

## **Draft Discussion Document**

**May 27, 2016**

**Action to consider modifications to the sub-ACL of GB haddock allocated to the Atlantic herring fishery and associated accountability measures**

### **AP/ CMTE Input**

1. Review draft purpose and need
2. Identify range of alternatives
3. Identify one or more drivers for new AMs
4. Support development proactive AM alternatives in this action?

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## **1.0 INTRODUCTION AND BACKGROUND**

This action will consider a range of alternatives to amend the catch cap of Georges Bank (GB) haddock in the herring fishery, associated accountability measures (AMs), and their implementation.

### **1.1 BACKGROUND**

The Council decided to add a 2016 work priority to potentially amend the accountability measures for GB haddock at the December 2015 Council meeting when work priorities were approved for 2016. At the January 2016 Council meeting the Council then requested that the Herring and Groundfish Committees consider if other measures should be explored as well related to how the accountability measures are implemented. Specifically, could the trigger be modified so that AMs do not go into effect unless the herring fishery exceeds their sub-ACL by more than 50% or unless the total ACL is harvested as well as the sub-ACL for the herring fishery.

These motions are the result of concerns raised by the herring industry after AMs were triggered in October 2015 after it had been determined that the 2015 sub-ACL for the herring fishery had been exceeded. For groundfish fishing year 2015 (May 1, 2015 – April 30, 2016), the GB haddock catch cap for the herring mid-water trawl fishery was 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, Figure 1).

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 (Figure 2). 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**

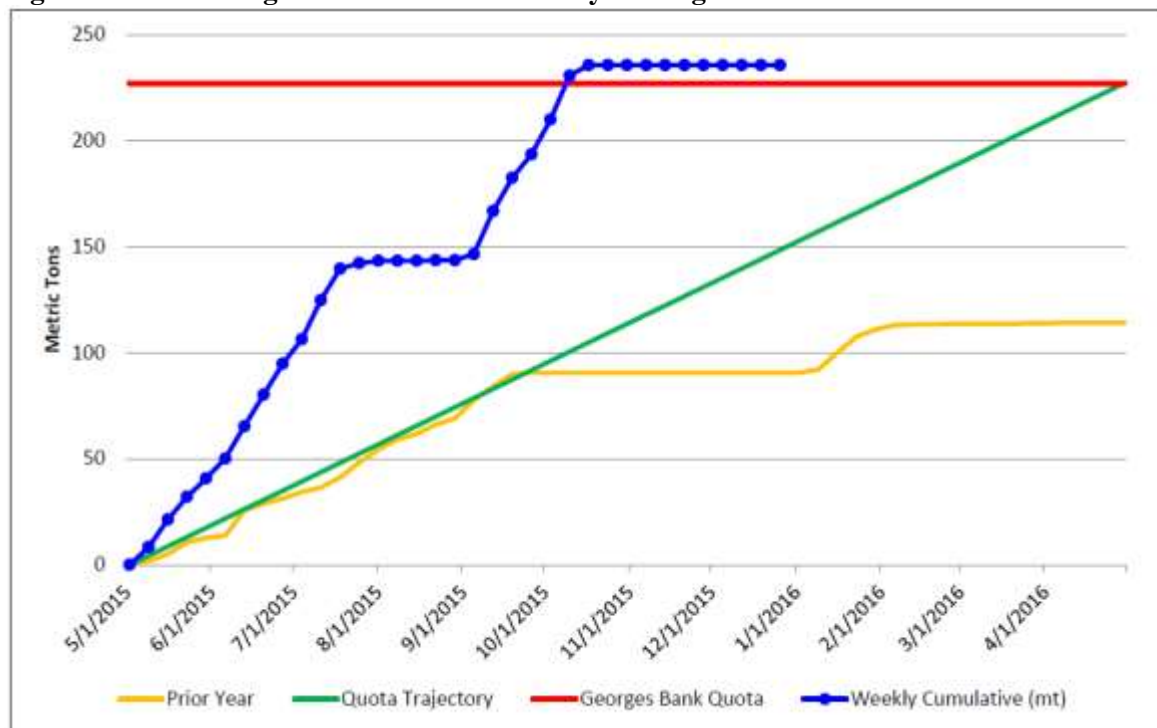
Month	Monthly estimated haddock catch (mt)	Cumulative estimated haddock catch (mt)	Cumulative percent of quota (227 mt)
May	43.09	43.09	18.98%
June	54.51	97.59	42.99%
July	45.70	143.29	63.12%
August	0.25	143.54	63.23%
September	66.32	209.87	92.45%
October	25.68	235.54	103.76%
November	0.00	235.54	103.76%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

Source: GARFO quota monitoring website:

[http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports\\_frame.htm](http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports_frame.htm)

Data reported through December 27, 2015.

