Proposed process and constraints to incorporating MRIP-based estimates into stock assessments

by:

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Foreword

When considering the implications of incorporating revised recreational estimates under the Marine Recreational Information Program (MRIP) for Federal recreational fisheries, it is important to consider how these estimates can be incorporated into the scientific (assessment) processes as well as how they can be integrated into both the management and regulatory processes. Other papers at this MRIP workshop are addressing how MRIP data might best be incorporated into stock assessments. This paper provides a general overview of issues related to how and when these assessments might be peer reviewed, as well as the management and regulatory/rulemaking process after peer-reviewed scientific inputs have been provided. The paper highlights some of the limitations related to the capability of Councils and NMFS to address new information for all applicable stocks. The paper is structured in three sections: I. The Southeast Perspective, II. The Northeast Perspective, and III. Incorporation of Revised Recreational Estimates through the Management and Regulatory Processes.

I. The Southeast Perspective (by J. Carmichael)

Introduction

Southeast Data, Assessment, and Review (SEDAR**)** is a cooperative Regional Fishery Management Council process initiated to improve the quality and reliability of assessments of fishery resources in the southeastern United States, including the South Atlantic, Gulf of Mexico, and US Caribbean. SEDAR is managed by the three Regional Fishery Management Councils in the Southeast in coordination with NOAA Fisheries and the Interstate Fisheries Commissions (Atlantic States Marine FC and Gulf States Marine FC). SEDAR seeks to improve the quality and reliability of stock assessments, improve the quantitative basis of fishery management actions, and increase the relevance of research and monitoring programs in the Southeast Region.

SEDAR Workshop participants are appointed by the Cooperator requesting the assessment and having jurisdiction over the species assessed. Cooperators are responsible for appointing the panelists and observers it deems necessary to fulfill the project Terms of Reference. Panelists are individually responsible for ensuring that their viewpoints and opinions are reflected in the workshop report. SEDAR panel decisions and recommendations are achieved through consensus of the entire workshop panel, rather than formal votes. SEDAR workshop panels are asked consider the biological and technical aspects of datasets and stock assessments and base recommendations upon the scientific merit of the alternatives proposed. Decisions are not to be based on possible management outcomes or regulatory impacts.

SEDAR assessment priorities and schedules are developed by a Steering Committee composed of representatives from each of the SEDAR Cooperators. Steering Committee members include the NOAA Fisheries Southeast Science Center Director, the NOAA Fisheries Southeast Regional Administrator, the Executive Directors of the South Atlantic, Gulf of Mexico and Caribbean Fishery Management Councils, the Chairs of the South Atlantic, Gulf of Mexico and Caribbean Fishery Management Councils, the NOAA/NMFS Highly Migratory Species Division Chief, and the Executive Directors of the Atlantic and Gulf States Marine Fisheries Commissions. The Steering Committee meets twice yearly to evaluate assessment needs from each Cooperator.

The number of assessments needed by SEDAR Cooperators is almost always greater than the number of available assessment leads, which leads to a need for prioritization. Assessments are prioritized by the Steering Committee based on input from the Cooperators. Key issues affecting priority are the length of time since the last assessment, stock status, perceived change in stock abundance or status, value or size of the fishery, regulation changes, and a desire to add assess species that have not been assessed through SEDAR in the past. Working 1-2 years in advance, each Cooperator develops their list of priorities and the Committee as a whole agrees upon the species to be assessed given the availability of assessment personnel. Ultimately, prioritization of stocks to assess, based on possible impacts of revised MRIP estimates, will be determined by the Steering Committee based on input from the Councils, Commissions, and NOAA Fisheries.

