



Atlantic States Marine Fisheries Commission

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MEMORANDUM

TO: American Eel Technical Committee
FROM: American Eel Plan Development Team
DATE: December 1, 2023
SUBJECT: Request for Recommendation on Continuation of Addendum I Mandatory American Eel Harvester Trip Level Catch and Effort Monitoring Program

At its November 28, 2023 meeting, the American Eel Plan Development Team (PDT) discussed the mandatory American eel harvester trip level catch and effort monitoring program required under Addendum I. Specifically, the PDT is considering whether or not to include options in the current draft addendum related to discontinuing this requirement. This memo requests the American Eel TC review the fishery-dependent catch-per-unit-effort (CPUE) harvester level reporting requirement in Addendum I, discuss state data collection programs, and provide a recommendation to the PDT regarding continuing this requirement.

Background

Addendum I required states to report harvest data provided as CPUE (by life stage and gear type). To improve future stock assessments, the Stock Assessment Subcommittee (SAS) recommended that states should be required to report effort by gear type including the number of units of gear fished per person per trip, and soak time or fishing time on an annual basis. Addendum III maintained the mandate to collect harvester CPUE data; however, the purpose of the collection shifted from harvester effort to increasing the accuracy of reporting where states and jurisdictions with a commercial yellow eel fishery were required to implement a trip level reporting system for both dealer and harvester reporting. Cross referencing between dealer and harvester trip level reporting was recommended to ensure accuracy. However, at this point fishery-dependent CPUE data have not been used for stock assessment purposes or to inform management and are not meeting the intended purpose.

The information below provides rationale for removing mandatory state fishery-dependent CPUE harvester level reporting required by the Atlantic States Marine Fisheries Commission (ASMFC) under Addendum I to the Interstate Fishery Management Plan (FMP) for American Eel.

1. Fishery-Dependent CPUE Data Not Used

Fishery-dependent CPUE data from some states was available for use in the 2017 American Eel Stock Assessment Update (October 2017), but the SAS concluded they were not indicative of trends in the stock as a whole and therefore were not used. Additionally, although fishery-dependent CPUE data from seven states met the minimum ten-year time series to be considered for inclusion in the 2023 American Eel Benchmark Stock Assessment (terminal year of 2019), the SAS again decided against inclusion because they were not considered indicative

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of trends in the stock as a whole and differences in baiting practices and bait preference vary geographically which can confound the accuracy of fishery-dependent CPUE data. The SAS noted fishery-dependent CPUE data are almost exclusively composed of positive trips only; trip reports with zero eels caught are rare because most agencies do not require reports of zero catches. Moreover, the stock assessment Peer Review Panel noted that given the variety of fishing gears and fishing areas, the analysis of fishing effort would not be straightforward. Fishery-dependent indices (n=9), as calculated by state partners, were only included as an appendix in the 2023 benchmark stock assessment. The requirement for states to collect harvest data provided as CPUE by life stage and gear type was intended to improve stock assessments; but has yet to be used for that purpose.

2. No Plan to Use Fishery-Dependent CPUE Data

Traditional stock assessments for American eel have not been possible in the past and the 2023 Benchmark Stock Assessment utilized a new index-based model (ITARGET) approach for management. Model inputs for the ITARGET model are catch (commercial landings submitted annually to ACCSP by the states), and the MARSS (Multivariate Auto-Regressive State-Space model) yellow eel fishery-independent index. If use of ITARGET is continued, fishery-dependent CPUE harvester data are not likely to be used in future assessments. The Peer Review Panel noted fishing effort data is not critical for subsequent assessment analysis. The Board accepted the 2023 Benchmark Stock Assessment and Peer Review Report for management use at their August 2023 business meeting and a motion to form a PDT to draft an addendum using ITARGET to recommend various coastwide catch caps for yellow eels. If the new yellow eel addendum is adopted using ITARGET for management, fishery-dependent CPUE data will continue to not be used to inform management decisions.

3. Voluntary Data Collection

Given fishery-dependent CPUE data collection has not met its intended purpose and there are no plans for the data to be incorporated into the management framework, the collection of this data should be made optional. This would allow several states that were collecting harvester CPUE data prior to the 2007 mandate to continue collection of this data if they choose and continue to allow this data to be available for re-evaluation.

Questions for TC Discussion

Below are several questions the TC should focus on addressing:

States with fishery-dependent CPUE data:

- If harvester CPUE data were not required, would the state keep collecting them?
- Does the state use this data for their own purposes outside of the ASMFC stock assessment?

All states:

- Are there concerns about removing the requirement?
- Would the TC recommend the Board consider removing the harvester reporting requirement?