

Flatfish AM Development—Bycatch Savings

Currently, the scallop fishery has sub-ACLs and AMs in place for three flatfish stocks managed through the groundfish FMP: Georges Bank yellowtail, SNE/MA yellowtail, and Southern windowpane flounder. The Council has recommended that a scallop sub-ACL for Northern windowpane be established through Framework 56 to the Northeast Multispecies FMP, with the development of accountability measures for this stock in the next available scallop action. The Scallop AP, Committee, and full Council have expressed interest in redesigning the AMs for GB yellowtail flounder and SNE/MA yellowtail flounder to make AMs as consistent to the extent feasible with gear modification AMs for Southern windowpane flounder (Council Motion #4a, June 22, 2016). The current AM for Southern windowpane flounder is a 5-row apron with 1.5:1 hanging ration GRA; timing and length of this reactive GRA is dependent on the scale of a sub-ACL overage.

At their June 18th meeting, the Scallop PDT recommended the following scope of AM development:

1. Focus on applying the 5-row apron with 1.5:1 hanging ratio as gear modification for AM.
2. Use the GRA “savings” values from the 2012 CFF study comparing 5-row apron to 8-row apron and 1.5:1 hanging ratio as upper bound of gear modification savings.
3. For Northern windowpane and GB yellowtail, apply GRA starting with the GB yellowtail broad stock area (SRA 522, 525, 561, 562).
4. For SNE yellowtail, focus on areas west of 71°W (same as Southern Windowpane AMs area).
5. Focus on open area (not access area) for GRAs.
6. Almost all bycatch of GB YT in FY 2017 is coming from CAII. Consider a delay in the opening as reactive AM (time/area closure).
7. As a starting point, consider prohibiting trawl gear in certain areas in SNE if AM is triggered, consistent with the SNE/MA windowpane AM

Following this discussion, observer data and reported dealer landings were used to estimate the upper-bounds of GB yellowtail and N. windowpane bycatch savings gained by using a 5-row apron with 1.5:1 hanging ratio GRA in a month for open-area fishing on Georges Bank. A similar approach was taken to estimate the upper-bounds of GB yellowtail and N. windowpane bycatch savings gained by prohibiting fishing in Closed Area II access area in a month. The specific methods used to calculate bycatch savings were presented to the PDT at their August 29-30th meeting and can be seen [here](#).

Table 1 and Figure 1 describe the monthly bycatch savings gained by using a GRA for open-area fishing on Georges Bank. The boundary of the potential Georges Bank open-area GRA AM is shown in Figure 3.

Table 2 and Figure 2 describe the monthly bycatch savings gained by not fishing in Closed Area II access area. The boundary of the potential Closed Area II access area AM is shown in Figure 4.

Table 1. The upper limit of Georges Bank yellowtail and Northern windowpane bycatch savings gained for each month where a 5-row apron 1.5:1 hanging ratio GRA is used for open-area fishing on Georges Bank. The percentage of landings from GB open-area fishing in each month is shown in the first column.

Month	% landings	GB YT bycatch savings	NWP bycatch savings
April	5.8%	1.5%	9.0%
May	20.4%	9.1%	11.8%
June	29.3%	12.9%	2.8%
July	17.9%	7.0%	3.5%
August	14.5%	1.2%	4.7%
September	7.0%	1.0%	1.7%
October	1.6%	0.3%	0.3%
November	0.4%	0.0%	1.5%
December	0.4%	0.0%	0.0%
January	0.4%	0.0%	0.0%
February	0.3%	0.1%	4.5%
March	2.0%	0.3%	6.2%

Figure 1. Displays monthly bycatch savings values for Georges Bank yellowtail (orange bars, primary axis) and Northern windowpane (striped blue bars, primary axis) in relation to percentage of monthly landings (blue line, secondary axis) for open-area fishing on Georges Bank (values are shown in Table 1).

