



New England Fishery Management Council

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MEMORANDUM

DATE: January 5, 2016
TO: Atlantic Herring Committee
FROM: Atlantic Herring Plan Development Team
SUBJECT: Georges Bank haddock accountability measure

At the December 2015 Council meeting, the Council added the following priority for 2016 related to Atlantic herring:

“initiate an action to amend the accountability measures in the Georges Bank haddock catch cap in the herring fishery.”

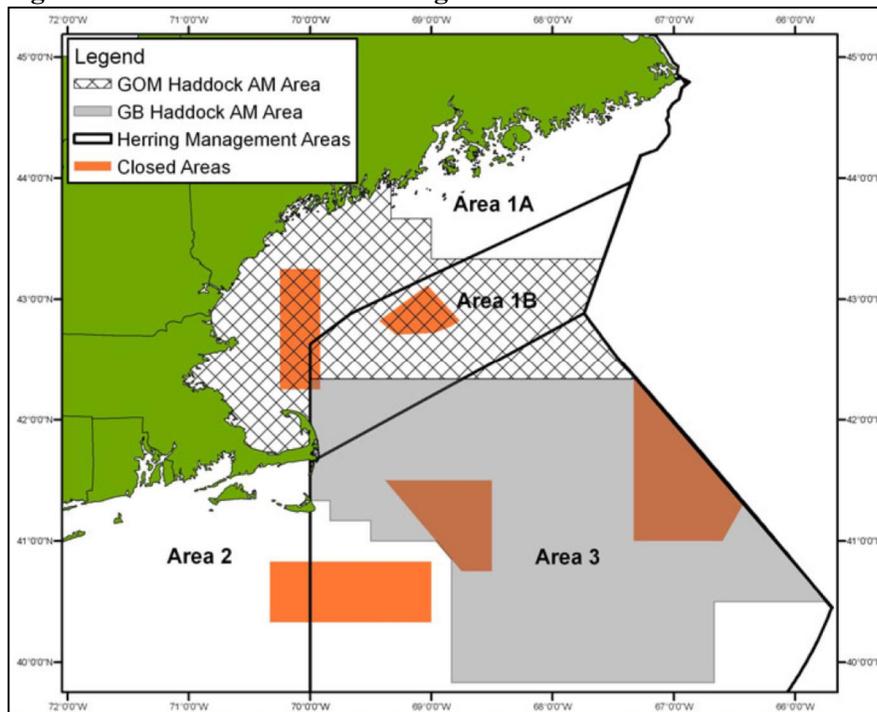
This memo provides the Herring Committee with background information about the Georges Bank (GB) haddock catch cap in the Atlantic herring fishery and the associated Accountability Measure (AM) should the cap be reached. This memo was compiled by the Herring Plan Development Team (PDT) subsequent to its meeting on December 10, 2015.

Description of the GB haddock catch cap and AM

In September 2011, through Framework 46 to the Northeast Multispecies Fishery Management Plan, the Gulf of Maine (GOM) haddock and Georges Bank (GB) haddock catch caps for the Atlantic herring midwater trawl fishery were increased to 1% of the GB haddock Acceptable Biological Catch (ABC), given the abundance of haddock and the risk of constraining herring catch despite the fact that overall haddock catches had been far below the ABC for that stock.

In addition, Framework 46 modified the method for estimating haddock catch in the herring fishery and the relevant accountability measures (AMs) such that, upon reaching the cap, the midwater trawl herring fleet may not catch or land herring in excess of the incidental catch limit (2,000 lb) in or from the appropriate haddock stock area (Figure 1). If so, the total catch of haddock by herring midwater trawl vessels exceeds the herring midwater trawl fishery GOM or GB haddock sub-ACLs for a FY, the respective sub-Annual Catch Limit (sub-ACL) for the following fishing year would be reduced by the amount of the overage. Prior to Framework 46, there was one haddock catch cap for the GOM and GB areas combined. See the Framework 46 final rule for more information (*Federal Register* 76(179), p. 56985-57000).