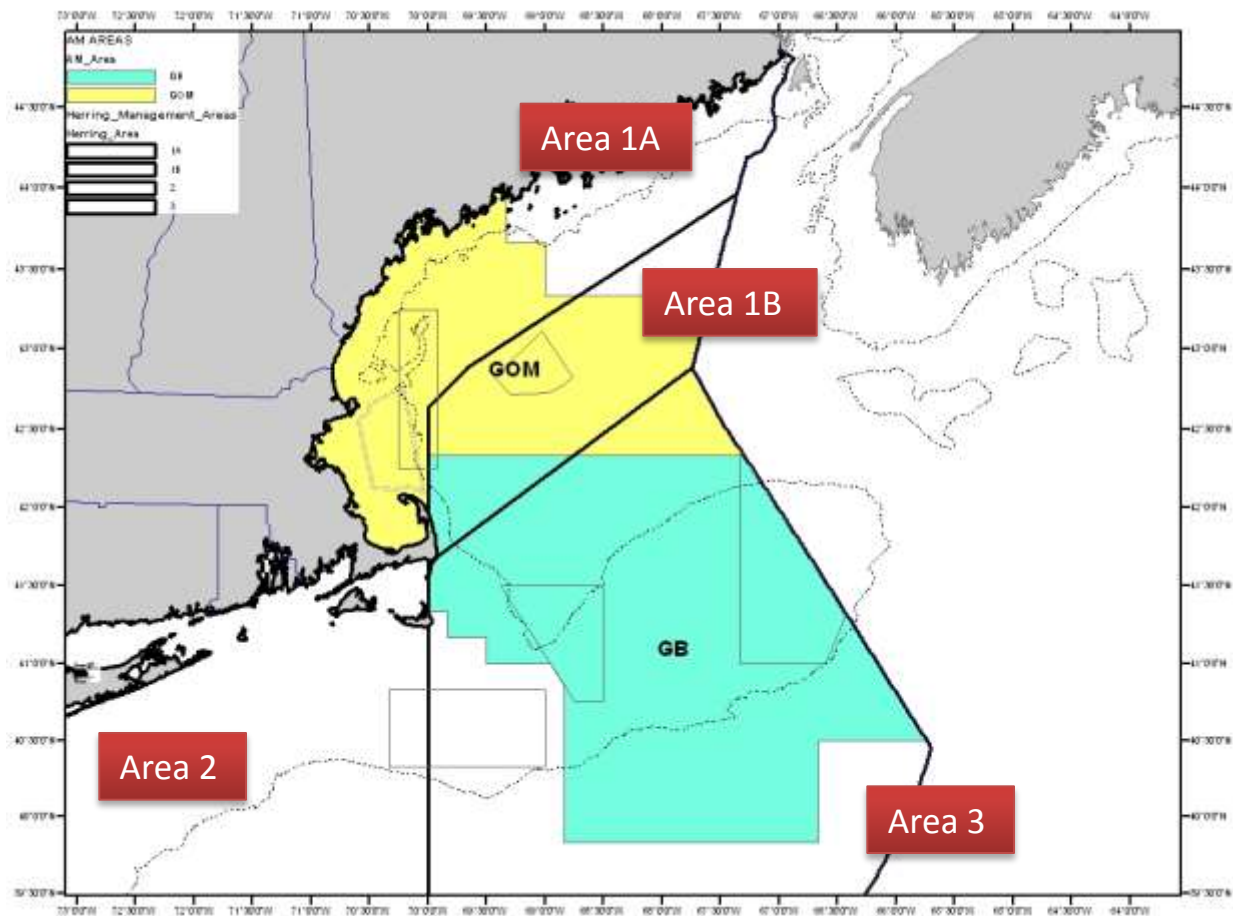
**Figure 1 - 2015 Georges Bank haddock catch by herring midwater trawl vessels**



Source: GARFO quota monitoring website (updated through 12/27/2015):

[http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports\\_frame.htm](http://www.greateratlantic.fisheries.noaa.gov/ro/fso/reports/reports_frame.htm)

**Figure 2 – Herring management areas and Haddock AM areas for GB (green) and GOM (yellow)**



From November 2015 through May 1 2016 no directed haddock fishing took place in the GB AM area (inshore portion of Area 1B or the majority of Area 3). The AM restriction lifted on May 1, 2016 when the next groundfish fishing year began and a new sub-ACL was available for FY2016.

