

U.S./Canada Transboundary Resources Steering Committee
Boston, MA
September 11, 2014
Meeting Notes

Canadian Participants:

Faith Scattolon, DFO, Steering Committee Co-chair
Mark Craig, DFO, Integration Committee Co-chair
Roger Stirling, Canadian TMGC Industry Representative, GOMAC Co-chair
Michael O'Connor, Canadian Industry Representative, TMGC Co-chair
Carl MacDonald, DFO, TMGC
Lou Van Eeckhaute, DFO, TRAC and TMGC
Tana Worcester, DFO, TRAC Co-Chair

U.S. Participants:

John Bullard, NMFS, Steering Committee Co-chair
Jennifer Anderson, NMFS, Integration Committee Co-chair
Allison Murphy, NMFS, Integration Committee
Tom Nies, NEFMC, Executive Director, TMGC
Terry Stockwell, NEFMC Chairman, TMGC Co-chair
Loretta O'Brien, NEFSC, TRAC Co-chair
Fred Serchuck, NEFSC, TMGC
William (Bill) Karp, NEFSC Director, TRAC
Sarah Heil, NMFS, TMGC
Dave Gouveia, NMFS, Species at Risk Working Group Co-chair

Opening Remarks

Mr. Bullard welcomed the participants to Boston and provided three updates. New information recently became available on the status of the U.S. Gulf of Maine cod stock, and the update indicates that virtually every indicator of the stock's condition has worsened or declined. This is difficult news and the National Marine Fisheries Service (NMFS) is working with our partners at the New England Fishery Management Council to discuss next steps. Second, Mr. Bullard discussed his concern about climate change and its impact on ocean resources. To help identify ways to manage and reduce the impacts of climate change on fisheries resources, NMFS staff is in the process of finalizing a methodology to rapidly assess the vulnerability of U.S. stocks to climate change. The methodology uses existing information on climate and ocean conditions, species distributions, and species life history characteristics to estimate the relative vulnerability of fish stocks to potential changes in climate. NMFS expects that the results of this assessment will be published this winter, and will include information about several of Canada/U.S. transboundary stocks. Mr. Bullard will share this information when it becomes available. Finally, Mr. Bullard provided an update on the New England Fishery Management Council's Habitat Amendment. One of the primary purposes of this action is to minimize impacts to essential fish habitat for Council managed species, including Canada/U.S. transboundary

groundfish resources. Although this action remains under development, it is expected to be finalized in the coming months. Mr. Bullard will provide further updates during the conference call this spring and plans to highlight some of the key measures that are expected as part of this action.

Ms. Scattolon stated that Mr. Claude d'Entremont, GOMAC Co-Chair and Canada/U.S. Steering Committee member, passed away in May after losing his battle with cancer.

Ms. Scattolon added to Mr. Bullard's update regarding climate change. The Department of Fisheries and Oceans' (DFO) Aquatic Climate Change Adaptation Services Program seeks to address climate change impacts and adaptations in regards to decisions faced by the department, including those related to vulnerable species. She requested that Tana Worcester share climate change related science papers with the U.S. and suggested that climate change become a standing agenda item on all Canada/U.S. Steering Committee meetings.

Additional Canadian updates included DFO's work on Aquatic Invasive Species Regulations and departmental consultations were underway with respect to new regulations relating to aquaculture. In the last federal budget, it was announced that DFO would receive resources under the National Conservation Plan for protected area planning. Additionally, the last budget announced additional resources for the Canadian Coast Guard, DFO Science, and Oceans and Coastal Management for the development of oil spill response strategies. Lastly, Ms. Scattolon noted that the department was pleased to announce its discovery of one of the lost ships from Sir John Franklin's Arctic expedition.

Species at Risk Working Group

Mr. Gouveia reported that the Working Group has tried to set up a meeting for 2014, but has been unsuccessful, largely due to budget constraints and competing priorities. A webinar is scheduled for the second week of October, with an agenda that will be more encompassing than past meetings (i.e., more species will be discussed).

Under the Atlantic Large Whale Take Reduction Plan, the U.S. took action on trap/pot and gillnet fisheries to reduce the impact of buoy lines on large whales. This rule relied on a co-occurrence model, which focuses on "hot spots." NMFS was able to implement focused closures, rather than larger areas. The rule also included increased gear marking requirements, minimum number of traps per trawl, and area closures. The attached document summarizes the status of species of interest.

Information sharing on Atlantic Mackerel and Spiny Dogfish

Atlantic Mackerel

Ms. Scattolon reported that Canada is observing declines in Atlantic mackerel. Canadian scientists recently completed an assessment, which indicates that mackerel are at the lowest level of abundance since assessing the species. They have implemented a dramatic reduction (70

percent) in allowable catch. In the past, the U.S. and Canada have undertaken efforts to develop a collaborative assessment approach at the TRAC.

