



MAFMC Comprehensive Research Plan 2016-2020

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Mid-Atlantic Council Five-year Research Plan

- MSA requires each Council to submit multi-year research priorities to inform research planning and budgeting for NE Region

Invictus

Out of the night that covers me,
Black as the pit from pole to pole,
I thank whatever gods may be
For my unconquerable soul.

In the fell clutch of circumstance
I have not winced nor cried aloud.
Under the bludgeonings of chance
My head is bloody, but unbowed.

Beyond this place of wrath and tears
Looms but the Horror of the shade,
And yet the menace of the years
Finds, and shall find, me unafraid.

It matters not how strait the gate,
How charged with punishments the scroll,
I am the master of my fate:
I am the captain of my soul. [\[1\]](#)

Mid-Atlantic Council Comprehensive Five-year Research Plan

- Council in consultation the SSC first developed five year research plan in 2008
- Identified general and species/FMP specific research needs
- Since then Council embarked on Visioning Project

Mid-Atlantic Council Visioning Project

- Input from broad range of stakeholders to map out the future course of marine fisheries management in the Mid-Atlantic region

Resulted in the development of the Council's Strategic Plan (<http://mafmc.org>) which outlines the Council's strategies for implementing the Council's vision for improved federal fisheries management in the Mid-Atlantic.

Visioning Project Central Theme

- Lack of public confidence in the data and science that drive fishery management decisions.
- One of the major goals of the Council's Strategic Plan is *to ensure that Council management decisions are based on timely and accurate scientific data that are analyzed and modeled in a manner that improves management performance and build stakeholder confidence*
- Research plan modified to be responsive to Visioning Project recommendations

Visioning Project Central Themes

- Stock Assessment Improvement
- Research to support measures to reduce/eliminate discards
- Social and economic data issues/MSEs
- Improving timeliness and accuracy of fishery data collection through electronic reporting
- Evaluation of Existing Quota Allocations

Stock Assessment Improvement

- Top priority is to have acceptable quantitatively based stock assessments for all MAFMC stocks (improve data poor)
- Continue to improve current quantitatively based stock assessments
- Will require close coordination with NEFSC

Stock Assessment Improvement

- Improved catch at age matrices for all stocks
- Fishery independent indices needed for Atlantic mackerel, black sea bass and Illex
- Additional research needed to improve understanding relationship between NEFSC and state survey indices and abundance by species

Stock Assessment Improvement

- Focus new Cooperative Research Program on collaborative research using fishing vessels to supplement NEFSC trawl survey (maybe permanently for some species)
- Northeast Trawl Advisory Panel (NTAP) convened and will meet in 2015-2016

Northeast Trawl Advisory Panel (NTAP)

- Joint advisory panel of the Mid-Atlantic and New England Fishery Management Councils
- Composed of Council members, fishing industry, academic, and government and non-government fisheries experts who will provide advice and direction on the conduct of trawl research in the NE US

Northeast Trawl Advisory Panel (NTAP)

- Established to bring commercial fishing, fisheries science, and fishery management professionals in the northeastern US together to identify concerns about regional research survey performance and data,
- Identify methods to address or mitigate these concerns, and to promote mutual understanding and acceptance of the results of this work among their peers and in the broader community.

Northeast Trawl Advisory Panel (NTAP)

- Council will consider NTAP recommendations to identify cooperative research projects that supplement or eventually replace NEFSC survey abundance indices for some species

Stock Assessment Improvement Ecosystem Considerations

- Incorporation of species interactions and the impacts of climate change and variability in stock assessments and management is a high priority
- Current MAFMC stock assessments conducted on a single species basis and only a few have begun to incorporate environmental drivers into population dynamics models.
- The development of multi-species models which incorporate environmental covariates is a high priority
- Additional recommendations likely as part of EAFM Document development in late 2015

Research to support measures to reduce/eliminate discards

- All stakeholders agreed on the need to greatly reduce or eliminate discards in Mid-Atlantic fisheries (especially those which occur as a result of fishery regulations)
- Represent economic and biological waste
- Can be reduced through improved gear performance (i.e., improved selectivity) and/or adoption of management procedures or approaches which allow for greater retention of the catch or the avoidance of unmarketable, sub-legal or otherwise prohibited species.

Research to support measures to reduce/eliminate discards

- Gear selectivity component of the discard problem should be addressed through collaborative research with fishermen from both the commercial and recreational sectors
- Also need to improve estimates of discard mortality (commercial and recreational)

Social and economic data issues

- Council implementation of MSRA focused on biological imperatives
- Stakeholders held view that social and economic consequences of meeting biological objectives were unnecessarily severe and not adequately incorporated into Council decision making
- Council seeks to improve incorporation of social and economic info into future decisions

Social and economic data issues

Yield and Regulatory Stabilization

- Stakeholders universally supported management approaches that result in stabilization of yield over time
- Analysis of current risk policy and ABC control rules relative to chasing noise is high priority for
- High priority also given to research on methods of setting ABCs for data poor stocks (BSB and AM highest priorities)

Management Strategy Evaluation

- Evaluation of management strategies using simulation, is widely considered to be the most appropriate way to evaluate the trade-offs achieved by alternative management strategies and to assess the consequences of uncertainty for achieving management goals

Management Strategy Evaluation

- A *comprehensive* management strategy evaluation of the current management system for Mid-Atlantic fisheries which incorporates social and economic considerations is warranted

Management Strategy Evaluation

- High priority is given to the development and evaluation of management procedures that perform well in the absence of high quality stock assessment information and provide more stable streams of allowable catches over time
- MSEs warranted for both data rich and data poor stocks

Improving timeliness and accuracy of fishery data collection through electronic reporting

- Stakeholders identified the need for the implementation of electronic reporting methods to improve the timeliness and accuracy of reports of fishing effort and catch
- Collaborative research projects with both commercial, party/charter (for hire) and recreational (volunteer angler) fishermen should be conducted

Evaluation of Existing Allocations to Fishery Sectors

- The Council has utilized output controls to manage the fisheries under its jurisdiction throughout its history.
- During the initial development of these quota-based management systems, the Council chose to allocate quotas by fishery sector (commercial and recreational) and, in some cases, regionally by state for some species

Evaluation of Existing Allocations to Fishery Sectors

- Initial allocation of quota was generally based on the historical catch by sector or state for the preceding ten year period
- Historical performance of each fishery defined the percentage share of annual quotas by sector and/or area in perpetuity

Evaluation of Existing Allocations to Fishery Sectors

- General inflexibility of fixed quota allocation system noted and recommended that the Council consider alternative methods to allocate annual quotas.
- Major issues of fairness and equity have arisen with respect to access to the fish allocated to sectors and states due to the dynamic nature of fish abundance and distribution since the initial allocations were made.

Evaluation of Existing Allocations to Fishery Sectors

- The Council seeks research which evaluates alternative methods of allocating quotas which are capable of accommodating distributional shifts which are likely to continue to occur
- In addition, the Council seeks research into methods and analyses which allow for optimal allocation of quota share among fishery sectors based on biological, social and economic considerations

Implementation

- Short term (2016-2017) - fund Cooperative Research based on needs identified in Strategic Plan (\$500K)
- Council seeking contract to manage Cooperative Research (RFP still open)
- In addition, form WG through NRCC to work with NEFSC on meeting MAFMC needs through implementation of NEFSC Strategic Plan improvement must involve NMFS assessment personnel (they have primary responsibility for SAs)

Questions?