Three assessment types are utilized by SEDAR – Benchmark, Standard, and Update – and they differ in the amount of review they receive, length of time to complete, and amount of new data or methods they may include. A Benchmark assessment is the most thorough and lengthy process and is required for all species that have not been previously assessed through SEDAR. During a Benchmark assessment, all datasets and decisions are evaluated. Multiple models are evaluated, with the goal of working down to one model 'package' that will be applied to develop management advice and determine stock status. Benchmark assessments involve a three-part workshop process: data, assessment, and review; each workshop may be up to one week long, allowing for multiple species to be accommodated in one workshop. Webinars and conference calls are also used to facilitate panel discussions. Benchmark assessments are reviewed by an independent review panel consisting of CIE reviewers and members of the SSC if the assessment is for a Council. Benchmark assessments are anticipated to be 9 month processes.

The Standard assessment is intended to update prior assessments with recent information and address issues supported by new data or other advancements as feasible within the approved benchmark model approach. Limited flexibility is allowed for deviations from the benchmark model. The lead assessment agency and Cooperator technical body determine what is appropriate and designate the appropriate additions and modification in the project Terms of Reference. Currently, the types of changes that may be considered are as follows:

- May incorporate technical advances approved through other SEDAR benchmark assessments or SEDAR intercessional workshops.
- New datasets reviewed and developed through a SEDAR intercessional workshop may be included if feasible given the model structure.
- Data-provider revisions to original datasets may be incorporated (e.g., revised catch estimates provided by an agency.)
- Errors may be corrected in input datasets or model configuration.
- Supporting models, such as growth relationships, may be updated based on new age and growth information.
- Biological parameters and assumptions may be updated if there is new supporting research and the updates are consistent with the model structure.
- May consider new model configurations if necessary to address new data or output needs.
- May consider alternative software packages that accommodate the benchmark model type.

Peer review of the Standard assessment is provided by the SSC or Cooperator equivalent. Standard assessments are approximately a 4 month process.

In Update assessments the framework from the stock's Benchmark assessment is utilized. Assessment updates are restricted to incorporation of additional years of observations to those datasets incorporated in the prior benchmark or standard assessment, with limited exceptions:

- New datasets reviewed and developed through a SEDAR intercessional workshop may be included if feasible given the model structure. (For example, CPUE from a new

independent survey may be added if the model accommodates such measures and the index was evaluated for the stock in another SEDAR workshop.)

- Data-provider revisions to original datasets may be incorporated (e.g., revised catch estimates provided by an agency.)
- Errors may be corrected in input datasets or model configuration.
- Supporting models, such as growth relationships, may be updated based on new age and growth information.
- Biological parameters and assumptions may be updated if there is new supporting research and the updates are consistent with the model structure.

Peer review of the update assessment is provided by the SSC or Cooperator equivalent. Updates are anticipated to be a 2 month process, depending on season and staff work load.

Opportunities for incorporating revised recreational data into SEDAR assessments

Revised Estimates 2004-present

Revised estimates now available for 2004 forward that are considered best available science could be incorporated into future SEDAR assessments in any of the three SEDAR assessment categories. The revised 2004-forward estimates are similar to other modifications to data streams that are regularly incorporated into assessments, based on the assumption that the revised estimates are an improvement of those previously available. Because the revisions do not represent new data streams the SEDAR benchmark trigger for new data is not automatically activated. However, the Steering Committee could direct a benchmark assessment if deemed appropriate. It should also be noted that continuity runs are required in most assessment Terms of Reference and would need to be done using the MRFSS data, when possible, to evaluate the effect of the revised estimates for as long as those are available.

When revised estimates can be included in coming assessments will be determined by the SEDAR Steering Committee and guided by the needs of the cooperating Councils. Information on the possible impacts of the revised estimates on particular stocks will be necessary for the Committee to consider changing current priorities.

Revised estimates 1999- 2003

Incorporation of potential revised 1999-2004 estimates can easily be accommodated for benchmark assessments as all data sets are examined for possible inclusion under that assessment category. This is the most straightforward alternative.