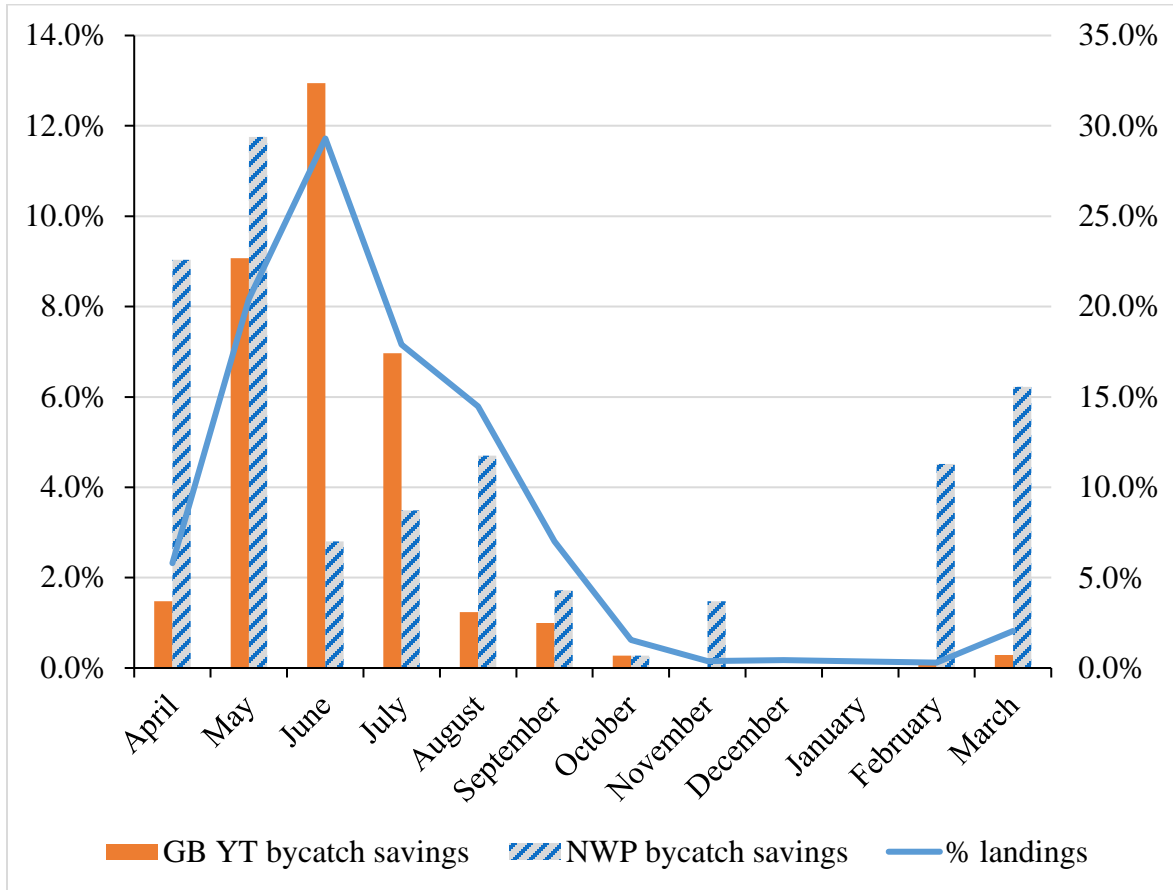


Table 2. The upper limit of Georges Bank yellowtail and Northern windowpane bycatch savings gained for each month where Closed Area II access area is closed. The percentage of landings from Closed Area II access area fishing in each month is shown in the first column.

Month	% landings	GB YT bycatch savings	NWP bycatch savings
April	0.6%	0.8%	8.0%
May	0.8%	0.2%	0.0%
June	21.3%	9.5%	3.5%
July	28.7%	14.5%	10.5%
August	18.5%	18.2%	3.3%
September	7.4%	29.0%	0.0%
October	6.1%	9.3%	0.8%
November	6.9%	6.0%	6.7%
December	6.8%	6.6%	34.8%
January	2.2%	5.7%	29.4%
February	0.5%	0.0%	0.0%
March	0.3%	0.1%	2.9%

Figure 2. Displays monthly bycatch savings values for Georges Bank yellowtail (orange bars, primary axis) and Northern windowpane (striped blue bars, primary axis) in relation to percentage of monthly landings (blue line, secondary axis) for Closed Area II access area (values are shown in Table 2).

