

**Framework Adjustment 48 to the Northeast Multispecies Fishery Management Plan  
Environmental Assessment  
Supplemental Information  
April 2013**

The following supplemental information is added to the Framework Adjustment 48 Environmental Assessment (EA) prepared by the New England Fishery Management Council (Council) and submitted to the National Marine Fisheries Service on April 9, 2013. This supplemental information sheet resulted from the need to further inform decision makers of the population status of Atlantic sturgeon, a species listed under the Endangered Species Act (ESA), resulting from the completion of new population estimates, and to respond to public comments received on the draft EA. This new information was not available to the Council or NMFS at the time the original draft of the EA was completed. The additional information and analysis in this document was considered in conjunction with the information and analysis contained in the Framework 48 EA in making the final determination that this action will not have a significant impact on the quality of the human environment. This material is incorporated as a separate document to distinguish this new information from the information that was available to the Council when it adopted final management measures for this action.

1. For Section 6.4.2.5, add as the final paragraph the following text:

Since the ESA listing of Atlantic sturgeon, the NEFSC has completed new population estimates using data from the Northeast Area Monitoring and Assessment (NEAMAP) survey (Kocik et al. 2013). Atlantic sturgeon are frequently sampled during the NEAMAP survey. NEAMAP has been conducting trawl surveys from Cape Cod, Massachusetts to Cape Hatteras, North Carolina in nearshore waters at depths to 18.3 meters (60 feet) during the fall since 2007 and depths up to 36.6 meters (120 feet) during the spring since 2008 using a spatially stratified random design with a total of 35 strata and 150 stations per survey. The information from this survey can be directly used to calculate minimum swept area population estimates during the fall, which range from 6,980 to 42,160 with coefficients of variation between 0.02 and 0.57 and during the spring, which range from 25,540 to 52,990 with coefficients of variation between 0.27 and 0.65. These are considered minimum estimates because the calculation makes the unlikely assumption that the gear will capture 100% of the sturgeon in the water column along the tow path. Efficiencies less than 100% will result in estimates greater than the minimum. The true efficiency depends on many things including the availability of the species to the survey and the behavior of the species with respect to the gear. True efficiencies much less than 100% are common for most species. The NEFSC's analysis also calculated estimates based on an assumption of 50% efficiency, which reasonably accounts for the robust, yet not complete sampling of the Atlantic sturgeon, oceanic temporal and spatial ranges, and the documented high rates of encounter with NEAMAP survey gear and Atlantic sturgeon. For this analysis, NMFS has determined that the best available scientific information for the status of Atlantic sturgeon at this time are the population estimates derived from NEAMAP swept area biomass (Kocik et al. 2013) because the estimates are derived directly from empirical data with few assumptions. NMFS has determined that using the median value of the 50% efficiency as the best estimate of the Atlantic sturgeon ocean population is most appropriate at this time. This results in a total population size estimate

of 67,776 fish, which is considerably higher than the estimates that were available at the time of listing. This estimate is the best available estimate of Atlantic sturgeon abundance at the time of this analysis. The ASMFC has begun work on a benchmark assessment for Atlantic sturgeon to be completed in 2014, which would be expected to provide an updated population estimate and stock status. The ASMFC is currently collecting public submissions of data for use in the assessment: [http://www.asmfc.org/press\\_releases/2013/pr20AtlSturgeonStockAssmtPrep.pdf](http://www.asmfc.org/press_releases/2013/pr20AtlSturgeonStockAssmtPrep.pdf).

2. In Section 6.4.4, replace the text in the Atlantic Sturgeon section with the following text:

Atlantic sturgeon are known to be captured in sink gillnet, drift gillnet, and otter trawl gear (Stein et al. 2004a, ASMFC TC 2007). Of these gear types, sink gillnet gear poses the greatest known risk of mortality for bycaught sturgeon (ASMFC TC 2007). Sturgeon deaths were rarely reported in the otter trawl observer dataset (ASMFC TC 2007). However, the level of mortality after release from the gear is unknown (Stein et al. 2004a). In a review of the Northeast Fishery Observer Program (NEFOP) database for the years 2001-2006, observed bycatch of Atlantic sturgeon was used to calculate bycatch rates that were then applied to commercial fishing effort to estimate overall bycatch of Atlantic sturgeon in commercial fisheries. This review indicated sturgeon bycatch occurred in statistical areas abutting the coast from Massachusetts (statistical area 514) to North Carolina (statistical area 635) (ASMFC TC 2007). Based on the available data, participants in an ASMFC bycatch workshop concluded that sturgeon encounters tended to occur in waters less than 50 m throughout the year, although seasonal patterns exist (ASMFC TC 2007). The ASMFC analysis determined that an average of 650 Atlantic sturgeon mortalities occurred per year (during the 2001 to 2006 timeframe) in sink gillnet fisheries. Stein et al. (2004a), based on a review of the NMFS Observer Database from 1989-2000, found clinal variation in the bycatch rate of sturgeon in sink gillnet gear with lowest rates occurring off of Maine and highest rates off of North Carolina for all months of the year.