Several avenues exist for incorporating revised estimates in Standard and Update assessments. SEDAR guidelines state that Standard assessments “May incorporate technical advances approved through other SEDAR benchmark assessments or SEDAR intercessional workshops”. These Guidelines also state that, for Standard and Update assessments, “New datasets reviewed and developed through a SEDAR intercessional workshop may be included if feasible given the

model structure". However, there are four options outlined here that may help improve efficiency and lead to a more uniform method of including the newly calibrated data for 2003 and earlier. Which method is appropriate may depend upon the types of calibration necessary to develop revised estimates for the earlier periods and the extent to which such estimates are considered new datasets.

Intercessional Workshop Method. If the MRIP Calibration Workshop develops a single recommendation for calibration of MRFSS landings for 1999-2003, and the method passes independent review, the calibrated landings could be incorporated into future Benchmark, Standard, and Update assessments. The MRFSS-MRIP calibration workshop is functioning as a SEDAR Intercessional workshop in this instance.

The Intercessional Workshop Method would improve consistency between SEDAR Cooperators. It would also be an efficient use of time and funds because the Independent peer review would be done only once then the approved methodology applied to all future SEDAR assessments.

Intercessional Workshop Method with SSC review. If the MRIP Calibration Workshop develops more than one peer review accepted recommendation for calibrating MRFSS landings for 1999-2003, each Cooperator's SSC (or equivalent) could evaluate the options and recommend a calibration method that is used for all future SEDAR assessments conducted for that Cooperator. This method may not produce the same consistency between Cooperators, but would provide efficiency by not needing to re-assess every stocks through the full benchmark process to incorporate the revised estimates.

Benchmark Method. Calibration methods proposed in the MRIP Calibration Workshopcould be evaluated during dedicated Benchmark assessments in which the data and assessment panels for that assessment determine the most appropriate approach. Approval of such an approach through a Benchmark assessment Independent peer review panel would provide the necessary approval to apply the method to future SEDAR Benchmark, Standard and Update assessments. This method essentially suggests that the calibration method must pass a second peer review and have gone through at least once benchmark assessment. The SEDAR Steering Committee would need to determine whether the methodology needs to go through a benchmark cycle for each Cooperator, or if only one approved benchmark cycle is needed (regardless of Cooperator involved). The greatest efficiency and consistency would be gained by the second option (one approved benchmark with methodology applied to all future assessments).

Dedicated Review Method. A final option would be to hold a separate peer review for the calibration method or methods that are recommended by the MRIP Calibration Workshop. Once approved, the calibration method could be used in all future SEDAR Benchmark, Standard, or Update assessments. Given that the MRFSS-MRIP Calibration workshop is similar to a SEDAR Intercessional workshop with SEDAR cooperators involved, and an independent peer review is planned of workshop recommendations, this alternative results in potential duplication of effort.

II. The Northeast Perspective (by J. Weinberg)

Background:

SAW/SARC Assessment Process

The Northeast Regional Stock Assessment Workshop or "SAW" is a formal scientific peer-review process for evaluating and presenting benchmark stock assessment results to managers. The SAW protocol is used to prepare and review assessments for fish and invertebrate stocks in the offshore US waters of the northwest Atlantic. Assessments are prepared by SAW working groups (federally led assessments) or Atlantic States Maine Fisheries Commission technical assessment committees (state led assessments) and peer reviewed by an independent panel of stock assessment experts called the Stock Assessment Review Committee or "SARC". The SAW/SARC process began in 1985.

The SARC is asked to determine the adequacy of the assessments in providing a scientific basis for management. The SARC panel may accept or reject an assessment. Following the peer review meeting, which lasts 4-6 days, each SARC panelist provides a written review and the panel provides an overall written summary of the proceedings. SARC panelist reports are typically completed about five weeks after the peer review meeting.

Final SAW documents include a Stock Assessment Report, a Stock Assessment Summary Report, and the SARC panelist reports. After the peer review takes place, final SAW assessment reports are published by the Northeast Fisheries Science Center and all final documents are made available online. Final published SAW reports reflect the written decisions and conclusions of the SARC panel regarding each of the assessment Terms of Reference.

Benchmark assessments are anticipated to be a 6-9 month process. Approximately 4-8 benchmark assessments are reviewed annually in the SAW/SARC process.

