Atlantic States Marine Fisheries Commission

ADDENDUM VI TO THE INTERSTATE FISHERY MANAGEMENT PLAN FOR TAUTOG



ASMFC Vision Statement:

Healthy, self-sustaining populations for all Atlantic coast fish species or successful restoration well in progress by the year 2015

1.0 Introduction

This Addendum sets the fishing mortality (F) rebuilding target (F_{target}) at 0.15. Based on the coastwide F from the 2011 Assessment Update, a 56% reduction in coastwide exploitation is necessary to achieve F_{target} .

2.0 Management Program

2.1 Statement of the Problem

The 2011 tautog stock assessment update estimated that the tautog stock is overfished with overfishing occurring. Spawning stock biomass (SSB) has remained at low levels for the last decade. A reduction in the target F is necessary to rebuild the stock.

2.2 Background

Tautog harvest is controlled through state regulations that are designed to restrain F at or below the F_{target} . States must implement regulations to achieve the F_{target} but are allowed to select seasons, bag limits, quotas, etc., to achieve the target as best meets their individual needs. An SSB_{target} was established in Addendum IV as a metric to evaluate the tautog population and the effectiveness of management measures.

Ideally, constraining harvest at or below the F_{target} would allow the depleted tautog stock to rebuild above the SSB_{target} . However, tautog has a unique life history that makes it vulnerable to overfishing and slow to rebuild. The species site fidelity (aggregation around structure and return to the same spawning areas) make them vulnerable to fishing pressure. Their slow growth rate and late maturity results in slow rebuilding.

The 2005 assessment and 2006 update found that even though overfishing was not occurring based on the F_{target} at the time (= 40% SSB or 0.29), stock biomass was flat¹, and had not responded to management measures. The Tautog Technical Committee (TC) reviewed the updated stock assessment and recommended reducing the F_{target} = 0.15 or lower to rebuild the stock. In response to the assessment, TC recommendations, and public input, the Board implemented Addenda IV & V, which reduced the F_{target} to 0.20. All states implemented regulations to achieve F = 0.20 by January 2008.

Five years later, the 2011 stock assessment update found that the stock continues to be overfished (SSB₂₀₀₉ = 10,553 mt versus SSB_{target} = 26,800 mt), with overfishing occurring (F = 0.38 versus F_{target} = 0.20) (Figures 1 & 2).

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¹ There was no biomass target prior to Addendum IV, which is necessary to determination of overfished or not overfished status.

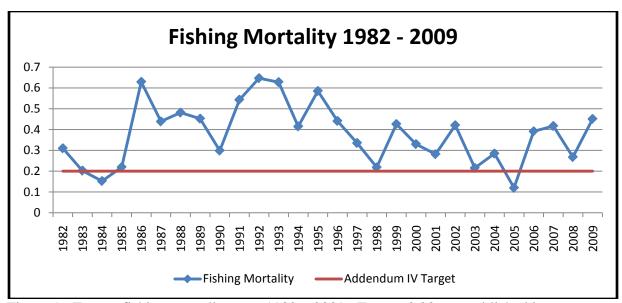


Figure 1. Tautog fishing mortality rate, 1982 - 2009. $F_{target} = 0.20$ as established in Addendum IV (2007). Source: 2011 Tautog Assessment Update.

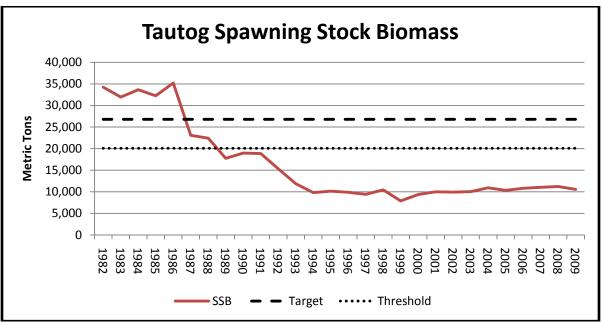


Figure 2. Tautog spawning stock biomass, 1982 - 2009. $SSB_{target} = 26,800 \text{ MT}$, $SSB_{threshold} = 20,100 \text{ MT}$. Source: 2011 Tautog Assessment Update.

SSB projections from the 2011 assessment update estimate that the stock will not increase under the current F rate (0.38), does not reach the threshold by 2025 under the Addendum IV F_{target} (0.20), and exceeds the threshold around 2020 under F = 0.15 (Figure 3). SSB is not projected to exceed the target by 2025 under any of these rates.