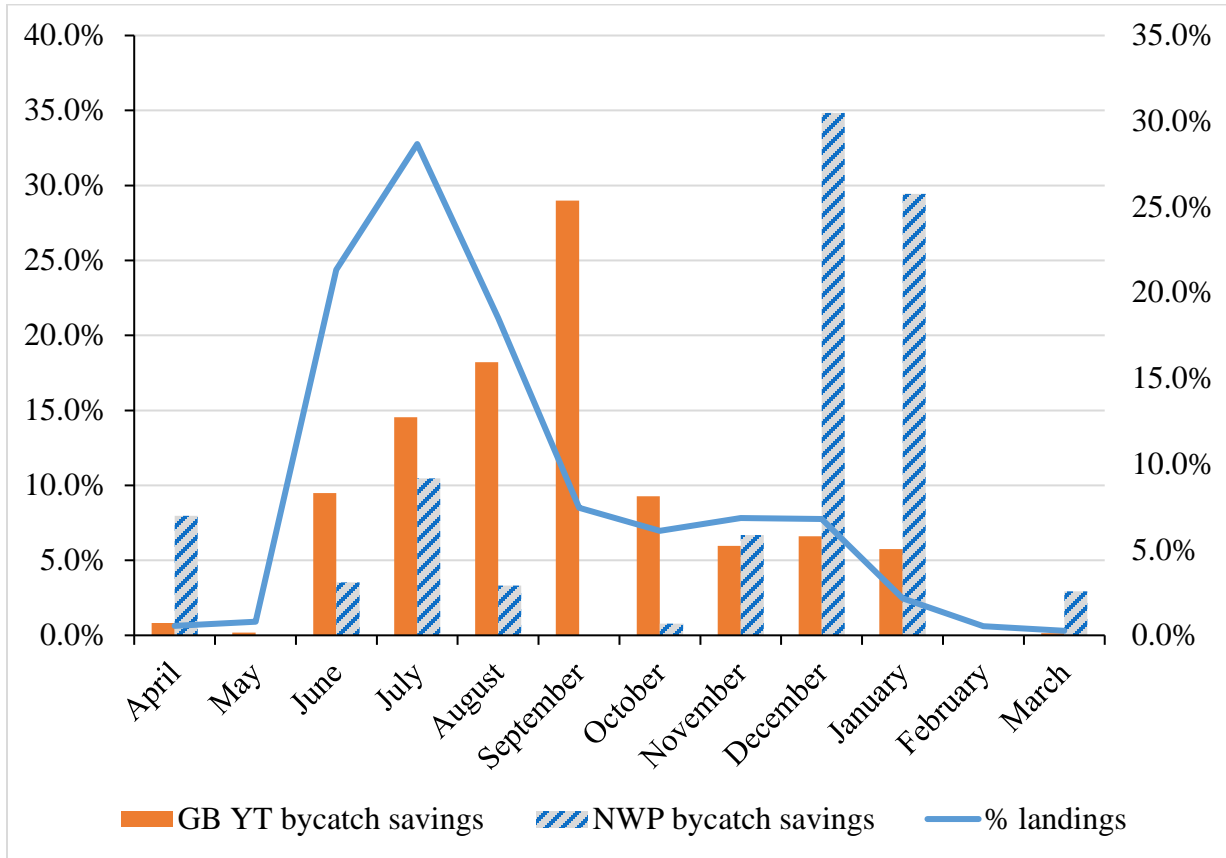


Figure 3. Boundary of the potential Georges Bank open-area GRA.