Other Existing Processes

Five to ten assessment updates are done annually. They undergo less external peer review than benchmark assessments, are often published as Center Reference Documents, and are used by appropriate Fishery Management Council staff members, Council committees, and the NE Regional Office to develop fishery specifications and for updating stock status determinations.

Other existing processes include the Transboundary Resources Assessment Committee (TRAC), the Groundfish Assessment Review Meeting (GARM), and the Data Poor Stocks Working Group (DPSWG). The TRAC conducts assessments of Northwest Atlantic fish stocks shared by the US and Canada. The GARM addresses roughly 20 New England groundfish stocks, and the DPSWG addresses stocks lacking data, assessment methods, or biological reference points. Thus far, 5 fish and invertebrate stocks and 7 skate species have been addressed by the DPSWG.

Plans for a New Process for "Operational" Assessments

In addition to the existing SAW/SARC process and assessment updates, a new assessment framework is being developed in the Northeast (NE) region for conducting and peer reviewing "operational" stock assessments more rapidly and at greater frequency. "Operational" assessments are similar to what are commonly called assessment "updates". This new process was tested for the first time in 2012 in updating the assessments of 13 groundfish stocks. "Operational" assessments are anticipated to be a 3-4 month process. According to plan, 20+ "operational" assessments could be reviewed annually within the new process. The process also refers to a "research" track, but this has not been fully planned yet. Although the current plan is to have the new process functioning in 2014, the process is still subject to significant change and revision in the future.

The process is described in a white paper prepared for the Northeast Regional Coordinating Committee (NRCC) (see Appendix 1 of NEFSC 2012). The new process for "operational" assessments has seven main steps:

Step 1 - The NRCC decides what stocks will be assessed.

Step 2 -The lead assessment scientist for each stock plans the analysis. Little change is expected or encouraged in the application of the baseline model in the operational assessments.

Step 3 - The assessment work plan is presented to the Assessment Oversight Panel (AOP) at an open meeting. Any approaches significantly different from the baseline model are to be referred to the "research" track for study, development, and peer review.

Step 4 - The operational assessment is then developed and conducted by the lead assessment scientist.

Step 5 – The operational assessment is then subjected to an Integrated Peer Review.

Step 6 – PDT/TC review comments on the assessment results are forwarded to SSC.

Step 7 – The SSC reviews the assessment findings and prepares ABC recommendations that are forwarded to Council.

The new process is designed to evaluate operational assessments, which use previously-approved data sources and assessment models. The process is not intended to evaluate assessments that incorporate major changes such as:

i. A change in stock definition is contemplated.
ii. Diagnostics from the operational assessment indicate the assessment model is inadequate to continue to serve as a scientific basis for management.
iii. New types of input data are available which, if incorporated into the assessment, might significantly change the assessment results. A significant change is one in which the estimates of stock size and OFL might differ by a stock specific amount (e.g., 20-30% for groundfish) from the assessment estimates without incorporating such new types of data.

iv. A significant retrospective pattern has become evident in the assessment estimates of stock size, fishing mortality, or recruitment.

v. A significantly different value of natural mortality (e.g., derived from analysis of trophic interactions) is considered appropriate in characterizing non-fishing stock dynamics.

vi. Significant changes in management practices have occurred that have markedly reduced the accuracy and utility of the existing assessment data inputs, or significantly diminished the reliability or validity of the assessment model itself.

Special considerations regarding use of MRIP data in Northeast assessments:

Selection of a Stock Assessment Process and Peer Review Process

Recreational catches are a significant component of the total catch in several Mid-Atlantic stocks and also in a few New England stocks. For these stocks, incorporating new recreational data and any hindcasts of earlier recreational catches would likely represent a major change, beyond that acceptable in an assessment update, or what is termed an "operational assessment" in the new process. Still unresolved is what to do about assessments whose recreational time series extend further back in time than 1998. Decisions about whether to use existing MRFSS data for these years will be important. Therefore, the assessments of these stocks and reviews should ideally be scheduled in a process such as the SAW/SARC, or in the "research" track (which still needs further planning for future implementation) that affords the appropriate level of peer review. Alternatively, a special review process might be set up, focused solely on incorporating MRIP data into stock assessments. Assessments which have a trivial recreational catch would not be involved.