Figure 1 - Gulf of Maine and Georges Bank Haddock AM Areas



Source: GARFO fishing industry homepage:
<http://www.greateratlantic.fisheries.noaa.gov/nero/fishermen/charts/her4.html>

Method for estimating haddock catch

Starting in 2011, data used to estimate/monitor the catch caps include observer data, vessel trip reports, and dealer reports. The following explanation of how catch is estimated relative to the GB haddock catch cap is from the National Marine Fisheries Service (NMFS/GARFO) quota monitoring webpage: http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports_frame.htm.

The method for estimating haddock catch by midwater trawl herring vessels matches the method used for estimating catch and discards in the multispecies fisheries. This method replaces estimated pounds with observed pounds where available. The cumulative method uses catch from the entire year to estimate a haddock catch ratio for each herring stock area. The haddock bycatch ratio is calculated for a stock area by dividing observed haddock catch for the year by the observed kept-all (total amount of all species) for the year. Haddock catch on unobserved trips is then estimated by multiplying the catch ratio by the kept all from all unobserved herring midwater trawl vessels fishing within that haddock stock area.

GB haddock catch in the Atlantic herring fishery

2015 GB haddock catch

For groundfish fishing year 2015 (May 1, 2015 ó April 30, 2016), the GB haddock catch cap is 227 mt. Based on data reported through August 12, 2015, almost 8% of the GB catch cap had been used by the midwater trawl fleet. Subsequently, additional observer data became available and was included in catch estimate updates, such that by the end of October, 103.76% of the cap had been used (Table 1, Table 2).

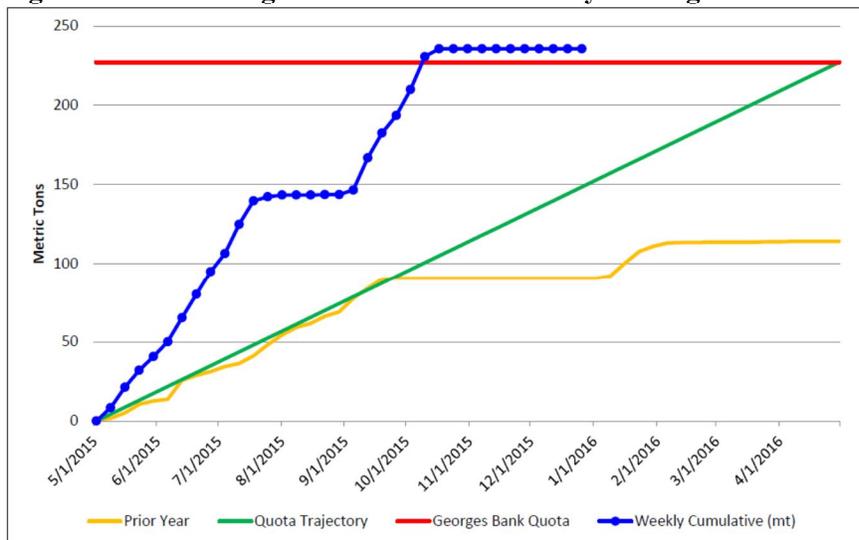
On October 22, 2015, NMFS/GARFO closed the directed herring fishery in the Herring GB Haddock AM Area after it determined that the GB Haddock Catch Cap had been harvested. Vessels were then restricted to the 2,000 lb possession limit in the AM Area for the remainder of the groundfish fishing year (through April 31, 2016; *Federal Register* 80(204), p. 63929-63930). This AM limits the midwater trawl fishery in most of Herring Management Area 3 to 2,000 lb of herring per trip/day until May 1, 2016, because Area 3 falls within the GB Haddock AM Area. Herring vessels issued an All Areas or Areas 2/3 Limited Access Herring Permit may land haddock from the Herring GB Haddock AM Area, provided they have a Northeast Multispecies permit and are on a declared Northeast Multispecies Day-at-Sea. However, this provision is not applicable to the majority of the directed herring fishery.

