Scientific and Statistical Committee Report of September 12-13, 2023 Meeting

to

Mid-Atlantic Fishery Management Council
October 5, 2023
Tab 14

Agenda: September 12-13, Baltimore

- *Offshore Wind*
- *Recreational Measures Setting*
- *Commercial Port Sampling*
- *Scup Discards and Gear Restricted Areas Analysis*
- *Atlantic Mackerel Stock Projections*
- *OFL-CV Process*
- *Ecosystem Work Group*

Offshore Wind Topics (1 of 3)

- Recreational Data Sources
  - New methods for evaluating recreational data
  - Analyses of geolocation of angler-at-sea cell phone lookups for regulation information
  - The approach holds promise in more generally informing the spatial distribution of recreational fishing effort.
  - General discussion about compliance in Recreational Fisheries

Offshore Wind Topics (2 of 3)

- Climate Impacts and Wind Energy Areas on Mid-Atlantic Shellfish
  - Modeling of fleet behavior for commercial clam vessels and potential effects of wind energy areas on behavior, economics, and stock assessments.
  - Displacement from traditional fishing areas, as well as ongoing increases in temperature, are expected to change distributions of Surfclam and Ocean Quahog
  - Following further validation, model may be useful for interpreting historical patterns of LPUE in both fisheries.

Offshore Wind Topics (3 of 3)

- Wind Impacts on Black Sea Bass Fisheries
  - Integrated survey to evaluate how recreational and trap fisheries for black sea bass will be impacted:
    - Monthly fishery surveys
    - Continuous, real-time bioacoustics assets to evaluate the incidence and behaviors of whales, dolphins, porpoises and migratory fishes.
  - Quantifying the rates of change before and after development—various approaches, especially near Ocean City, MD
  - Interactions between attraction to sites and rates of removal, if fishing mortality is higher within wind area

Recreational Measures Setting Process (aka Harvest Control Rules 2.0)

- Council timelines for updating the Harvest Control Rules Framework, which sunsets at the end of 2025, with a new framework/addenda were presented to the SSC. Early engagement of the SSC was appreciated.
- Stability of current regulations will not necessarily create stability of population or ensure reduced volatility of future regulations.
  - Example: undetected overfishing can require substantial changes in regulations between assessment; such lags would offset the initial benefits of stability of regulations.

Recreational Measures Setting Process (aka Harvest Control Rules 2.0)

- Concerns about the nature of the “bins” that define the basis for making catch adjustments and the proposed magnitudes of percentage changes in quotas induced by transitions among “bins.”
  - Simulation analyses are needed to support the magnitudes of such changes
- Interactions with commercial fisheries. The concept of “borrowing” needs clarification (many science and management issues)
- Use of simulation tools and MSE for Summer Flounder will have utility for RMSP.

Commercial Port Sampling

- The SSC received presentations on recent trends in the Northeast port sampling program.
- Reductions in total budget, increasing costs, and the low overall number of samples were alarming. Recent improvements via technological advances were appreciated, but these will not be sufficient to offset losses in funding and costs.
- SSC suggested that a more comprehensive review of sampling strategy would be useful. If the problems in the Northeast US are being experienced elsewhere in the US then a review by the National Academy of Sciences may be warranted.

Scup Discards and Gear Restricted Areas Analysis

- Positive review of Council staff report.
- Closure areas appear to have kept the rate of discard mortality very low (about 2%) since their inception in 2000.
- Not possible to establish these areas as THE causal factor for Scup recovery and currently high overall abundance, but low discard rates are appear to have contributed to the management success.
- What level of discard reduction is acceptable?
- Increases in total discards appear to be driven by increases in abundance rather than increases in discard rate.
- The SSC did not endorse a special study to relate scup discards to predictive environmental drivers at this time, and identified alternatives analyses for consideration.

Atlantic Mackerel
Stock Projection Alternatives

- Reviewed Council and Center Staff recommendations.
- Range of options are logical and will be useful for contrasting options related to rebuilding timelines and Council Risk Policy.

OFL CV Working Group Update

- Complex but transparent process for setting uncertainty (Coefficient of Variation) of Overfishing Limit (OFL) to derive the Acceptable Biological Catch (ABC).
- Ways to improve:
  - Are all 9 factors necessary?
  - Can it be streamlined?
  - How valuable are the interim data updates between setting ABCs?
  - How will new “state space” models affect characterization of uncertainty?
  - Updating when an assessment is delayed?
- SSC will meet between October 2023 and March 2024 to work on improvements.

Ecosystem Working Group

- Understanding effects of environmentally-driven changes in Recruitment on ABCs
- Measuring overall productivity of Northeast Ecosystems
- Understanding why Biological Reference Points change:
  - Changes in biology (growth, maturity, natural mortality)
  - Changes in fishery (selectivity)
  - Changes in Recruitment over time
  - Utility for understanding ecosystem effects

Questions?