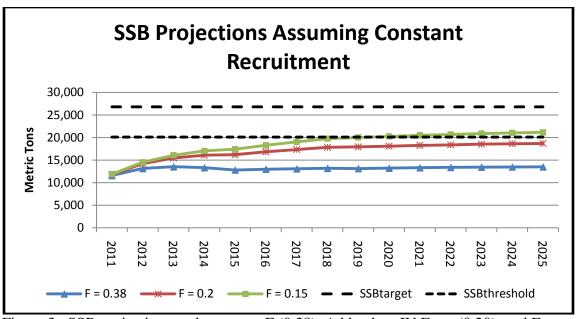


Figure 3. SSB projections under current F (0.38), Addendum IV F_{target} (0.20), and F = 0.15. Projections were updated to include the most recent years' recruitment values. $SSB_{target} = 26,800$ MT, $SSB_{threshold} = 20,100$ MT. Source: 2011 Tautog Stock Assessment Update.

Table 1. SSB projections at various fishing mortality rates based on constant recruitment.

	Fishing Mortality		
	0.38	0.2	0.15
2011	11578	11808	11873
2012	13148	14202	14521
2013	13528	15450	16067
2014	13330	16102	17042
2015	12810	16205	17424
2016	12990	16833	18285
2017	13077	17351	19041
2018	13180	17833	19756
2019	13128	17937	20009
2020	13217	18090	20254
2021	13315	18253	20489
2022	13386	18381	20674
2023	13448	18526	20883
2024	13485	18628	21038
2025	13507	18700	21152

The TC reviewed the assessment update and commented that the flat biomass and SSB trends are an indication that Addenda IV & V measures have been ineffective in rebuilding the stock. It recommended reducing the F_{target} to 0.15 or lower to rebuild the stock in a reasonable amount of time.

3.0 Management Program

3.1 Fishing Mortality Reference Point

This Addendum establishes $F_{target} = 0.15$ in order to initiate stock rebuilding and achieve SSB_{target} . This level of F is projected to rebuild SSB to 17,424 MT by 2015, and exceed the threshold around 2020 (Figure 3, Table 1).

States may implement regulations to reduce F in their recreational or commercial fisheries to achieve F_{target} according to the schedule outlined in Section 4 of this Addendum. The states are required to implement management programs that achieve a 56% reduction in exploitation relative to the 2011 assessment update. States may implement more restrictive regulations than are necessary to achieve F_{target} at any time.

The results of the 2011 Assessment Update are to be used as a benchmark for determining fishing mortality reductions. If a state, or group of states, can provide evidence, at the same level of precision as the most recent assessment, of F below those indicated in the assessment, then this evidence can be used to determine the reduction needed to achieve F_{target} . Any state utilizing this option must monitor its fisheries to assure that F_{target} is achieved and maintained.

Compatible regulations between adjacent states are desirable to prevent the shift of fishing effort to areas with more liberal regulations, or to an area with an open season, if seasonal closures are implemented.

All state proposals must be reviewed by the TC and provided to the Board for final approval. States that submit reduction proposals based on a state/regional assessment are encouraged to also submit a second proposal using on the coastwide assessment F. States are required to implement regulations to achieve F = 0.15 by January 1, 2012, and the Board will consider these proposals the week of August 1, 2011. A state that only submits a proposal based on a state/regional assessment may risk missing the compliance deadline if the Board does not approve their state/regional assessment proposal.

3.2 State Possession Limit Restrictions

Concern has been raised that the absence of tautog regulations in federal waters allows for loopholes that potentially contribute to overfishing. Possession restrictions have been used successfully to control federal waters fisheries for other species. The majority of state regulations prohibit *possession* but there are a few exceptions where only *landing* is restricted. While landing restrictions are enforceable, prohibiting possession allows for a larger area where marine enforcement can intercept vessels carrying tautog in amounts or sizes that violate state regulations.

This Addendum requires that all state tautog regulations prohibit *possession*.

4.0 Compliance Schedule

States must implement Addendum VI according to the following schedule to be in compliance with the Tautog FMP:

July 15: States submit reduction proposals to the TC (through ASMFC Staff) for review. States that submit reduction proposals based on a state/regional assessment are encouraged to also submit a second proposal using on the coastwide assessment F. A state that only submits a proposal based on a state/regional assessment may risk missing the compliance deadline if the Board does not approve their state/regional assessment proposal.

ASMFC Summer Meeting Week (August 1, 2011): Management Board reviews proposals and TC recommendations and considers final approval of state proposals.

January 1, 2012: States implement regulations to meet compliance requirements contained in this Addendum.