



# Atlantic States Marine Fisheries Commission

## NEWS RELEASE

*Sustainable and Cooperative Management of Atlantic Coastal Fisheries*

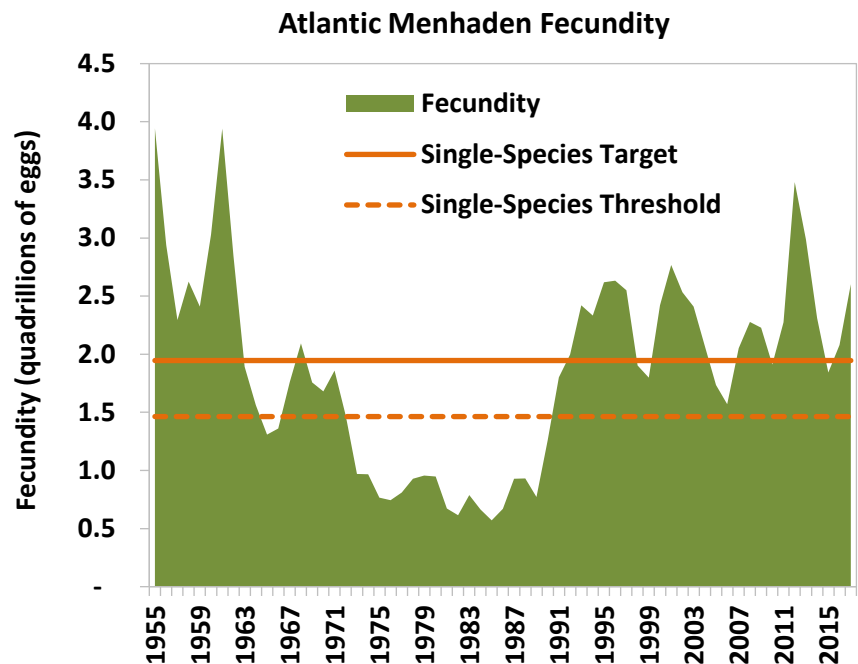
FOR IMMEDIATE RELEASE  
February 7, 2020

PRESS CONTACT: Tina Berger  
703.842.0740

### ASMFC Atlantic Menhaden Board Prepares to Move Forward with Menhaden Ecological Reference Points

Arlington, VA – The Commission’s Atlantic Menhaden Management Board accepted the results of the Single-Species and Ecological Reference Points (ERPs) Assessments and Peer Review Reports for management use. The single-species assessment indicates the stock is not overfished nor experiencing overfishing relative to the single-species reference points established in Amendment 3. However, the ERP assessment indicates that the fishing mortality reference points for menhaden should be lower to account for menhaden’s role as a forage fish. In order to consider moving forward with the use of ERPs for management, the Board tasked the ERP Workgroup with producing several scenarios to explore how different fishing mortality assumptions for the other predator and prey species in the ERP model (i.e., bluefish, weakfish, spiny dogfish, and Atlantic herring) might affect the menhaden ERP fishing mortality target and threshold. The Board will review these analyses and take up the issue of formally adopting ERPs in May at the Commission’s Spring Meeting.

“On behalf of the Menhaden Board, I commend the ERP Workgroup and the dozens of state, federal, academic, and ASMFC scientists for their countless hours of dedication to this formidable task,” stated Board Chair Nichola Meserve. “The Board has long recognized the importance of Atlantic menhaden as a forage fish for a variety of predators as reflected in its setting of conservative harvest limits for menhaden and its emphasis on the development of ERPs as one of its highest priorities for managing the species. The ERP assessment is an impressive body of work and a huge step towards fully realized ecosystem-



