and management reviews
 - NEFSC awards and monitors grants
 - Project results made available to management process and public.

RSA Awards in numbers and \$

2000-2018	Sea Scallops	Atlantic Herring	Monkfish
# of Awards	172	4	24
Total Est. Value (Res. + Comp.)	\$ 146.3 million	\$ 2.4 million	\$ 22.1 million
Total Est. Research only value	\$ 34.1 million	\$ 0.6 million	\$ 3.8 million
Average ratio of estimated research/total value	0.23	0.25	0.17

Since 2000, just under \$40 million toward research, about \$170 million total.

Examples of RSA Project Topics

Sea Scallops

- Surveys of abundance and size (over 30% of scallop RSA)
- Gear research to reduce bycatch of finfish (just under 30%),
- Interactions between scallop fishery and turtles,
- Scallop meat quality (grey meats),
- Scallop biology and life history research.
- Monkfish- most recently, investigation of age, growth, and maturity.
- Atlantic Herring- monitoring landings for river herring avoidance.

Description of Online Survey

- Purpose better understand perceptions of RSA performance and help identify issues to focus in on.
- Over 40 questions both open ended and pre-defined.
- Survey available for about a month, with 55 respondents.
- Broad range of participants from all 3 programs.
- Appendix III has detailed summary of results.

Sample of Online Survey Results

- Detailed strengths and weaknesses provided.
- Responses often split on issues
 (E.g. sufficient resources, flexibility, input on priorities, NOAA
 involvement in projects, conflict of interest issues, accountability and
 oversight).
- Most agreed that the programs are meeting the goals and providing useful information, especially the scallop program.
- The overall process enables NOAA to award the most useful projects.

Description of Individual Interviews

- Opportunity for more detailed questions of participants very familiar with the RSA process.
- Wide spectrum of participants 20+ interviews.
- Conducted over 3-week period 3 or more panel members participated in all interviews, about 1-1.5 hours each.
- Open ended discussions, did provide a list of 10 topics in advance of interviews.
- Overall, very informative and useful for panel discussion of findings and recommendations.

Review Panel Findings – 6 Total

Finding 1. Research Set Aside programs performing well, and generally regarded as highly successful, especially the Scallop RSA program.

- Broad support-stakeholders, managers, and scientists.
- Sense of ownership and buy-in to science and fishery management by fishing industry stakeholders.

Finding 2. Concerns about several aspects of RSA. Ten concerns:

- Inadequacies in priority setting,
- 2. Lack of transparency in review processes,
- 3. Limited pool of RSA applicants,
- 4. Challenges of awards in "fish" instead of dollars,
- 5. Fairness in the way RSA compensation fishing awards used,
- 6. Timeliness of awards,
- 7. Lack of clarity in financial oversite,
- 8. Results not feeding back into management as well as they could be,
- 9.Access and ownership of RSA results,
- 10. Lack of collaboration with NMFS scientists.

Finding 3. The role of RSA is unspecified.

- E.g., objective of scallop RSA is to enhance the understanding of the resource or contribute to support management decisions.
- Inadequate criteria for deciding what's in and what's out.
- RSA could support:
 - Fishery Development
 - Conservation science (NMFS traditional mission)
 - Alternative science (to compete with NMFS assessments)
 - Cooperative science (to supplement NMFS assessments)
 - FMP implementations
 - Protected species science
 - Ecosystem knowledge
- RSA has in the past filled most or all of these roles.

Finding 4. Sea scallop surveys lack an overall design.

A rigorous scientific design should address:

- spatial coverage,
- sampling design,
- sampling technology,
- sampling frequency,
- sampling intensity, and
- models for data assimilation.

Finding 5. Implementing RSA programs generates a substantial administrative workload.

In 2018,

- 12 meetings that considered priorities
- 20 priorities included in grant solicitations
- 40 proposals submitted and reviewed
- 144 technical reviews
- 14 management reviews
- 11 hours of management review discussions
- 19 grants awarded
- Time spent assembling package of sea scallop surveys, monitoring projects and compensation fishing, providing technical guidance, processing EFPs, RSA outreach, assembling data, and on legal reviews.

Finding 6. One or more of the current RSA programs may no longer be viable, but other species may be candidates for RSA programs in the future.

- Sea Scallop RSA is certainly viable.
- Atlantic herring and monkfish are less obvious:
 - Lower potential value of RSA and potential research.
 - Research priorities less critical in terms of direct use in fisheries management
 - Key element of river herring avoidance project is shoreside monitoring. Is this an appropriate a role for RSA?
- Because we have monkfish and herring RSA in place, is that enough of a reason to continue programs?
- The fact that RSA has not been used for other species should not inhibit using RSA in the future.

Council Discussion Today

- The review panel addressed all of its ToRs (Ap.VII).
- 6 overall findings and over 50 recommendations.
- What next?

Recommendations fall into two broad categories:

- Stay the course with recommended program refinements within the confines of the same approach.
- Begin a discussion to potentially explore a new approach.

Recommendation 1. When it comes to making changes in NEFMC RSA programs, caution should be exercised not to "screw up a good thing."