Insert info about fishery landings and impacts since then. Has effort shifted to other areas, or just declined? Short summary of observer data used for estimate.

### **1.1.1 Summary of Previous Council actions to address haddock bycatch in the herring fishery**

The multispecies and herring fisheries take place in the same areas and seasons. Throughout the recent history of these two fisheries concerns have been raised that herring fishing vessels may catch groundfish species and that these catches may affect the rebuilding of overfished groundfish stocks. As a result, herring vessels were prohibited from catching groundfish when the Northeast Multispecies FMP was amended in 1996. There were also concerns that measures designed to reduce catches of groundfish by the herring fishery reduced the ability of the herring fishery to achieve optimum yield. These concerns led to herring vessels being allowed to fish in multispecies closed areas because the gear was not expected to catch groundfish. These two competing issues came to a head in 2005 when herring midwater trawl vessels caught haddock from a large haddock year class on George Bank.

#### **Few sentences about Emergency Action and Ad-hoc Bycatch Committee**

This led to the adoption of Framework Adjustment 43 to the Northeast Multispecies FMP in 2006. FW 43 modified the restrictions for herring vessels so that herring fishing could continue on Georges Bank. This framework prohibited certain herring vessels from discarding haddock and limited possession of other groundfish to small amounts. It also adopted a cap on the amount of haddock that could be caught by certain herring vessels. The cap was set at 0.2 percent of the combined GB and GOM haddock target total allowable catch (TTAC). When the cap was reached, catches of herring from a large part of the GOM and GB areas were limited to 2,000 pounds per trip for all herring vessels.

#### **Paragraphs about Framework 46, Amendment 16, and Amendment 5**

### **1.2 PURPOSE AND NEED (AP/CMTE INPUT #1 – REVIEW AND APPROVE)**

The purpose of this action is to consider measures that would incentivize the midwater trawl fleet to minimize the incidental catch of haddock in the herring fishery while providing the opportunity to fully harvest the sub-ACL of herring for Herring Management Areas 3 and 1B. Given the current large biomass of Georges Bank haddock, and the fact that overall haddock catches are far below the ABC for that stock, the current fixed 1.0% cap on haddock catch by the herring fleet has a real potential to create a serious constraint on herring catch. Therefore, this action is needed to reduce the potential for negative impacts on the herring fishery from reducing the opportunity to fish the TAC in Area 3 and 1B, and avoid potential impacts to the supply of herring used as bait for the lobster fishery.

Further, this action is needed to further promote long-term sustainable management of the Atlantic herring fishery and better meet the goals and objectives of the Atlantic herring management program, particularly the goal to achieve, on a continuing basis, optimum yield (OY), and the objectives to achieve full utilization from the catch of herring, including minimizing waste from discards (and incidental catch) in the fishery and to promote the utilization of the resource in a manner which maximizes social and economic benefits to the nation, while taking into account the protection of marine ecosystems.



## **2.0 DRAFT ALTERNATIVES**

(Note: Staff has drafted these alternatives based on ideas raised at previous meetings, or to round out the full range of potential alternatives. These alternatives have been discussed with the Herring PDT on May 23, 2016 (see meeting summary for details – Document #3b) as well as the GF PDT via conference call on May 26, 2016 (see draft memo – Document #4c).

### **AP/Cmte Input #2:**

The AP/Cmte should review the draft range of alternatives and add/remove/modify as necessary. During the discussion, specific rationale and justification should be provided. Ideally, a final range of alternatives would be identified for the Council to consider in June.

## **2.1 GEORGES BANK HADDOCK CATCH CAP FOR THE HERRING FISHERY**

For this section, only one alternative can be selected.

### **2.1.1 No Action**

The GB Haddock catch cap would remain at 1% of the US ABC, after a deduction for management uncertainty of 7%.

#### ***Rationale:***

In 2011, Framework 46 increased the cap from 0.2% to 1.0% because it was thought to be an amount that would be sufficient to allow the prosecution of the herring fishery without adversely sacrificing groundfish yields over a range of haddock stock sizes. The major factors considered were: 1) haddock biomass increased dramatically compared to previous years when 0.2% was used in FW43; and 2) the method for estimating catch went from haddock catch observed at sea or dockside to extrapolated catch across the entire fishery using the cumulative method for estimating discards. For the conditions at that time, the 1% cap was expected to be a better balance of controlling incidental catch, reducing uncertainty for fishing communities, and achieving optimum yield.