The NEFSC prepared an estimate of the number of encounters of Atlantic sturgeon in fisheries authorized by Northeast FMPs. The analysis estimates that from 2006 through 2010, there were averages of 1,239 and 1,342 encounters per year in observed gillnet and trawl fisheries, respectively, with an average of 2,581 encounters combined annually. Mortality rates in gillnet gear were approximately 20%. Mortality rates in otter trawl gear observed are generally lower, at approximately 5%. The highest incidence of sturgeon bycatch in sink gillnets is associated with depths of <40 meters, larger mesh sizes, and the months April-May. Sturgeon bycatch in ocean fisheries is actually documented in all four seasons with higher numbers of interactions in November and December in addition to April and May. Mortality is also correlated to higher water temperatures, the use of tie-downs, and increased soak times (>24 hours). Most observed sturgeon deaths occur in sink gillnet fisheries. For otter trawl fisheries, Atlantic sturgeon bycatch incidence is highest in depths <30 meters and in the month of June.

The NE multispecies fishery is prosecuted with both bottom otter trawl and sink gillnet gear. These data support the conclusion from the earlier bycatch estimates that the NE multispecies fishery may interact with Atlantic sturgeon. However, the more recent, larger population estimate derived from NEAMAP data (Kocik et al. 2013) suggests that the level of interactions with the NE multispecies fishery is not likely to have a significant adverse impact on the overall Atlantic sturgeon population, or any of the DPSs. On February 6, 2012, NMFS issued two final

rules (77 FR 5880-5912; 77 FR 5914-5982) listing five DPS's of Atlantic sturgeon as threatened or endangered. Four DPSs (New York Bight, Chesapeake Bay, Carolina and South Atlantic) are listed as endangered and one DPS (Gulf of Maine) is listed as threatened. The effective date of the listing is April 6, 2012. Formal consultation under Section 7 of the ESA has been reinitiated and is ongoing for the NE multispecies fishery. The previous October 2010 Biological Opinion (BO) for this fishery concluded that the actions considered would not jeopardize the continued existence of any listed species. This BO will be updated to describe any impacts of the NE multispecies fishery on Atlantic sturgeon DPSs and define any measures needed to reduce those impacts, if necessary. Although interactions between Atlantic sturgeon and the groundfish fishery are likely to occur during the reinitiation period, NMFS determined in an August 28, 2012 memorandum that the amount of interactions is not likely to cause an appreciable reduction in survival and recovery of any of the five DPSs and would not violate ESA sections 7(a)(2) and 7(d).

3. For Section 7.6.4, replace the final paragraph in its entirety with the following text:

In general, the adoption of all of these measures will benefit groundfish stocks because collectively they make it more likely that mortality targets are reasonable and will not be exceeded. The measures that constitute the Proposed Action (if based on the Preferred Alternatives) are designed to achieve the rebuilding objectives for the Northeast Multispecies fishery. The most important biological impact of the proposed measures is that they would control fishing mortality on Northeast Multispecies stocks in order to prevent (or end) overfishing and rebuild overfished stocks. The adoption of additional sub-ACLs for GB yellowtail flounder and SNE/MAB windowpane flounder are the measures most likely to have positive biological impacts. These sub-ACLs, and the AMs that will be adopted as a result, will impose tighter controls on fishing mortality for these stocks. The preferred alternative changes to AMs would also contribute to achieving these objectives by providing better control of fishery catches. For example, the preferred alternative would modify recreational AMs so that measures can be changed in advance of an overage, making it less likely that an overage will occur. The measures are not likely to impact non-groundfish stocks, protected species, or habitat to any great extent when compared to the No Action alternative, since these proposed specifications differ only slightly from the No Action alternative. The measures are likely to have negligible impacts on communities. The revisions to the AMs may cause short-term economic losses if they are triggered but over the long-term the industry should benefit from keeping catches under target levels. Changes to the administration of the scallop fishery sub-ACLs, the establishment of SNE/MA windowpane flounder sub-ACLs, the revisions to the AMs would be expected to benefit the groundfish fishery in the long-term by making more likely that mortality targets will be achieved. The effects of revisions to the at sea monitoring program have the capacity to cause negative impacts to the fishery, however, some benefits would also occur, reducing negative impacts and potentially providing some long-term benefits overall. Sector exemption requests can provide benefits to the fishery, particularly if haddock catch can increase and provide additional revenue. Although the benefits and costs are highly uncertain, there is the potential for negative impacts on future productivity and interactions with protected species from fishing the closed areas, depending on what specific exemptions are requested and subsequently proposed in future sector operations plan rule(s).

