Research Set-Aside Project Update
SSC Economic Work Group

Joint MAFMC-SSC Session
August 11, 2021
Role of the SSC Economic Workgroup

Provide scientific economic advice and perspective through a case study approach (as selected by the Council)

• Ask: Should Council re-start the RSA Program?
• Three RSA foci: Research Priorities; Funding; Enforcement
• Work with the Research Steering Committee (RSC)
  – Participate in the RSA Workshops
    (3 virtual, 1 in-person)
  – 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 Workshop 1: Research

- The SSC Economic Workgroup identified many RSA project selection criteria
- Ten issues were chosen with most saliency from the historic RSA program, and the most economic consequences to any future RSA
  - Only presented 5 due to time constraint
  - All 10 will be included in final report to the Council
SSC Economic Workgroup: Process for Workshop 1

• Use facilitated 10-15 minute interactive discussions, each using a common approach
  – Topic supported by a written "one-pager" laying out essential information
  1) Define issue
  2) Summarize past RSA experience
  3) Recommendations
• SSC author gave 3-5 minute overview, then facilitated audience discussion
Presentations and Authors

Presentation 1. Consistency with stated Council plans/objectives; Linkages to management goals. Application of Benefit/Cost principles in proposal evaluation.  Dr. Mark Holliday

Presentation 2. Peer Review and Principal Investigator (PI) Communications: Before, During, and After Completion of RSA projects. Dr. Olaf Jensen

Presentation 3. Conflict of Interest. Dr. Geret DePiper

Presentation 4. Universal data access and transparency. Dr. Yan Jiao

Presentation 5. Decoupling allowances. Ecosystem Species. Dr. Jorge Holzer (Presented by Dr. DePiper)
RSA Workshop #2 Preview
An Update – Dr. Jorge Holzer

Scheduled for August 31, 2021
Workshop # 2: Financing (Original Plan)

The original plan for the second RSA workshop relied on auction data from the original program and data on fishing activity of participants. It included the following components:

1. Description of the operation of the auctions in the original RSA program, and its difference with the operation of the scallop program.
2. Estimation of harvesters’ willingness to pay (how much do they value the quota?) for quota of at least a couple of species.
3. Simulation of revenue generation and allocation of the quota under a fixed price offer (e.g., as in the scallops' program) and under different auction formats.
4. Estimation of jointness in production for different species to assess complementarities in the value of quota of different species (Does it make sense to bundle the quota of some of the species?)
5. Discussion of the pros and cons of fixed-price offers versus auctions (including the ancillary benefits for management of additional information collected under each type of market).
Workshop # 2: Financing (Updated Plan)

The Economic WG was not granted access to the auction data from the original RSA program. In consequence, the updated plan for the second workshop is less ambitious:

1. Description of the operation of the auctions in the original RSA program, and its difference with the operation of the scallop program.

2. Examples of revenue generation and allocation of the quota under a fixed price offer (e.g., as in the scallops' program) and under a couple of auction formats using a made-up distribution of willingness-to-pay.

3. Discussion of the pros and cons of fixed-price offers versus auctions (including the ancillary benefits for management of additional information collected under each type of market).
Workshop # 3: Enforcement

• SSC Workgroup Lead: Dr. Lee Anderson
• Workshop scheduled for Oct. 14th
• SSC Economic Work Group playing supporting role to OLE and GARFO
  – Will develop supporting material in line with other workshops
Looking forward

Economic Work Group would like to continue to support the MAFMC

• If Council agrees, Work Group will align transition to new work with Council’s discussion and selection of 2022 priorities

• Data access can severely impact the scientific advice the Economic Work Group can develop
  – Will likely play an important role in vetting future topics
  – Parity between biological and economic advice
Thank you

• Dr. Lee Anderson
• Dr. John Boreman
• Dr. Geret DePiper (chair)
• Dr. Mark Holliday
• Dr. Jorge Holzer
• Dr. Yan Jiao
• Dr. Olaf Jensen
• Dr. Paul Rago
Advancing Ecosystem Science And Management Application
Objective: make better use of existing ecosystem information presented each year, and develop more tailored products and processes to use this information in management

Possible tasks for this WG include:

• Review and prioritize current ecosystem indicator work (analyses of indicators/groups, thresholds, etc) for the 2022 SOE report or prototype stock specific reports

• Develop and test decision frameworks that use ecosystem information setting Acceptable Biological Catch (ABC) for individual stocks

• Provide scientific support for MAFMC's comprehensive review and update of EAFM risk assessment, and for the Council's use of SOE and risk assessment in strategic planning.
What types of ecosystem data/information, tools, or approaches may be missing or would be informative to help support Council decision making, strategic planning, and priority setting (management and research)?

**Examples**

1. The North Pacific Fishery Management Council has used Ecosystem Status Reports to inform OFL and ABC setting for coming years (Bering Sea pollock 2006, Gulf of Alaska cod 2018-2019)
2. California Department of Fish and Wildlife utilizes habitat compression and forage indices to inform their [Risk Assessment and Mitigation Program](#) for humpback whales, blue whales, and Pacific leatherback turtles
Stock Rebuilding – Science and Policy Considerations
Joint SSC & Council Discussion:  
Stock Rebuilding—Shotgun Wedding (1)

- Rebuilding a stock a difficult task
- Science and management are inseparable; neither alone are sufficient.
  - Rebuilding must strike a balance:
    - {knowledge of stock} vs {legal requirements, management goals, risk policy}
  - Multiple paths towards rebuilding are feasible, some may be better economically
- Incorporation of economic factors in rebuilding plans could be useful
- SSC would appreciate further discussion with the Council and managers
  - Statutory guidelines for rebuilding start and end dates, as informed by current understanding of stock status and dynamics
  - Policy issues include the desired probability of rebuilding within the period
  - Application of the Council Risk Policy to interim fishing mortality rates during rebuilding, and
  - Responses to stock assessment updates within the rebuilding period.
Joint SSC & Council Discussion: Stock Rebuilding—Shotgun Wedding (2)

- What if conditions change during rebuilding?
- Rebuilding timelines are conditioned on expected values of future recruitment, continuation of current growth and maturation rates, and no change in discard patterns.
- Example

<table>
<thead>
<tr>
<th>Recruitment LOW</th>
<th>Recruitment HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease fishing mortality</td>
<td>High discards, waste fish</td>
</tr>
<tr>
<td>Extend rebuild period</td>
<td>Lower controllability: other fisheries</td>
</tr>
<tr>
<td>Wait until end, and hope?</td>
<td>Accelerate rebuild schedule?</td>
</tr>
</tbody>
</table>

- Explicit consideration of the economics of rebuilding could lead to lower interannual fluctuations in landings and better economic returns during the rebuild period.
- Ecosystem factors, e.g., Atlantic Mackerel as a forage species.
- Overall Goal=Identify scope of relevant policy considerations to properly structure rebuild strategies