### **2.1.2 Modify the cap to reflect current biomass of GB haddock**

This alternative would modify the current GB haddock catch cap from 1% to (???) The GOM haddock catch cap would remain the same, 1%.

#### ***Rationale:***

### **2.1.3 Modify the cap to be a variable percentage**

This alternative would modify the current GB haddock catch cap from a set 1% each year, to a variable percentage of the US ABC. The details have not been ironed out yet but overall the idea is that a larger percentage would be allocated to the herring fishery when haddock biomass is high and utilization by the groundfish fishery is relatively low.

For example, upon implementation of this action the GB haddock cap would increase to ??? (e.g. 2%, 3%, 5%, etc.). The allocation would remain at that level unless one or both of the following conditions exist. One, the stock status of GB haddock changes and it became overfished or overfishing is occurring (or some other trigger?). Two, the groundfish fishery increases their utilization of GB haddock above a predefined threshold (e.g. 30%, 40%, 50% of the sub-ACL). (See GF PDT memo for more details on haddock abundance and utilization by the groundfish fishery).

The Groundfish PDT would review catches each year, and if either of these two elements are triggered, the catch cap for the herring fishery would automatically decrease the following fishing year. The Council will need to specify exactly what the triggers are and what the automatic reduction in the cap would be.

#### ***Rationale:***

### **2.1.4 Increase cap to ??? (e.g. 2%, 3%, 5%) with transfer provision that unused haddock within the herring fishery sub-ACL reverts back to the groundfish fishery during the fishing year**

This alternative would modify the GB haddock cap for the herring fishery to 2% (or some other value more than 1%). This allocation would be available at the start of the groundfish fishing year. By December of that year, about mid-way through the fishing year, if the herring fishery has not caught their full sub-ACL, NMFS would estimate the total catch of haddock expected to be caught by the herring fishery through the remainder of the fishing year. If that estimate is lower than the available sub-ACL, NMFS could transfer some portion of the sub-ACL from the herring fishery to the groundfish fishery. Any additional haddock to the groundfish fishery would be allocated proportionally among the GF sectors and common pool vessels.

#### ***Rationale:***

### **2.1.5 Terminate sub-ACL of GB haddock to herring fishery and apply haddock catch from the herring fishery to the “other” sub-component instead**

This alternative would suspend the sub-ACL allocation of GB haddock to the herring fishery. Instead, all haddock catch in the herring fishery would be applied to the “other” sub-component catch. Other fisheries that catch GB haddock that are currently in this other sub-component category are fisheries such as squid, mackerel, whiting, etc.

Each year the Groundfish PDT reviews catch of all groundfish species summarized by fishery. For fisheries that do not have a direct sub-ACL, their catch is summed together under “other”. Previously the other sub-component for GB haddock was set at 4% of the US ABC, and currently it is set at 1%. The GB haddock catch of all fisheries that do not have a sub-ACL are accounted for under that sub-component. These sub-components are not subject to specific catch controls by the Groundfish FMP. As a result, the state waters and other sub-components are not allocations, and these components of the fishery are not subject to accountability measures if the catch limits are exceeded. Because the state waters and other sub-component values are based on expected catch, there is no downward adjustment for management uncertainty that applies to fisheries with specific allocations and accountability measures. (See GF PDT memo for more detail about catch of GB haddock in other fisheries).

***Rationale:***

**2.1.6 Others?**

**2.2 GEORGES BANK HADDOCK ACCOUNTABILITY MEASURES FOR THE HERRING FISHERY**

For this section, more than one alternative can be selected.

**2.2.1 No Action**

When the GB haddock incidental catch cap has been caught, all herring vessels fishing with mid-water trawl gear will be prohibited from fishing for, possessing, or landing, more than 2,000 lb of herring in the GB Haddock AM area (Figure 2) for the remainder of the multispecies fishing year. In addition, the haddock possession limit will be reduced to 0 lb in that area, for the following vessels: 1) all vessels that have a Federal herring permit and are fishing with mid-water trawl gear; and 2) all vessels that have an All Areas Limited Access Herring Permit and/or an Areas 2/3 Limited Access Herring Permit fishing on a declared herring trip. A vessel can possess haddock after the catch cap has been caught, provided the vessel possesses a Northeast multispecies permit and is operating on a declared Northeast multispecies trip.