Timing/Scheduling

The NEFSC does not yet have a formal policy for incorporating MRIP-based estimates into stock assessments. However, there have been internal meetings and discussions with NMFS HQs staff and national organizers of the MRIP team. Ideally, the next assessments for those stocks where the MRIP data constitute a significant portion of the total catches would be conducted when the MRIP data are complete (1998-2010) and when the size frequency data are also available and complete. This would be most efficient.

The optimal way to maintain normal flow of assessment output would be to incorporate MRIP data into assessments one stock at a time, rather than updating all stocks at once. A number of stocks in the Northeast region have poor stock status (i.e., overfished, overfishing, rebuilding deadlines coming up within 2 years). Because of this, there is high demand from fisheries management agencies, NMFS, and the public for continual focus, analysis, re-analysis, and peer review of the assessments of these stocks. A major dedicated effort to incorporate MRIP data into assessments of all stocks at once would either delay or disrupt the completion of future benchmark assessments of stocks in poor condition, most of which are managed by the NEFMC.

The NEFSC provides scientific and assessment support to two Fishery Management Councils and also has a partnership with the ASMFC. Both Councils and the ASMFC are members of the NRCC, the committee which has oversight over scheduling of stock assessments in the Northeast region. Given the finite scientific and management resources within the region, there is often competition among the Councils and the ASMFC to get their stocks on the assessment schedule. While the NRCC has historically planned 2-3 years ahead, the schedule is not "set in stone". Recently, major changes to the schedule have been made on short notice (e.g., as little as 6 months). This has created difficulties in planning the stock assessment work, and could play a role in how and when MRIP data are incorporated into stock assessments in the Northeast region.

Good faith efforts are made by all NRCC parties to coordinate the timing and delivery of assessments with management and regulatory cycles. However, this is complex process and such coordination has frequently been difficult to achieve.

Summary:

The NEFSC does not yet have a formal policy on incorporating MRIP-based estimates into stock assessments. Ideally, the NEFSC would incorporate the MRIP data into assessments when the time series for these data are complete (1998-2010) and when the size frequency data are available and complete. To maintain a normal flow of assessment output, MRIP data would best be incorporated into assessments one stock at a time, rather than updating all stocks at once. Assessments are scheduled in the Northeast by the NRCC and this process will continue in the future. Such scheduling has recently become less certain, placing additional stress on long-term planning abilities. Still unresolved is how to conduct assessments whose recreational time series extend further back than 1998. Decisions about whether (and how) to use existing MRFSS data in deriving the recreational catches in these earlier years will be important. Depending on the importance of recreational data in the assessments and how these data are used, a high level of independent peer review may be required, as is routine for benchmark stock assessments.

References:

Northeast Fisheries Science Center (NEFSC). 2012. Assessment or Data Updates of 13 Northeast Groundfish Stocks through 2010. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 12-06, 789 p.

III. Incorporation of Revised Recreational Estimates through the Management and Regulatory Processes (by J. Coakley)

Introduction

When considering the implications of incorporating revised recreational estimates under the Marine Recreational Information Program (MRIP) for Federal recreational fisheries, it is important to understand how these estimates and new assessments can be integrated into both the management and regulatory processes. The following provides a general overview of the management and regulatory/rulemaking process after peer-reviewed scientific inputs have been provided, and highlights some of the limitations related to the capability of Council's and NMFS to address new information for all applicable stocks.