Ms. Worcester added that the U.S. and Canada had established a working group on mackerel, which had a joint teleconference several months ago. However, there have been no recent interactions. The framework is in place for future collaboration. Mr. Bullard closed the discussion by adding that, several years ago, the Mid-Atlantic Fishery Management Council (MAFMC) requested joint management of mackerel. At the August MAFMC meeting, he asked managers if this request remained current and received an affirmative response, but acknowledged that a number of steps must be taken before a joint management approach could be considered.

Spiny Dogfish

Ms. Worcester reported that the TRAC conducted a benchmark assessment for spiny dogfish in 2010, but did not reach consensus. As a result, Canada and the U.S. have been conducting separate assessments. Canada recently completed a new benchmark and assessment for provision of management advice in Canada, which produced results that are consistent with the results of the recent U.S. assessment. This stock is healthy and, going forward, Canada expects to do an assessment every five years. This was raised to reiterate the importance of sharing scientific information on this species. Canadian management had set an interim quota for spiny dogfish for the 2014/15 fishing season.

Mr. MacDonald clarified that DFO was required to consult with the Scotia Fundy Groundfish Advisory Committee for recommendations on final quotas and discards. Mr. Bullard added that the U.S. has raised quota and trip limits, but the challenge has been insufficient shore-side processing and marketing. The U.S. industry is interested in this species because of its abundance.

Transboundary Resources Advisory Committee Report

Canada/U.S. Allocation Shares

Ms. Van Eeckhaute briefly summarized the allocation shares (attached), which is calculated using 90 percent recent survey biomass distributions and 10 percent historic catch. The table below includes the 2015 shares:

	Canadian Share	U.S. Share
Eastern Georges Bank (EGB) Cod	81%	19%
EGB Haddock	52%	48%
GB Yellowtail Flounder	30%	70%

EGB Haddock Assessment Results

Ms. Van Eeckhaute presented an update on EGB haddock (attached). In 2013, the combined TAC was 10,400 mt, and only 5,066 mt was caught, predominantly by Canadian fishermen. The 2003 and 2010 year classes were very large, and the 2013 year class preliminarily appears to be the largest in the time series. Biomass has fluctuated, and is at an all-time high, due in large part to the 2010 year class. Recruitment has been variable, and is generally higher when the biomass is above 40,000 mt. Because of uncertainty associated with the size of the 2013 year class, the TRAC downsized the size of this year class for forecasting biomass estimates and catch advice. The downsizing affects the 2016 beginning year biomass estimate and has little effect on the catch advice. A catch of 44,000 mt for 2015 has a neutral risk that fishing mortality would exceed F_{ref} . No questions resulted from this presentation.

EGB Cod Assessment Results

Ms. O'Brien presented an update on EGB cod (attached). The EGB cod assessment time series begins in 1978; sharp declines in catch began in the 1990s. The lowest catch in the time series was observed in 2013. Biomass has increased over the past few years due to a relatively stronger 2010 year class, but recruitment has been generally low since the 1990s. Little recruitment is expected from the 2011 and 2012 year classes. Biomass is well below 25,000 mt with a truncated age structure. If the TAC is set at 1,150 mt for 2015, the probability of exceeding F_{ref} is 50 percent. If the TAC is set at 225 mt, there is a 75-percent risk that biomass will not increase. Given the low spawning stock biomass, the TRAC recommends that management recognize the growth potential from the 2010 year class. Low catches are needed to promote rebuilding.

Mr. Bullard sought confirmation that the status of cod is declining. Ms. O'Brien confirmed that there will be few fish that recruit to the fishery after the 2010 year class. Mr. O'Connor noted that he sees improvements in the stock, and is not as pessimistic about its future. Ms. O'Brien indicated that new survey information will shed light on the size of the 2013 year class.

GB Yellowtail Flounder Assessment Results

Ms. O'Brien presented an update on GB yellowtail flounder (attached). The lowest catch in the time series was observed in 2013. Survey indices have continued to decline, indicating poor stock status. Catch curve analysis indicates high total mortality. At the June TRAC meeting, members agreed not to go forward with the VPA model for catch advice, but instead used the newly developed empirical approach, which recommended a quota of 44-354 mt under a constant exploitation rate (ranging from 2-16 percent) or using a constant quota of 400 mt or lower for three years to measure stock response.

Mr. O'Connor asked for clarification on the proposal to use one method for three successive years. Ms. O'Brien explained that the TRAC recommended holding one factor constant in order to measure stock response to the management decisions. Three years was chosen because of the life history of the species; they are fully mature by age three and only live until age six.

TRAC Terms of Reference (TORs)

The 2015 TRAC will be held in Canada, where assessments for EGB cod, EGB haddock, and GB yellowtail assessments will be reviewed. The 2015 TORs will be similar to previous years, with some exceptions related to changes in the assessment approach for yellowtail and interest in providing two year projections for GB haddock and cod. Final wording of the TORs was still being discussed by the TMGC, so the TORs were not ready for review and approval by the Steering Committee. Mr. Bullard and Ms. Scattolon agreed to review and approve the 2015 TRAC TORs secretarially, following additional work.