Table 1 – 2015 Georges Bank haddock catch by herring midwater trawl vessels

Month	Monthly estimated haddock catch (mt)	Cumulative estimated haddock catch (mt)	Cumulative percent of quota (227 mt)
May	43.09	43.09	18.98%
June	54.51	97.59	42.99%
July	45.70	143.29	63.12%
August	0.25	143.54	63.23%
September	66.32	209.87	92.45%
October	25.68	235.54	103.76%
November	0.00	235.54	103.76%
December	0.00	235.54	103.76%

Source: GARFO quota monitoring website:
http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports_frame.htm
 Data reported through December 27, 2015.

Figure 2 - 2015 Georges Bank haddock catch by herring midwater trawl vessels



Source: GARFO quota monitoring website (updated through 12/27/2015):
http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports_frame.htm

2011-2014 GB haddock catch

In other years since the haddock catch caps were implemented (2011-2014), the GB haddock catch cap was exceeded once, in 2013 by 5% (Table 2). As a result, the 2014 catch cap was adjusted downward from 179 mt to 162 mt to account for the overage.

Table 2 - Haddock catch by midwater trawl vessels subject to haddock catch cap, 2011-2014

FY	2011		2012		2013		2014	
	GB	GOM	GB	GOM	GB	GOM	GB	GOM
Haddock cap (mt)	318	11	286	9	273	3	162	3
Haddock catch (mt)	101	3	285	0	285	0.1	114	0
% of Cap	32%	23%	100%	0%	105%	2%	70%	0%

Note: Catch caps are based on groundfish fishing year (May 1 ó April 30).
Source: GARFO quota monitoring website:
http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports_frame.htm

2016 expected GB haddock catch limits

Through Framework 55 to the Northeast Multispecies FMP, the Council has recommended that the GB haddock catch cap (sub-ACL) for groundfish FY 2016 be 521 mt, a 130% increase over FY 2015 (227 mt). However, due to the overage deduction required by groundfish Framework 46, the FY 2016 sub-ACL will be decreased by about 10 mt, to about 511 mt. Still, this will increase the cap by 125% relative to FY 2015.

2015 Atlantic herring catch

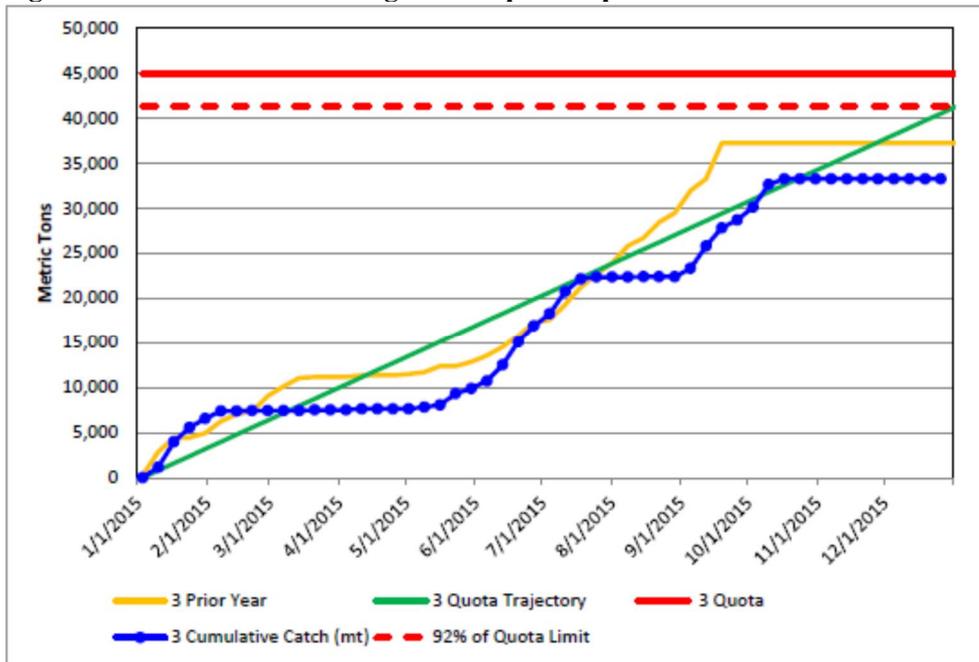
As of December 27, 2015, about 76% of the 2015 Atlantic herring quota had been caught. The GB haddock AM closure area encompasses a portion of Area 1B and most of Area 3. From those areas, about 9,600 mt of Atlantic herring quota was not caught in 2015. The AM constrained effort primarily in Area 3 (Figure 3). As in 2014, the fishery had not been active in Area 1B since early June (Figure 4).