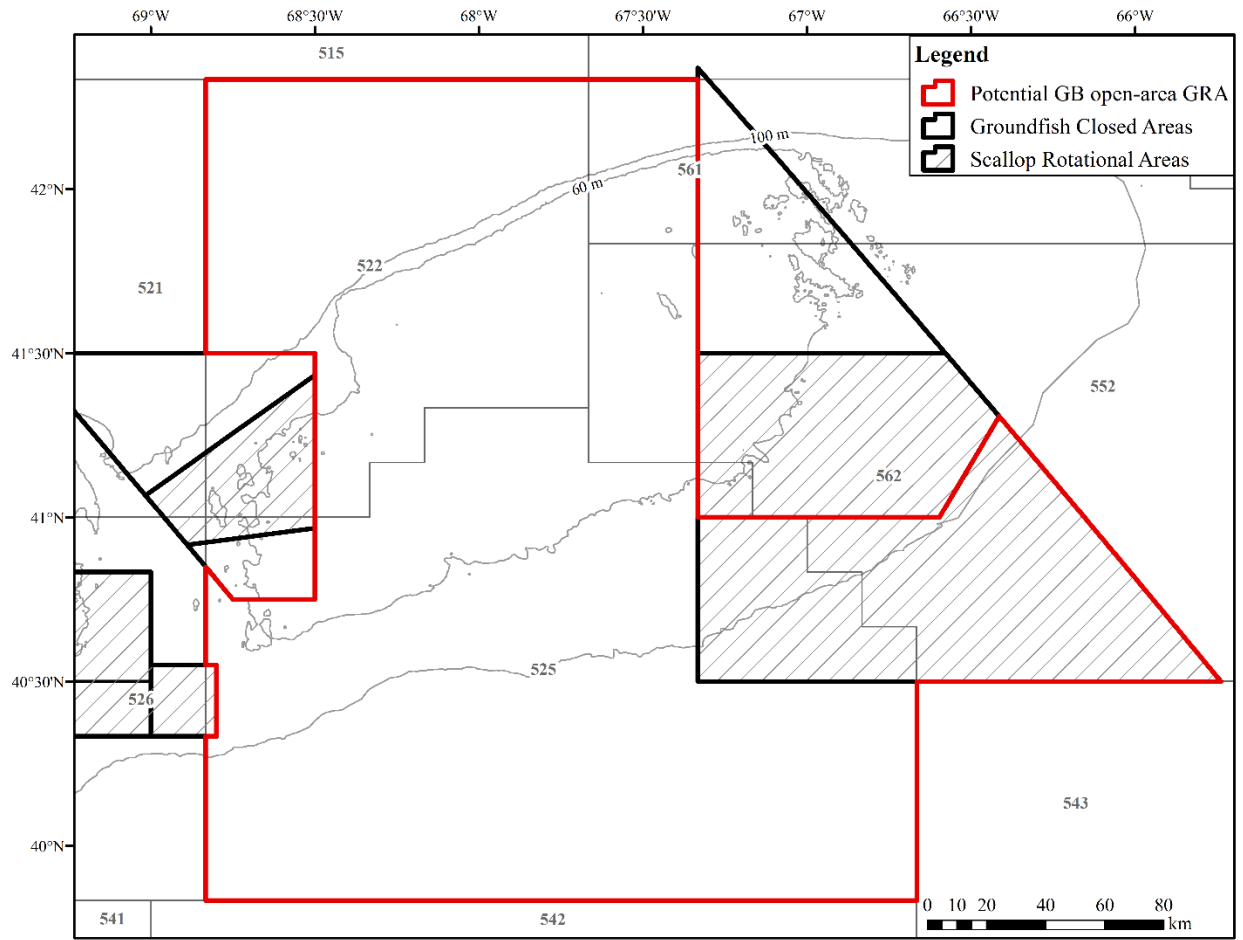