TRAC Timing

Ms. Worcester and Ms. O'Brien presented a discussion paper (attached) detailing issues related to the timing of the TRAC, which was meant to be a tool to help understand the scope of the constraints. A consequence table is presented at the end of the paper. Having assessments prepared for a June TRAC is becoming increasingly difficult, in part due to U.S. survey scheduling, sample preparation, and analysis. A specific proposal for a way forward had not been developed, but there were some initial discussions at the TMGC meeting.

The Steering Committee discussed the challenges on both U.S. and Canadian sides with moving the TRAC to July, August, and September, each of which presents constraints on surveys, management, and the consultation process. Mr. Karp offered to maintain the June date for TRAC in 2015, provided the appropriate committees develop an alternative for future years.

Ms. Scattolon and Mr. Bullard tasked the TRAC and TMGC to develop a workable solution to this problem at an intercessional meeting, including exploring using alternate data sources (e.g. U.S. weekly quota monitoring data), timing of surveys, and evaluating what information will be available in given timeframes so that the TRAC and TMGC can develop catch advice. A proposed solution is to be presented at the Canada/U.S. Steering Committee teleconference in April.

Transboundary Management Guidance Committee Report

TMGC Guidance Presentation

Mr. O'Connor and Mr. Stockwell presented the catch advice negotiated by the TMGC. They agreed to a TAC of 650 mt for EGB cod, a 50 mt reduction from 2013, which corresponds, approximately, to $F = 0.06$ and keeps F lower than 0.11 in response to poor stock status. This also reduces the risk of biomass decline relative to the expected biomass decline at a TAC=1150 mt. For EGB haddock, the TMGC agreed on a TAC of 37,000 mt, which has a low level of risk of exceeding F_{ref} and was chosen due to uncertainty of growth and abundance of the 2010 year class and maintaining biomass for future harvest. The TMGC considered both of the TRAC's recommendations on GB yellowtail flounder (i.e., constant exploitation rate or constant quota for three years), and selected a TAC of 354 mt based on a 16 percent exploitation rate for one year. The multi-year approach will be reevaluated at next year's TRAC. Mr. Nies provided some explanation to the U.S. legal requirements to rebuild stocks, which provided little room for

negotiations for 2015. (The International Fisheries Agreement Clarification Act provides flexibility from the 10-year rebuilding requirement. In the case of yellowtail flounder, it allows for rebuilding over a longer period of time, by 2032.)

EGB Cod Fishing Mortality Reference Point

Mr. O'Connor reported that the TMGC reviewed the 2014 TRAC analysis of an appropriate F to use with the VPA M 0.8 model. Members discussed negotiating a new F_{ref} , without having a consensus on a benchmark model, but did not recommend any changes to F_{ref} at this time. Based on TRAC advice, the TMGC agreed that an $F=0.11$ is an appropriate reference point for the VPA "0.8" model for providing catch advice.

Quota Trading

Mr. Stockwell summarized that the TMGC had a brief discussion about quota trading, but at current TACs, the only stock with any currency is EGB cod, and the quota is not high enough to take action. Mr. Nies noted that it will require considerable work to incorporate quota trading into U.S. management. Given both of these factors, the TMGC elected to defer on taking additional actions until stock conditions improve.

Review of TMGC

Mr. O'Connor discussed the TMGC's agreement to review administrative functions of TMGC, which will focus on the following issues: Documenting 10+ year history of TMGC; formalizing policies for preparation of meeting minutes, meeting materials, etc.; cataloging relevant documents (i.e., meeting minutes, policies); and considering having the U.S. maintain the TMGC website. Ms. Heil and Mr. MacDonald will lead this review. The TMGC expects management recommendations on additional topics that TMGC could explore and possible criteria to evaluate TMGC performance. A lengthy discussion ensued about the scheduling and timing of intercessional meetings to complete this work.

Closing Remarks

Mr. Bullard and Ms. Scattolon concluded the meeting by thanking the participants for their hard work and discussed 2015 meeting dates.

The following schedule was established for 2015:

- Intercessional TMGC: March 3-4, 2015. Members will determine in-person/teleconference at a later date. If TMGC requires input from TRAC, the co-chairs are required to provide plenty of time to allow for analysis
- Intercessional TRAC: March 20, 2015
- Steering Committee Teleconference: April 29, 2015, 9am-12pm EST (10am-1pm Atlantic).
- TRAC: Week of June 22, 2015 (currently proposed by the U.S. for the week of June 15)
- TMGC: September 9-10, 2015, in Halifax, Nova Scotia
- Steering Committee Meeting: September 11, 2015, in Halifax, Nova Scotia