- Success shouldn't be an excuse for complacency.
- The recommendation for caution is about the importance of Stakeholder engagement.
- Changes should be designed collaboratively with stakeholders

Recommendation 2. Several ideas for improving RSA programs that emerged during this review should be considered by the NEFMC and NMFS.

- Numerous ideas to improve RSA came from the online survey, interviews, and panel members.
- These ideas were too numerous (over 30 specific ideas) and sometimes too detailed to be fully analyzed by the RSA review panel.
- They are included under recommendation 2 as suggestions for future consideration.
- Most of the ideas can be implemented by NMFS or the NEFMC without fundamentally changing the approach used to implement RSA (e.g., many relatively short term grants).
- These ideas were presented at the January 2019 Council meeting. The slides used for that presentation are included in this PPT for the purpose of completeness. However, they will not be presented.

1. Inadequacies in priority setting processes:

- a) Invest more time and effort in development of priorities and specific deliverables;
- b) PDT work with Center to specify status and expected deliverable;
- c) Peer review of priorities (maybe by SSC);
- d) Budget RSA by topic as guidepost;
- e) Align RSA priorities with mission statement (if developed);
- f) Record of stakeholder input from each meeting.

Perceived weaknesses and lack of transparency in proposal review processes

- a) Improve communication about rules for review;
- b) Improve industry participation at management reviews.

3. Limited pool of RSA applicants and recipients:

- Consider more outreach like using the Sea Grant network to highlight opportunities to participate in RSA;
- b) Other ideas under (4) could address this as well.

4. RSA vs. monetary award:

- a) Establish standard procedure on how to specify value estimates for each program.
- b) Identify mechanisms that could be used to respond to inaccurate price estimates and award adjustments.
- c) Consider allowing transfer of RSA or DAS between years.
- d) Consider reserving a portion of RSA to offset low price estimates.
- e) Consider additional comp fishing incentives and flexibility (more exemptions).

5. Fairness about fishery compensation:

- a) If a concern could highlight in a mission statement.
- b) Conduct an evaluation of how RSA fishing opportunities have been used to date.
- c) If a problem is documented, there are tools that could be used to improve fairness moving forward.

6. Timeliness of RSA awards:

- a) NMFS and NEFMC should prepare detailed time table for entire RSA process from priority setting to final reports.
- b) NEFMC should consider initiating priority setting earlier in the year.
- c) Consider staggering the announcements so they are not open simultaneously.

7. Financial oversight:

- a) Having high degree of confidence is important.
- b) NMFS should conduct an internal audit of its financial oversight procedures and strengthen them as appropriate.

8. Results feeding back into the process:

- a) For scallop survey awards a post award meeting to share and review survey plans should be held in April each year.
- b) Establish an advisory Cmte for each award to provide input pre, during and post research to increase utility of results.
- c) Separate Cmte to enhance monitoring and tracking RSA results.
- d) More formal communication of progress reporting requirements.
- e) Applicants specify how prior award results have been used before more projects are awarded.
- f) Consider RSA "Share Days" for Herring and Monkfish programs.
- g) Periodic subject based updates on status of RSA research.

9. Inadequate access to data – data ownership:

- a) Data sharing policy and rights of data ownership should be clarified in funding announcement and online.
- b) There is no formatting requirement, but RSA data is public property and should be accessible. Data warehousing would require additional resources. Could build that in cost of grant.
- c) NMFS and NEFMC should develop regular reports to summarize status of RSA projects, maybe several updates during the year and an annual report.

10. Lack of collaboration with NMFS scientists:

- a) NEFSC should encourage scientists to collaborate on RSA projects.
- b) Opportunities for collaboration greatly enhanced under cooperative agreements
- c) Advisory Committee meetings described above (8b) would improve collaboration as well.

Recommendation 3. To clarify the role of RSA, the NEFMC should adopt a mission statement for RSA.

- The RSA review panel does not have a consensus recommendation on the content of a mission statement.
- The mission might include:
 - Fulfilling FMP information needs beyond NMFS' traditional role,
 - instilling confidence and a sense of ownership in scientific information and fishery management,
 - fostering cooperation and collaboration between the fishing industry and scientists, including NMFS scientists.
 - Improving the precision such that scientific and management buffers are reduced.
 - Scientific studies that can realistically deliver results applicable to management within about 5 years.
- The report also identifies possible roles RSA should not fulfill, such activities that are NMFS' traditional mission.

Recommendation 4. A series of options for improving the efficiency and effectiveness of resource surveys for scallops should be considered.

- Option 1. Improve the current approach, issue multi-year grants (up to 5 years).
- Option 2. Re-establishing the Survey AP to design surveys.
- Option 3. Using an RSA for a cooperative agreement (CA) to prepare a statistically rigorous survey design. The agreement should engage NMFS throughout.
- Option 4. Expand option 3 to include implementation of surveys.
- Option 5. Expand option 4 into a long term Cooperative Agreement for RSA Programs (CARSAP).

No consensus on the options, and some review panel members question if NMFS has the authority for CARSAP

Recommendation 5. NMFS, in consultation with the Council, should evaluate and document RSA program administrative capacity to determine where support is sufficient and where it could or should be increased.