4. The following text is applicable to the reasoning behind the response to question 5 of the FONSI in Section 8.2.2:

The Preferred Alternatives cannot be reasonably expected to adversely affect endangered or threatened species or critical habitat for these species. While there may be some adverse impacts by maintaining fishing effort through the proposed action, that impact is not expected to be significant. As discussed in Section 7.3, these species are expected to have very minimal impacts from the measures that are proposed. In addition, measures in place to protect endangered or threatened species, marine mammals, and critical habitat for these species would remain in place.

Furthermore, for the reasons described in Section 7.3, NMFS has determined that the continued operation of the NE Multispecies FMP is not likely to jeopardize the continued existence of any listed species including any of the five Atlantic sturgeon DPS's. The NE multispecies fishery may interact with Atlantic sturgeon. However, the more recent, larger population estimate derived from NEAMAP data support (Kocik et al. 2013) the conclusion that the level of interactions with the NE multispecies fishery is not likely to have a significant adverse impact on the overall Atlantic sturgeon population, or any of the DPSs. Since the decision to list the Atlantic sturgeon DPSs as endangered and threatened under the ESA, the ESA Section 7 consultation for the NE multispecies fishery has been reinitiated and is ongoing. It is expected that an updated Biological Opinion will be issued during the 2013 NE multispecies fishing year that will contain additional evaluation to describe any impacts of the fisheries on Atlantic sturgeon and other listed species and define any measures needed to mitigate those impacts, if necessary.

5. For Section 8.3, replace the text in its entirety with the following text:

Section 7 of the Endangered Species Act requires federal agencies conducting, authorizing or funding activities that affect threatened or endangered species to ensure that those effects do not jeopardize the continued existence of listed species. On February 6, 2012, NMFS published final rules listing the GOM DPS of Atlantic sturgeon as threatened, and listing the New York Bight, Chesapeake Bay, Carolina, and South Atlantic DPSs of Atlantic sturgeon as endangered, effective April 6, 2012. Preliminary analysis indicates that multiple Atlantic sturgeon DPSs may be affected by the continued operation of the NE multispecies fishery. Formal consultation under Section 7 of the ESA has been reinitiated and is ongoing for the NE multispecies fishery. The previous BO for the NE multispecies fishery completed in October 2010 concluded that the actions considered would not jeopardize the continued existence of any listed species. This BO will be updated and additional evaluation will be included to describe any impacts of the NE multispecies fishery on Atlantic sturgeon DPSs and define any measures needed to mitigate those impacts, if necessary. It is anticipated that any measures, terms and conditions included in an updated BO will further reduce impacts to the species. While it is likely that there will be interactions between Atlantic sturgeon and gear used in the groundfish fisheries, the amount of interactions attributable to this fishery that will occur between now and the time a final BO will be published is not likely to cause an appreciable reduction in survival and recovery of any of the five DPSs. NMFS determined in an August 28, 2012, memorandum that allowing the NE multispecies fishery to continue during the reinitiation period will not violate ESA sections

7(a)(2) and 7(d). This determination may be revised if an updated Biological Opinion is received.

Thus, NMFS has concluded, at this writing, that the proposed framework adjustment and the prosecution of the multispecies fishery is not likely to jeopardize any ESA-listed species or alter or modify any critical habitat, based on the discussion of impacts in this document and on the assessment of impacts in the Amendment 16 Environmental Impact Statement. NMFS does acknowledge that endangered and threatened species may be affected by the measures proposed, but impacts should be minimal especially when compared to the prosecution of the fishery prior to implementation of Amendment 16. For further information on the potential impacts of the fishery and the proposed management action on listed species, see Section 7.3 of this document.

6. Add the following citation to the list of literature cited in Section 9.2:

Kocik J, Lipsky C, Miller T, Rago P, Shepherd G. 2013. An Atlantic Sturgeon Population Index for ESA Management Analysis. US Dept Commer, Northeast Fish Sci Cent Ref Doc. 13-06; 36 p. Available from: National Marine Fisheries Service, 166 Water Street, Woods Hole, MA 02543-1026, or online at <http://www.nefsc.noaa.gov/nefsc/publications/>