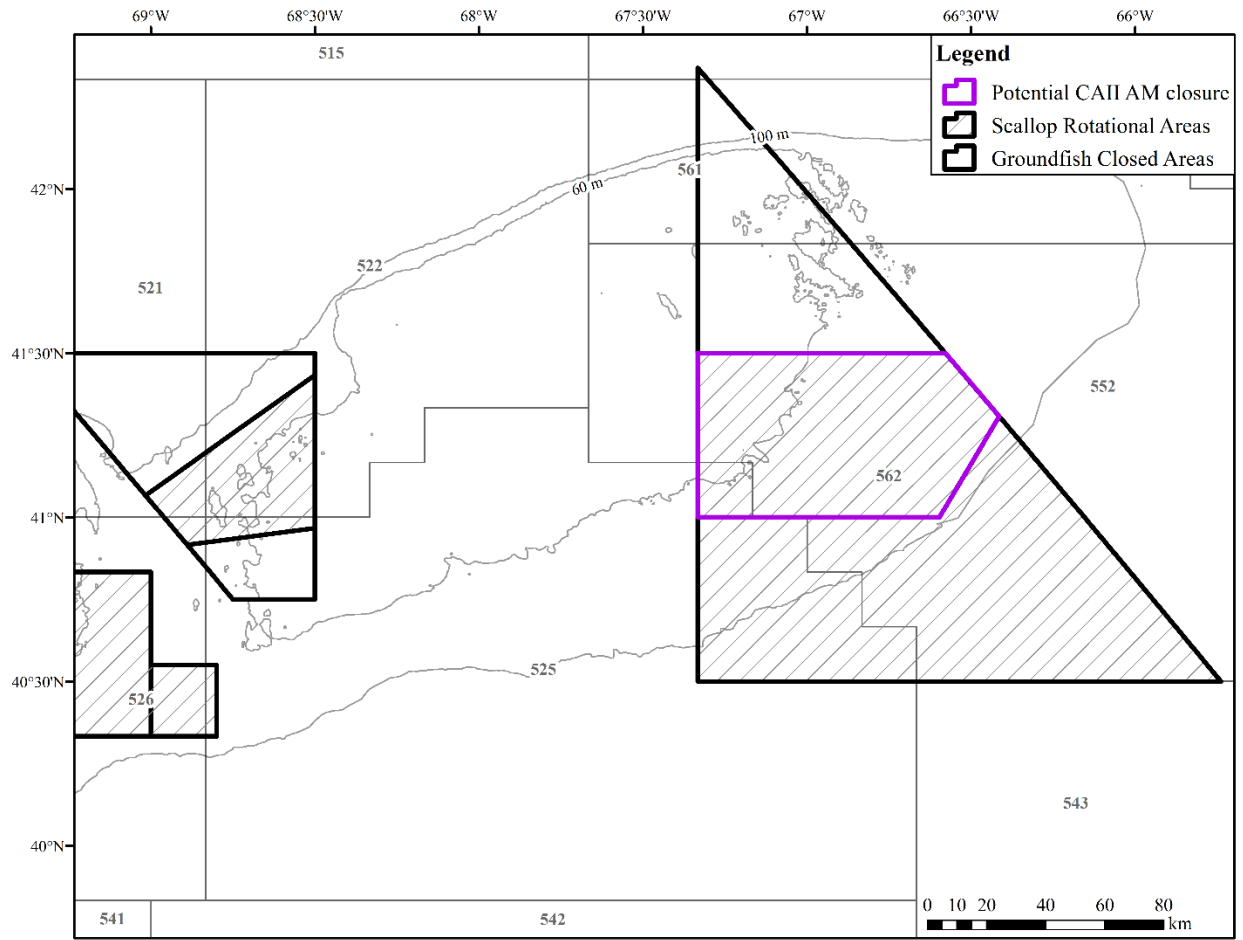