Table 3 - Atlantic herring catch in 2015

Management Area	Cumulative catch (mt)	Quota (mt)	Cumulative Percent of quota
1A	29,395	30,580	96.13%
1B	2,889	4,922	58.69%
2	14,408	32,100	44.88%
3	33,256	44,910	74.05%
Total	79,948	104,566	76.46%

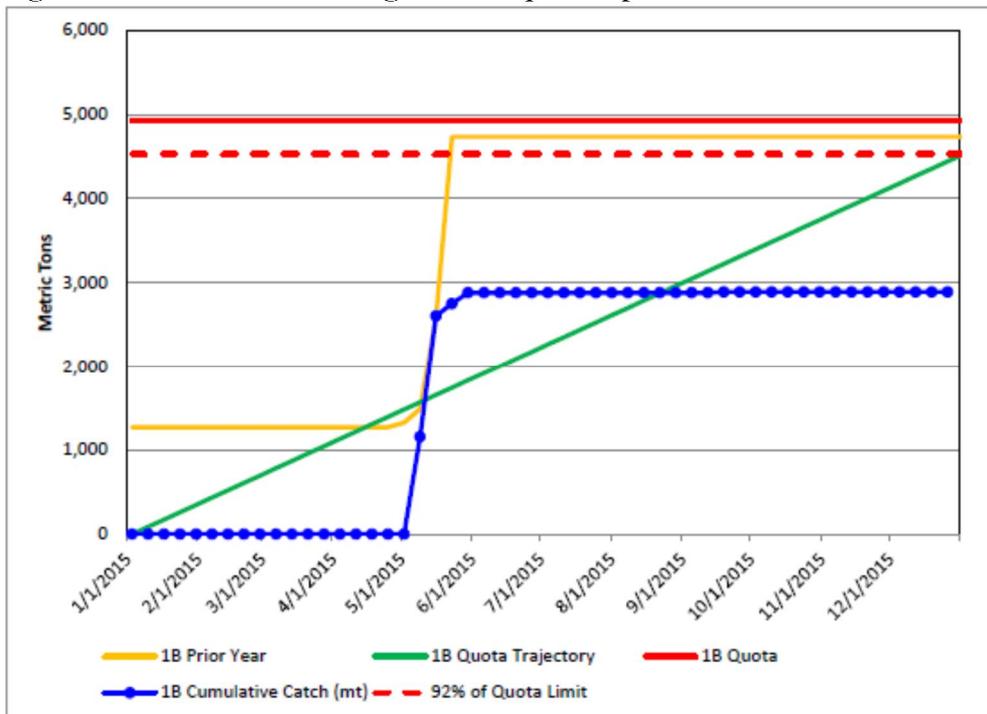
Source: GARFO quota monitoring website (through 12/27/2015):
http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports_frame.htm

Figure 3 - 2015 Atlantic herring Area 3 quota report



Source: GARFO quota monitoring website (updated through 12/27/2015): http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports_frame.htm

Figure 4 - 2015 Atlantic herring Area 1B quota report



Source: GARFO quota monitoring website (updated through 12/27/2015): http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports_frame.htm