If NMFS determines that total catch exceeded any ACL or sub-ACL for a fishing year, then the amount of the overage shall be subtracted from that ACL or sub-ACL for the fishing year following total catch determination. NMFS shall make such determinations and implement any changes to ACLs or sub-ACLs, in accordance with the APA, through notification in the Federal Register, prior to the start of the fishing year, if possible, during which the reduction would occur.

***Rationale:*** This AM was implemented in Framework 46. The boundary encompasses where 90% of commercial haddock was caught based on 2006-2009 fishing years.

### **2.2.2 Modify the AM area (higher bycatch rate areas)**

The AM area would be modified based on new information. See GF PDT memo for additional information about haddock distribution, haddock spawning distribution, etc.

#### **AP/Cmte Input #3 – specific ideas on what the driver should be?**

The Herring PDT discussed three potential ideas:

1. Same approach from FW46 could be used with updated data – area with majority of commercial haddock catch (90% or some other value)
2. GB haddock distribution based on survey data
3. Area with the highest bycatch rates (observer data from 2010-2015)

When considering new areas think about spatial scale of data being used to develop the new areas and how the catch will later be monitored – stat area boundaries, ten-minute square, etc.

***Rationale:***

### **2.2.3 Establish an AM season (higher bycatch rate months)**

Currently there is no AM season. When the AM is triggered the closure for directed mid-water trawls is in place for the remainder of the GF fishing year. It is possible that a season could be adopted instead. It may be possible to apply a season with the current in-season AM if the AM season is later in the year, or a subsequent year AM if adopted through this action (Section 2.3.2).

The Herring PDT has brainstormed several data sources that may help identify potential AM seasons: observer data, portside data, study fleet, and herring revenue maps by month.

***Rationale:***

### **2.2.4 Modify the payback provision**

The pound for pound payback that is currently in place for any overage of the GB haddock sub-ACL would only apply if one or two of the following conditions existed. If not, the pound for pound reduction in the following year sub-ACL would take place.

- 1) the herring fishery catches their full sub-ACL and the total ACL is caught; or
- 2) the herring fishery catches more than 150% of their sub-ACL.

***Rationale:***

### **2.2.5 Others?**

## **2.3 IMPLEMENTATION OF GEORGES BANK HADDOCK ACCOUNTABILITY MEASURES FOR THE HERRING FISHERY**

For this section, more than one alternative can be selected.

### **2.3.1 No Action**

This section focuses on how the AM is implemented, not the AM itself, or the sub-ACL allocation amount. Specifically, measures related to the timing of when the AM is triggered, and how it is implemented in terms of the methods or data used to monitor and trigger the AM. Under No Action, the AM is triggered in-season based on an extrapolation of observed catch to the entire fishery using the cumulative method.

#### ***Rationale:***

An in-season AM would help prevent the total ACL from being exceeded and reduce the potential for overfishing of the GB haddock stock. An in-season AM reduces the risk of exceeding the sub-ACL by a large amount compared to allowing the fishery to continue to fish in the GB haddock stock area after the sub-ACL has been caught. Since any overage of the sub-ACL in year 1 is deducted from the sub-ACL the following year, an in-season AM may reduce future impacts on the herring and groundfish fisheries. If the sub-ACL is exceeded and the herring fishery continues to catch GB haddock, the final overage may be large, potentially reducing future fishing opportunities all together in the GB haddock stock area.

### **2.3.2 Modify when AM triggers for the herring fishery – subsequent year**

After the groundfish fishing year is complete a final estimate of GB haddock catch in the herring fishery would be available and AMs would trigger the subsequent year if the sub-ACL was exceeded. This alternative would essentially change the implementation timing of the AM from an in-season implementation, to a subsequent year AM. If this alternative is selected, the specific season or length of time the AM would be in place the subsequent year would need to be defined.