Figure 4. Boundary of the potential CAII access area AM closure.

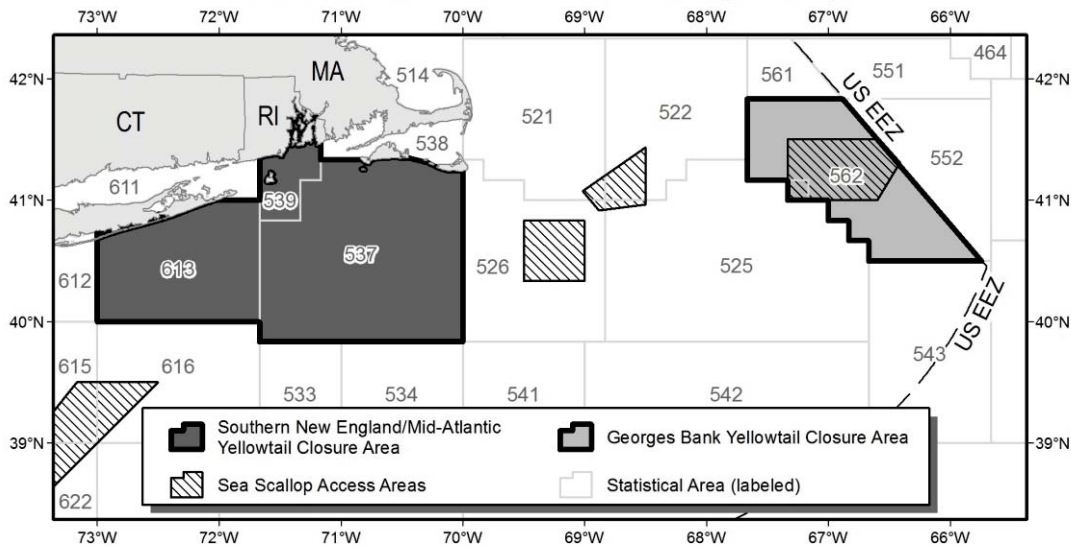


Yellowtail Flounder Accountability Measures in the Scallop Fishery



WHAT ARE THE YTF ACCOUNTABILITY MEASURES (AMs)?

The AMs are seasonal closures of defined statistical areas. The lengths of such closures, which are based on the time of year when YTF bycatch is the highest, depend on the severity of the YTF sub-ACL overages.



Map 1. AM closure areas for limited access vessels in GB and SNE/MA. Note that the closure areas in SNE/MA are identical to those for the LAGC IFQ fishery when fishing with dredges.

What are the YTF AMs in Georges Bank (GB)?

If the GB YTF sub-ACL overage results in an AM, the only AM applicable to GB is the limited access AM. Although the YTF catch of LAGC IFQ vessels applies to the GB sub-ACL, their catch is minimal and they do not have an AM for this area.

In GB, the AM is a seasonal closure of statistical area 562, as well as the small portion of 525 that is within the Closed Area II (CA2) scallop access area (see map above). The length of the closure depends on the amount of the overage, as well as whether or not CA2 is open to the scallop fishery.

Yellowtail Flounder Accountability Measures in the Scallop Fishery



For years when CA2 is open, the AM closure schedule is:

Percent coverage of YTF sub-ACL	Length of closure
3 or less	Oct-Nov
3.1-14	Sep-Nov
14.1-16	Sep-Jan
16.1-39	Aug-Jan
39.1-56	Jul-Jan
Greater than 56	Mar-Feb (All year)

For years when CA2 is closed, the AM closure schedule is:

Percent coverage of YTF sub-ACL	Length of closure
1.9 or less	Sep-Nov
2.0 -2.9	Aug-Jan
3.0 -3.9	Mar-Aug, Feb
4.0 - 4.9	Mar, Jul-Feb
5.0 -5.9	Mar-May, Jul-Feb
6.0 or greater	Mar-Feb (All year)

What are the YTF AMs in Southern New England/Mid-Atlantic (SNE/MA)?

If the SNE/MA YTF sub-ACL overage results in AMs, the limited access fleet, LAGC IFQ vessels using trawls, and LAGC IFQ vessels using dredges would each have specific AMs.

For limited access vessels, the AM is a seasonal closure of statistical areas 537, 539, and 613 (see Map 1 on page 4). The length of the closure depends on the amount of the overage, and all three statistical areas close for the same period of time.

