Atlantic States Marine Fisheries Commission

1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201
703.842.0740 • asmfc.org

Sturgeon Benchmark Assessment Planning Call

July 31, 2025

TC Members: A. Higgs (Chair, NY), I. Braun-Ricks (PRFC), C. Davis (VMRC), D. Dyson (NJ), S. Ebbin (UConn), C. Fede (GA), D. Fox (DESU), D. Frechette (ME), C. Godwin (NC), J. Henne (USFWS), A. Horne (MD), D. Kazyak (USGS), L. Lyon (DC), M. Mangold (USFWS), I. Park (DE), B. Post (SC), E. Schneider (RI), D. Secor (UMD CBL), J. Sheppard (MA)

Public: A. Biddle (SC), J. Katz (NOAA), L. Methratta (NOAA), C. Orphanides (NOAA), R. Pendleton (NY), A. Silva (NOAA), S. White (USGS)

Staff: K. Drew (Science), J. Boyle (ISFMP)

Action Items for TC/SAS

- Provide feedback on the NOAA Draft Monitoring Standards to Jordan Katz (jordan.katz@noaa.gov) by this fall
- Contact K. Drew (kdrew@asmfc.org) if you have samples of known age, known time-at-large, or chemically marked fish that you would like to contribute to the initial exchange, and/or if you are an experienced reader who would like to participate in the exchange and can commit to a short turnaround in reading ages this fall

NOAA Draft Monitoring Standards

J. Katz presented an overview of NOAA's draft monitoring standards which are currently in development. While BOEM requires monitoring to assess the impacts of wind energy projects, there are no specific standards that monitoring efforts must meet, and as a result, the data collected can vary from project to project. These standards are intended to provide a consistent set of metrics and monitoring standards that can be applied across projects to ensure the right data are collected and that data can be synthesized across projects. These standards are specifically for fixed foundation wind energy projects in the Southern New England/Mid-Atlantic Bight region. NOAA does not have the authority to make these standards requirements for wind energy projects, but BOEM does. NOAA is undertaking the development of these standards because they address impacts on fish and protected species that NOAA is responsible for. NOAA will provide the standards to BOEM for BOEM to consider implementing as requirements. NOAA reached out to ASMFC to engage the Sturgeon TC to review these standards and provide feedback to ensure that the standards are appropriate for sturgeon (a protected fish species) and will address management needs.

For sturgeon, the Impact Producing Factors the standards address include biological and physical factors like noise, hydrodynamics, artificial reef effects, electromagnetic fields, movement/behavior changes, and vessel strike, entanglement, and incidental capture, as well as socioeconomic impacts such as structure presence, traffic, and port utilization.

The draft standards have not been released publicly yet, but a draft document was distributed to the TC ahead of the call. NOAA is asking for feedback to be submitted by Fall 2025 (a specific deadline will be provided after the call, but no earlier than October 2025). In particular, NOAA would like know:

1. Do the standards address the right questions for sturgeon?
2. Will the information collected through these standards meet management needs for sturgeon?

Overview of 2017 Benchmark Assessment Methods

K. Drew reviewed the methods used in the 2017 benchmark assessment and the results of the 2024 update. For the benchmark and update, stock status was determined from the ARIMA analysis and the tagging model in conjunction with the stochastic EPR reference points. Additional analyses included Mann-Kendall trend analysis, power analysis, cluster analysis, the Conn method to combine indices, dynamic factor analysis (DFA), population viability analysis (PVA), and stochastic stock reduction analysis (SSRA/DBSRA). While some analyses like the Mann-Kendall trend analysis, power analysis, and cluster analysis provided additional information about trends and information content in the data, the DFA, PVA, and SSRA/DBSRA analyses performed poorly and did not provide useful information. The 2017 benchmark and 2024 update were able to evaluate stock status with regards to total mortality, but could not provide estimates of absolute abundance/biomass or population size reference points that could inform rebuilding targets.

Draft 2028 Benchmark Timeline

Atlantic sturgeon is scheduled to be reviewed through the November 2028 SARC; although there is some uncertainty about the SARC schedule in the near term, but assessments further out are still going on as planned, and ASMFC can always change to an external review if it becomes necessary.

Major short-term milestones for the assessment include having the SAS and Terms of Reference (TORs) approved at Annual Meeting 2025 and beginning the data gathering process in January 2026, with the deadline for 2025 data submission being June 1, 2026. Staff will send a memo to the Administrative Commissioners to solicit nominations for the SAS later in August. Draft TORs will be circulated to the TC after that. The full schedule is shown in Table 1.

TC members discussed the possibility of hiring an external expert, such as Bill Pine (formerly of University of the Florida, now a consultant) or Nathan Hostetter (NCSU) to develop the tagging model or another model for the assessment. If theTC can develop a proposal with a budget, this could be presented to Commission leadership to see if funding is available. Another option would be involving some USGS modelers in the assessment to increase the analytical capacity of the SAS.

New Analyses for the 2028 Benchmark

K. Drew reported on the Sturgeon Ageing WG's latest call, where the WG discussed issues with sturgeon ageing raised at the 2024 Southern Divisions AFS meeting, including low precision for fin spines and fin rays, low accuracy for known-age samples and known time-at-large fish. The WG recommended conducting an exchange focusing on known-age, known time-at-large, and chemically marked fish where possible to evaluate precision and accuracy and make recommendations on the use of hard parts ages for Atlantic sturgeon, including the use of historical ages, for the benchmark to consider. They also recommend that alternative methods of evaluating age and growth such as tagging data be considered during the benchmark and compared to existing literature based on hard part ages, and to conduct simulation studies to evaluate the effects of bias and imprecision on reference points. D. Secor had concerns about completely dropping hard part ages, given their long history of use in the literature, and would want to see a strong justification for that from the exchange. The Ageing WG is looking for additional samples of known age, known time-at-large, and/or chemically marked fish to include in the exchange. Any TC members who would like to contribute samples, or experienced agers who would like

to participate in the exchange and could commit to a short turnaround on ageing the samples this fall should reach out to K. Drew to get involved.

K. Drew noted that high priority analyses for the benchmark assessment would be developing absolute estimates of abundance and/or biomass, as well as abundance or biomass reference points and recovery targets. This would be in addition to refining the tagging model and estimates of total mortality and total mortality reference points. The TC did not have any additional recommendations for methods or datasets at this point.

New TC Chair

A. Higgs (NY) completed her term as TC Chair with the conclusion of this meeting. I. Park (DE) will be the TC Chair going forward. Staff is seeking nominations or volunteers for the TC Vice-Chair position.

Table 1. 2028 Atlantic Sturgeon Benchmark Assessment Timeline

	Milestone	Date
✓	TC Planning Call	July 31, 2025
	SAS and TORs approved by Board	Week of Oct. 27, 2025
	Reach out to data providers with request & timeline	January 2026
	2025 Data submission deadline	June 1, 2026
	Data Workshop	July/Aug 2026
	Methods Workshop	Jan./Feb. 2027
	2026 Data submission deadline	June 1, 2027
	Assessment Workshop	Aug/Sep 2027
	Report components due to Staff	Mid-May 2028
	Draft report to SAS	Mid-June 2028
	SAS call/webinar to approve report	Mid-July 2028
	Draft report to TC	Mid-August 2028
	TC call/webinar to approve report	Mid-September 2028
	Stock Assessment Report due to Review Panel	Mid-October 2028
	Peer Review Workshop (SARC)	**Mid-November 2028**
	Assessment Presented to Board	February 2029