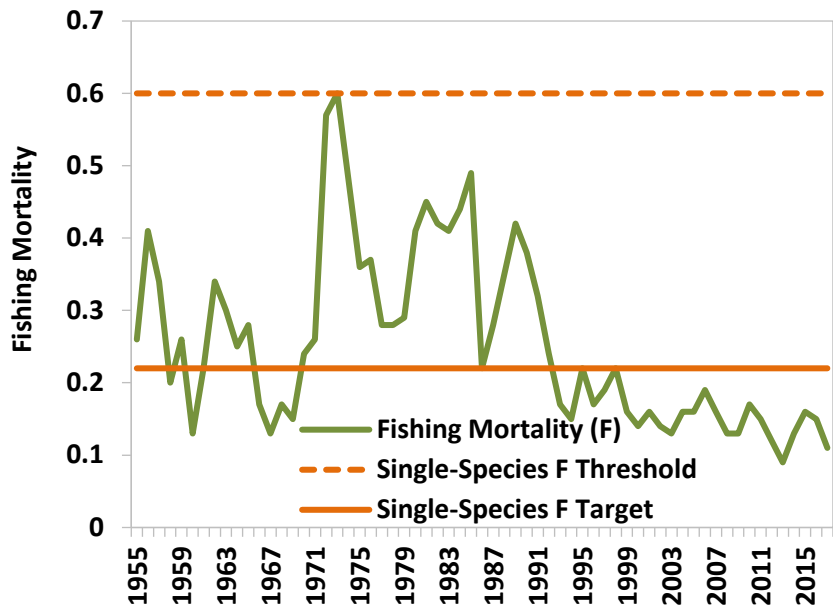
The Atlantic States Marine Fisheries Commission was formed by the 15 Atlantic coastal states in 1942 for the promotion and protection of coastal fishery resources. The Commission serves as a deliberative body of the Atlantic coastal states, coordinating the conservation and management of nearshore fishery resources, including marine, shell and diadromous species.

based fishery management. Although there is still much more work to be done, the ERP assessment provides managers with a critical tool in setting harvest targets for menhaden in an ecosystem-context.”

Under the traditional single-species reference points, Atlantic menhaden are neither overfished nor experiencing overfishing. Population fecundity, a measure of reproductive capacity (i.e., number of mature eggs in the population), has been above the single-species threshold since 1991 and above the single-species target in 20 of the 27 years since then, including 2017. Fishing mortality ( $F$ ) has remained below the

single-species overfishing threshold (0.6) since the mid-1970s, and below the single-species overfishing target (0.22) since the mid-1990s. Fishing mortality was estimated to be 0.11 in 2017. Although the ERP assessment indicates that the  $F$  reference points should be lower than the single-species reference points, it also showed that the conservative total allowable catch set for the 2018 to 2020 fishing seasons is consistent with the ERP  $F$  target in the example management scenario presented to the Board.

**Atlantic Menhaden Fishing Mortality (ages 2-4)**



The ERP assessment, which was endorsed by an independent panel of fisheries scientists in November, uses the Northwest Atlantic Coastal Shelf Model of Intermediate Complexity for Ecosystems (NWACS-MICE) to develop Atlantic menhaden ERPs. The model was chosen from a suite of potential options because it was the only model that could explore both the impacts of predators on menhaden biomass and the effects of menhaden harvest on predator populations, and be updated in a timeframe that is informative for management. NWACS-MICE is an intermediate complexity ecosystem model that focuses on four key predator species (striped bass, bluefish, weakfish, and spiny dogfish) and three key prey species (Atlantic menhaden, Atlantic herring, and bay anchovy). These species were chosen because diet data indicate they are top predators of Atlantic menhaden or are key alternate prey species for those predators, and datasets were available to describe their population dynamics.

The ERP assessment recommends a combination of the single-species model (Beaufort Assessment Model) and the NWACS-MICE model as a tool to evaluate trade-offs between menhaden harvest and predator biomass in a quantitative and transparent way. An important conclusion from the ERP assessment is that the final ERP definitions and values, including the appropriate harvest level for menhaden, depend on the management objectives for the ecosystem (i.e., management objectives for both Atlantic menhaden and its predators). The Board will continue to discuss management objectives and use of ERPs at the Commission’s Spring Meeting in May.

Copies of the Assessment and Peer Review Reports can be found on the Commission’s website on the Atlantic menhaden webpage, <http://www.asmfc.org/species/atlantic-menhaden>, under stock status. A more detailed overview of the stock assessments is available at [http://www.asmfc.org/uploads/file/5e3c4663AtlanticMenhadenAssessmentsOverview\\_Feb2020.pdf](http://www.asmfc.org/uploads/file/5e3c4663AtlanticMenhadenAssessmentsOverview_Feb2020.pdf). The overview aims to aid media and interested stakeholders in better understanding the assessment results. For more information, please contact Max Appelman, Fishery Management Plan Coordinator, at [mappelman@asmfc.org](mailto:mappelman@asmfc.org) or 703.842.0740.