Management and Specifications Process

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) [1] requires acceptable biological catches (ABCs) and annual catch limits (ACLs) be set for each stock in a fishery (i.e., with minimal exception); however, ACLs can be set for more than 1 year at a time (e.g., a 3-year specification action could set ACLs for each of the 3 years; the ACLs could be the same for each year in the cycle, or different). Most fishery management plans (FMPs) produced by the New-England Fishery Management Council NEFMC), Mid-Atlantic Fishery Management Council (MAFMC), and South-Atlantic Fishery Management Council (SAFMC) have multi-year authority to set specifications (see Table 1). Specifications is a term used to describe fishery management measures such as catch limits (e.g., ABCs, ACLs, landings and harvest limits, etc.) and well as other types of fishery measures (e.g., gear requirements, trip limits, minimum fish sizes, etc.). While the authority for multi-year specification setting has existed in most fisheries for many years through the FMPs, it has been used only to a limited extent.

In the Mid-Atlantic, specifications are established through specification actions (i.e., specifications packages) which are implemented through NMFS proposed and final rulemaking. In New England, specifications are established through either specifications or framework adjustments which may include a wider range of management measures. Both also are also implemented through proposed and final rulemaking. In the South Atlantic, specifications are established through FMP Amendments, Regulatory Amendments, and framework procedures. Any changes to the implementing regulations through proposed and final rulemaking requires an analysis of the environmental, economic, and social impacts of the proposed change typically thought an environmental assessment (EA) or if significant impacts are expected, and environmental impact statement (EIS).

The timing of fishery specifications is driven by two processes: 1) the input of new information through the stock assessment process on which to base ABCs and ACLs requiring the use of best available information on which to base fishery management, and 2) the timing of the fishing year and need to adjust measures in response to current fishery conditions by the start of the fishing year. As described earlier, the starting point for incorporation of any revised recreational data

[1] Magnuson-Stevens Fishery Conservation and Management Act (MSA), portions retained plus revisions made by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA).

begins with peer-reviewed stock assessment information which is used to provide estimates of the overfishing limits (OFLs) and a baseline from which to calculate ABCs and ACLs.

Table 2 provides the current fishing years for Atlantic coast Federally-managed stocks. Most fishing years are based on calendar years, and begin on January 1. The current staggering of some fishing years provide administrative benefits, in that they spread out the specification processes such that not all specifications are being developed, submitted, reviewed, published, and implemented at the same time. This has an impact on Council staffing resources as well as NMFS staff resources.

A downside of having so many fishing years begin January 1 is that the specification packages and implementing rules must be processed late in the year, when holidays and weather can cause delays, and when many Federal agencies, including other regions of NMFS, are trying to get year-end actions in place and published in the Federal Register.

To develop specifications, each FMP and its implementing regulations describe a process for specification setting or framework adjustments, including the parties involved (e.g., Scientific and Statistical Committees (SSCs), Plan Development Teams (PDTs), Technical Committees, Monitoring Committees, Advisory Panels, the Councils, etc.) and their respective roles; the timing of the process; and the range of specifications and/or adjustments that can be made through that process. Figure 1 provides an example of the general process for the MAFMC stocks to set specifications for catch limits and fishery measures. This process starts when new peer-reviewed assessment information is provided and requires approximately 2-3 months to prepare briefing documents, coordinate meetings sequentially, and package advisory recommendations for the Council to consider when developing their recommendations.

For the MAFMC, as an example, the process of setting recreational measures for the upcoming fishing year for summer flounder, scup, and black sea bass is actually decoupled from the initial specifications process during which the recreational ACLs and recreational harvest limits are set. This decoupling enables the incorporation the most up to date, current year recreational estimates when setting measures and allows additional time for analyses to determine the recreational measures to be implemented (i.e., minimum fish sizes, seasons, and possession limits). Therefore, the revised recreational estimates are brought into the management process for these species in two different steps. The first is through the scientific inputs to set catch and landings limits for the recreational fishery. The other would be through the incorporation into the analyses to determine what recreational measures This secondary step requires an additional 2-3 months to works analyses and recommendation development with Monitoring Committee's and Advisory Panels for the Council to consider.

