New England Fishery Management Council
50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116
E.F. "Terry" Stockwell, Chairman | Thomas A. Nies, *Executive Director*

MEMORANDUM

DATE: August 25, 2015

TO: Scientific and Statistical Committee (SSC)

FROM: Groundfish Plan Development Team (PDT)

CC: Groundfish Committee (Committee)

SUBJECT: **Georges Bank yellowtail flounder Acceptable Biological Catch**

The Groundfish Plan Development Team (PDT) discussed **Georges Bank (GB) yellowtail flounder Acceptable Biological Catch (ABCs).**

Information reviewed included TRAC documents and PDT memos to the SSC:

- TRAC. 2015. Georges Bank Yellowtail Flounder. TRAC Status Report 2015/03.
- TRAC. 2014. Georges Bank Yellowtail Flounder. TRAC Status Report 2014/03.
- TRAC. 2013. Georges Bank Yellowtail Flounder. TRAC Status Report 2013/01.
- TRAC. 2015. DRAFT Stock Assessment of Georges Bank Yellowtail Flounder for 2015.
- PDT to SSC re GB YTF ABCs/OFLs, dated August 14, 2014
- PDT to SSC re GB YTF ABCs/OFLs, dated August 9, 2013

GB yellowtail flounder ABCs

2015 TRAC Assessment

The Transboundary Resource Assessment Committee (TRAC) met July 7-9, 2015 in St. Andrews, New Brunswick, Canada to conduct assessments for Eastern Georges Bank (EGB) cod, EGB haddock, and GB yellowtail flounder. The final TRAC status reports (TSRs) from the meeting are available at http://www.nefsc.noaa.gov/saw/trac/.

Briefly, TRAC results indicate that the GB yellowtail flounder stock biomass is low and productivity is poor. The Total Allowable Catch (TAC) has been reduced substantially in recent years due to declining stock conditions, and recent catch is low relative to the low quotas. Combined Canada and US catches in 2014 were 159 mt, which is the lowest value in the time

series beginning in 1935. Further, discards were greater than landings for the first time in the series. The indices from two bottom trawl surveys (Northeast Fisheries Science Center, NEFSC, fall and Division of Fisheries and Oceans, DFO, winter) increased relative to the previous assessment, while the third (NEFSC spring) declined. Recent catch is low relative to the quota and biomass estimated by the surveys, while catch curve analyses indicated high total mortality rates (Z>1). Applying the empirical approach (established at the 2014 Diagnostic Benchmark) resulted in catch advice similar to that provided by the 2014 TRAC.

TRAC Catch Advice

The TRAC recommended that one approach be selected and used for the next three years to see if the stock responds:

1) A constant exploitation rate of 2%-16% per year, which would result in 2016 catch advice of 45 mt-359 mt (see Table 2, page 4 of the 2015 TRAC Status Report).

OR

2) A constant quota of 354 mt per year or less (based on not increasing the quota relative to the 2015 quota, which was 354 mt, due to concerns about stock declines).

PDT Recommendation

The PDT reviewed the findings from the TRAC's recent 2015 GB yellowtail flounder assessment. The PDT remains concerned about the status of the GB yellowtail flounder stock. The TRAC results indicate that the stock condition is poor (i.e., low productivity, historic low catches, low survey indices, poor recruitment and declines in condition), and total mortality remains high, despite large reductions in the catch limit in recent years and corresponding low catches.

The PDT discussed the trade-offs of the two catch setting strategies (see pages 3-4 of the 2015 TRAC Status Report) with respect to stock status and US fishery considerations. The exploitation rate approach provides a technical basis for catch setting, because it is tied directly to the NEFSC and DFO surveys. However, this approach means that the quota could vary annually based on survey biomass estimates, which could result in wide swings in catch advice from year to year. In contrast, the constant quota approach provides stability in catch for a three year period, but may lead to the quota being set too low if the stock recovers in later years and the fishery encounters yellowtail flounder at a higher rate. More generally, the PDT feels that the current annual catch setting process does not necessarily support the three year approach to setting quotas. The PDT indicated that selecting a specific exploitation rate or constant quota to use for the next three years would be difficult given the poor condition of this stock, and that the 2016 catch recommendations that result from both approaches recommended by the TRAC (354 mt based on constant quota or 359 mt based on upper limit of the constant exploitation rate of 16%) may be too high given the poor condition of the stock and lack of positive response to date.

The PDT viewed 359 mt as an upper limit on the GB yellowtail flounder ABC.

The 2015 TRAC assessment notes that for the first time discards are greater than landings. The PDT discussed that low catches may be due to a combination of factors including, but not limited to, the loss of market for GB yellowtail flounder due to low quotas, poor stock condition of GB yellowtail flounder, and shifts in the spatial distribution of GB yellowtail flounder. The PDT also discussed that recent low catches of GB yellowtail flounder by the US groundfish fishery may be influenced by other management. For example, the large Northern Windowpane Flounder Accountability Measure (AM) has been in place in FY 2014 and FY 2015 due to overages of Northern windowpane flounder catch limits. The AM requires the use of approved gear (i.e., haddock separator trawl, rope separator trawl or Rhule trawl) while fishing in the gear restricted area to reduce impact on flatfish. The area is located west and southwest of Closed Area II.