Review the operational efficiency of RSA programs including:

- grant competition administration,
- compensation fishing and research permitting administration and oversight,
- pre and post award programmatic and fiscal oversight,
- access to project data and results, and
- outreach.

Recommendation 6. The NEFMC should consider preparing an Omnibus FMP for Research Set Aside Programs that would be available for all fisheries under the jurisdiction of the Council.

The Omnibus Plan could include:

- Codify the role of RSA and principles to guide use of RSA;
- Processes to be used for implementation (i.e. setting priorities, amount of RSA set-aside, funding vehicle, etc.); and
- A flexible procedure for deciding when and how much RSA should be available as needs and opportunities arise, for any FMP.

Preparation of an omnibus RSA FMP would assure broad, transparent participation in shaping the future of RSA in consideration of this report.

Responses to Sample Set of Executive Committee Guidance (Questions)

- 2. Priorities- how are they set?
- 5. Process used to make awards?
- 14. Alternatives to competitive grants?
- 20. Are projects used for management?
- 21. Number and amount of awards by recipient?

Select Responses to Executive Committee Guidance (Questions)

2. Priorities- how are they set?

- Lots of input to priority setting.
- Potential for COI—input to priorities from grant applicants and recipients.
- Priorities lack specificity.
- Ranking priorities does not address program balance.

5. Process used to make awards?

- Intense technical and management reviews.
- Some stakeholder concerns, but review panel generally concludes the process is sound.

14. Alternatives to competitive grants?

- Multiple legal determinations that grants are the only vehicle.
- Virtually no opportunity to review or discuss the basis for determination.

Select Responses to Executive Committee Guidance (Questions)

20. Are RSA projects used for management?

Somewhat subjective analysis

Overall yes, some are essential- i.e., scallop surveys

Impact (2013-2017)	Herring	Monkfish	Scallop	% of Total
High	2	1	29	38%
Medium		3	11	17%
Low	1	1	19	25%
None		1	9	12%
Uncertain/ not complete			7	8%
Grand Total	3	6	75	100%

Select Responses to Executive Committee Guidance (Questions)

- 21. Number and amount of awards by recipient for the last 5 years (2013-2017)?
 - 84 Projects awarded
 - 12 institutions received awards
 - 3 institutions received about 80% of all awards

What next?

- Could think of this as a fork in the road.
- This is the time for discussion and deliberations, not a quick decision.
- Some suggestions in the report could be implemented by staff this year and next, while others will require more time and deliberation.
- A new approach cannot happen this year.
- Council can provide initial input today on which fork to take, or Executive Committee can discuss further and circle back.
- When the Council makes its decision, the next steps will be clearer.



Additional Remarks from the RSA Review Panel Chair

Dr. Michael Sissenwine

- Thanks for lots of hard work and cooperation
 - Panel members
 - Council members
 - Especially stakeholders

Challenge: RSA Grants

- What's the Challenge with RSA Grants:
 - Workload
 - Lack of specificity
 - Impeded collaboration with NMFS scientists
 - Turn around time can be long—sometimes several years.
- At least the review chair is disappointed with review's response to ToR 14. on alternatives to competitive grants?
 - Lawyers decided RSA must use grants as configured
 - No opportunity to review or discuss the determine.
 - At least the review panel chair believes that the description of the configuration used is incorrect for at least some projects.

Fortunately there may be a better approach: CARSAP

CARSAP(R4,Opt.3-5): What's Different?

- Cooperative Agreements (CAs) are grants. RSA uses some CAs.
- The review chairs understanding of RSA CAs vs. CARSAP

	Current RSA CA	CARSAP
Scope of Solicitation	Describes scientific problem to be solved	Describes scientific topics to be addressed
Nature of Proposals and Competition	Scientific approach for solving problem	Make up of team to address scientific topics
Participation of NMFS Scientists	Participate after proposal accepted, typically initiated by NMFS.	Fully participate from initial idea to application.
Governance	Grant recipient is in charge (within constraints of grant).	Potential roles: Recipient, NMFS, NEFMC, stakeholders.
Duration of Agreement	Typically a few years	Five years and renewable.

CARSAP could address several concerns in Finding 2.

Chair's perspective on the fork in the road for RSA

Findings	Stay the course	New Approach
1. RSA successful – don't screw it up	Rec 1. Little risk of screw up	Rec 1. Engage stakeholders to prevent screwed up
2. Ten concerns to address several aspects of program	Rec 2. Implement ideas to address concerns	Many concerns disappear
3. Role of RSA unspecified	Address in each FMP	Rec. 3 and 6. Mission statement, Omnibus FMP
4. Scallop surveys lack overall design	Rec 4, Options 1 - 2 (what's new?)	Rec 4, Options 3 - 5 for rigorous design
5. Substantial admin. workload	Rec 5, study it, but will there be more staff?	Rec 4, Option 5, to reduce workload
6. Maybe a different mix of RSA Species appropriate	Address in each FMPs, slow response time	Rec. 6 Omnibus FMP, potentially responsive
	Already prerogative of NMFS, NEFMC staff. Requires minimal Council action.	Requires Council actions and full stakeholder engagement.