#### ***Rationale:***

### **2.3.3 Modify when AM triggers for herring fishery – in-season or subsequent year based on precision of catch estimate**

GB haddock catch in the herring fishery would be estimated during the year, and AMs would trigger in-season if the sub-ACL is exceeded, but only if the catch estimate is based on observer coverage with the SBRM minimum of 30% coefficient of variance (CV). If the CV is greater than that amount, the AM would not trigger. In that case, the mid-water trawl herring fishery would be permitted to continue fishing in the AM area until the CV minimum is met. If a CV of 30% is not met during the fishing year the sub-ACL was exceeded, the sub-ACL the subsequent year would be reduced by the final estimate of the overage. Subsequent year AMs may run a greater risk of increasing total catch, and overages if the sub-ACL is exceeded. As with current provisions, if the overage is in excess of the subsequent year sub-ACL, the herring fishery would not be able to fish in the GB haddock stock area in the subsequent year. In summary, under this

alternative, the AM does not trigger in-season unless the estimate of catch is based on observer coverage with the SBRM minimum standard for precision (CV of 30%). (See GF PDT memo for some information on the recent catch estimates with precision estimates included)

***Rationale:***

**2.3.4 Seasonal split of GB haddock sub-ACL (80%/20%)**

Eighty percent of the haddock sub-ACL would be available to the herring fishery on May 1 and the remaining 20% would be added on November 1. If the herring fishery catches more than 80% before November 1, then the AM is triggered and the area closes to direct midwater trawl herring fishing from that time through November 1. The remaining 20% would become available on November 1 to support a winter fishery. If the herring fishery catches more than 20% of the remaining GB haddock sub-ACL after November 1 the area would again close to directed herring midwater trawl gear from that time through April 30.

More details of how this alternative would be monitored still need to be developed.

***Rationale:***

**2.3.5 Change mechanism for how AM is triggered**

**2.3.5.1 Option A**

Herring fishery AM is only triggered if one of two conditions are met:

- 1) the herring fishery catches their full sub-ACL *and* the total ACL is caught; or
- 2) the herring fishery catches more than 150% of their sub-ACL.

***Rationale:***

**2.3.5.2 Option B**

Herring fishery AM is only triggered if the herring sub-ACL is caught and the total estimated catch from all sources is 50% or higher of the total ACL (or some other value that is estimated to cause negative impacts on GF fishery or haddock resource).

***Rationale:***

**2.3.6 Allow transfer of haddock to herring fishery mid-season**

This alternative would allow NMFS to transfer haddock ACL to the herring fishery from the groundfish ACL in-season.

Staff does not think this alternative is administratively feasible.

The idea of a transfer came up because it is used in the scallop fishery with YT flounder, but in that case it works in the opposite direction. In-season, YT is transferred from the scallop fishery to the GF fishery if it is estimated that the scallop fishery is not going to catch all the sub-ACL that was allocated to them in the beginning of the year.

Under this alternative, fish would be allocated to the GF fishery and later separated out into individual sectors at the start of the year, and then somehow taken back in the middle of the season if a transfer is approved.

Instead, staff has incorporated the idea of a transfer in Alternative 2.1.4, but it works in the opposite direction – haddock would be allocated to the herring fishery at the start of the year, and if it is not projected to be caught would be transferred to the GF fishery.

***Rationale:***

**2.3.7 Amend how estimated catch is calculated in the herring fishery – incorporate dockside monitoring data**

This alternative would incorporate dockside monitoring in the estimate of haddock catch. Currently the estimate is based on at sea observations only, and is not informed by dockside data.

The Council sent a letter to NMFS in January 2016 requesting dockside data be used to monitor the current caps. NMFS responded in April 2016 that they are looking into whether that is feasible and at the May 23 PDT meeting it was explained that the request is still being reviewed and a response is forthcoming, but will likely not be available for the June Council meeting. It was also explained that the peer review of in-season bycatch estimation methods is scheduled for fall 2016, but it was not clear if this would be addressed in that review or not.

***Rationale:***

**2.3.8 Others?**

## **2.4 PROACTIVE ACCOUNTABILITY MEASURES**

### **AP/Cmte Input #4:**

Proactive measures were not included in the Council motion from April, but came up during PDT discussion of this action. Does the AP/Cmte want to develop proactive AM alternatives?

For this section, more than one alternative can be selected.

### **2.4.1 No Action**

Under No Action there are a handful of measures that may be helping to reduce GB haddock bycatch.

1. Voluntary bycatch avoidance program – but is this in the right areas? Focus is river herring correct?
2. Measures to reduce or eliminate incentive to target groundfish
  - Possession limit of 100 pounds of all groundfish, excluding haddock
  - Prohibition on the discard of haddock sale of groundfish
3. Others?

### **2.4.2 Bycatch Avoidance Program**

This alternative would develop a required bycatch avoidance program. The details have not been developed yet.

### **2.4.3 Proactive seasonal closure**

This alternative has not been discussed as a proactive AM yet. If a discrete area and/or season is identified through the analyses developed for this action it is possible that a seasonal restriction could be considered as a proactive AM, not just a reactive AM.