In addition, for both the MAFMC and SAFMC, there is overlapping jurisdiction for some Federal recreational stocks with the Atlantic State Marine Fisheries Commission (ASMFC) which manages state waters fisheries. Complimentary actions are typically are developed in cases with overlapping jurisdiction, which may require joint meetings or additional time for coordination. There is also overlapping jurisdiction between SAFMC and GMFMC for some stocks, such as those in the Coastal Migratory Pelgaic FMP (e.g., king mackerel), which requires action by both Councils to effect regulatory changes.

Regulatory Timeline

Once a Council recommendation has been made for specifications, the Council staff prepares the specifications package, usually an EA for the MAFMC, or Framework EA in the case of the NEFMC, which may take several weeks to months to prepare depending on the scale of the action. The package is then submitted to NMFS and it takes 5 -7 months for NMFS to review, approve, and implement and EA. If the action is elevated to an EIS, the timeline from submission to implementation would be extended by 2 - 3 months. In addition, there may be cascading actions resulting from the action proposed, such as accountability measures associated with catch limits being triggered, that may result in addition NMFS staff monitoring and regulatory action.

Conclusions/Discussion

In order to effectively incorporate the revised recreational estimates into the science and management processes for Federally managed recreational fisheries, it will be necessary to consider adjustments to both the frequency and timing of stock assessments as well as the timing of the Council management processes, such that the final assessment results feed into the management process in a way to allow them to be used quickly. In addition, these actions will need to be sufficiently spaced such that Council staff and NMFS can apply existing staff resources. This will require Councils and NMFS to consider regional priorities.

An effort to rapidly integrate revised recreational estimates for all the applicable stocks simultaneously would likely come at the cost of limiting or halting other types of actions under consideration by both the Councils and NMFS. Finite resources on the part for all organizations involved in the process will need to be coordinated.

The integration of this new information will not occur instantaneously for all stocks, but will instead need to be incorporated over the several years.

Table 1. FMP authority to set multi-year specifications for species with recreational catch (specs), and current practice for setting measures for 2012.

Council	Stock	FMP Authority	Current Specifications Practice (2012)
MAFMC	summer flounder	up to 3 years	annual
	scup	up to 3 years	annual
	black sea bass	up to 3 years	annual
	Atlantic mackerel	up to 3 years	annual
	Atlantic bluefish	up to 3 years	annual
	spiny dogfish	up to 5 years	annual
	golden tilefish	after new stock assessment or RSA	specs rolled over since 2009
NEFMC	NE multispecies (large mesh)	biennial adjustments	ongoing because of projection problems
SAFMC	All (73)	varies	varies

Table 2. Current fishing year definitions by month, starting in November, for NEFMC, MAFMC, and SAFMC stocks.

Stock	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M
summer flounder																			
scup																			
black sea bass (Mid-Atlantic)																			
Atlantic mackerel																			
Atlantic bluefish																			
spiny dogfish																			
golden tilefish (Mid-Atlantic)																			
NE multispecies (large mesh)																			
black sea bass (South Atlantic)																			
king mackerel (Atlantic group)																			
Spanish mackerel (Atlantic group)																			
wreckfish																			
greater amberjack																			
68 remaining stocks																			

Table 3. Proposed rule/final rule regulatory timeline, from submission of specifications (EA example).

Action	Approximate Timeframe
Final Council staff version of Draft EA/IRFA/RIR submitted to NMFS	-
Request NERO/NEFSC review of EA	2-week review period
Compile NMFS/NEFSC comments on EA	1 week
Send Council staff comments on EA	-
Send CZMA letters	90-day comment period
Council formally submits EA	-
Request PPI review of EA	10-day review period
Issues Advisory Clears	1 week
NMFS finalizes EA	1-2 weeks
Proposed Rule Publishes	-
Proposed rule comment period ends	30 days after proposed rule publishes
Request PPI clearance of EA and FONSI	3-day clearance period
Final rule publishes	Less than 30 days after proposed rule comment period closes
Final rule effective	15 day APA delayed effectiveness period
Small entity compliance guide	(if needed)

Figure 1. Example (from MAFMC) of use of Council advisory groups in the process to develop Council recommendation for specifications.