Yellowtail Flounder Accountability Measures in the Scallop Fishery



The SNE/MA AM limited access closure schedule is:

Percent coverage of YTF sub-ACL	Length of closure
2 or less	Mar-Apr
2.1-3	Mar-Apr , Feb
3.1-7	Mar-May, Feb
7.1-9	Mar-May, Jan-Feb
9.1-12	Mar-May, Dec-Feb
12.1-15	Mar-Jun, Dec-Feb
15.1-16	Mar-Jun, Nov-Feb
16.1-18	Mar-Jul, Nov-Feb
18.1-19	Mar-Aug, Oct-Feb
19.1 or more	Mar-Feb (All year)

For LAGC IFQ vessels that fish with dredges, the AM is a seasonal closure of the same statistical areas applicable to the limited access fishery (i.e., 537, 539, and 613; see map on page 4). As with the AM for the limited access fleet, the length of the closure depends on the amount of the overage. However, these areas are not all closed at the same time, and all three areas do not close for the entire FY, no matter how great the overage.

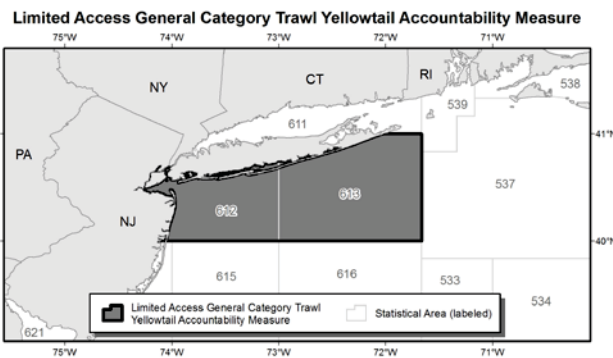
The SNE/MA AM closure schedule for LAGC IFQ vessels that fish with dredges is:

Overage	AM closure area and duration		
	539	537	613
2 percent or less	Mar-Apr	Mar-Apr	Mar-Apr
2.1 - 7 percent	Mar-May, Feb	Mar-May, Feb	Mar-May, Feb
7.1 - 12 percent	Mar-May, Dec-Feb	Mar-May, Dec-Feb	Mar-May, Feb
12.1 - 16 percent	Mar-Jun, Nov-Feb	Mar-Jun, Nov-Feb	Mar-May, Feb
16.1 percent or greater	Mar-Feb (All year)	Mar-Jun, Nov-Feb	Mar-May, Feb

Yellowtail Flounder Accountability Measures in the Scallop Fishery



For LAGC IFQ vessels that fish with trawls, the AM is a seasonal closure of statistical areas 612 and 613 (see map below). As with the other AMs, the length of the closure depends on the amount of the overage. This area could be closed to LAGC trawl gear for up to 7 months of the FY, but will not be closed for an entire FY.



The SNE/MA AM closure schedule for LAGC IFQ vessels that fish with trawls is:

Overage	AM Closure
2 percent or less	Mar-Apr
2.1-3 percent	Mar-Apr, and Feb
3.1-7 percent	Mar-May, and Feb
7.1-9 percent	Mar-May, and Jan-Feb
9.1-12 percent	Mar-May, and Dec-Feb
12.1 or greater	Mar-June, and Dec-Feb

If the LAGC trawl AM is triggered, a trawl vessel could still covert to dredge gear and continue fishing for scallops. If a vessel chooses to switch gears, it must follow all dredge gear regulations, including that fishery's AM schedule if it has also been triggered.

WHEN DO YTF AMs GO INTO EFFECT?

- If reliable information is available to make a mid-year determination of the need to implement AMs for the YTF sub-ACLs, the respective AM(s) for each YTF stock area will be implemented at the start of the next FY (e.g., In situations where the ACL for a stock is low, an overage is known early in the FY, and AM determinations are based on actual catch and landings rather than projections).
- If reliable information is not available to make a mid-year determination of the need to implement AMs for the YTF sub-ACLs, NMFS must wait until enough information is available (i.e., when the total observer and catch data is available for that FY for both the groundfish and scallop fisheries) before making a decision to implement any YTF AMs. Under this scenario, NMFS would implement AMs Year 3 (e.g., for an overage in FY 2013, the AM will be implemented in FY 2015).