**Canada/United States (U.S.) Transboundary Resources Steering Committee**

**Via Microsoft Teams**

**September 2, 2021**

**Meeting Minutes**

**Canadian Participants:**

Doug Wentzell, Fisheries and Oceans Canada (DFO), Steering Committee Co-Chair

Irene Andrushchenko, DFO, Science

Robert Apro, DFO, International Fisheries Policy

Ray Belliveau, Gulf of Maine Advisory Committee (GOMAC) Industry Co-Chair

Kathryn Cooper-MacDonald, DFO, Fisheries Management

Alain d’Entremont, Transboundary Management Guidance Committee (TMGC) Industry Co-Chair

Tracie Eisener, DFO Integration Committee

Jennifer Ford, DFO, Director of Resource Management and Licensing

Paul Gillis, DFO, Association Regional Director General

Terry Higgins, DFO, Integration Committee Co-Chair

Donald Humphrey, DFO, Species at Risk Working Group (SAR WG) Co-chair

Amber Lindstedt, DFO, International Fisheries Policy

Tara McIntyre, Transboundary Resource Assessment Committee (TRAC) Co-Chair

Roger Stirling, GOMAC Industry Co-Chair (via teleconference)

Reide Thomas, DFO, Integration Committee

Justin Turple, DFO, International Fisheries Policy

**U.S. participants**

Michael Pentony, National Marine Fisheries Service (NMFS) Greater Atlantic Regional Fisheries Office (GARFO), Steering Committee Co-Chair

Pete Christopher, GARFO, Supervisory Fishery Policy Analyst (Groundfish)

Elizabeth (Libby) Etrie, TMGC Industry Co-Chair

Marianne Ferguson, NMFS GARFO, Integration Committee Co-Chair

Jean Higgins, NMFS, SAR WG Co-Chair

Tom Nies, New England Fishery Management Council (NEFMC), Executive Director

Eric Reid, NEFMC Ecosystem-Based Fishery Management Committee

Michael Simpkins, NMFS Northeast Fisheries Science Center (NEFSC), TRAC

Spencer Talmage, NMFS GARFO, Integration Committee

Tara Trinko-Lake, NMFS NEFSC, TRAC Co-Chair

**Opening Remarks**

Mr. Michael Pentony, United States (U.S.) Steering Committee (SC) Co-Chair, opened with highlights of the new U.S. Administration’s initiatives. Through the “America the Beautiful” initiative, the Biden Administration is working with State, Tribal, and local partners to conserve at least 30% of United States lands and waters by 2030 to ensure access to food, clean air, and clean water, as well as to provide protections from climate related impacts. The initiative’s first report was published in June and included recommendations and eight principles to achieve the nation’s first conservation goal. Next steps include creating an American Conservation and Stewardship Atlas to measure conservation progress and establish more parks, expanding access to nature, enhancing wildlife corridors, incentivizing voluntary conservation efforts, and investing in jobs that support wildlife and ecosystem restoration. Mr. Pentony noted that the New England Fishery Management Council (NEFMC) will be contributing to the marine aspects of these efforts.

The National Oceanic and Atmospheric Administration (NOAA) recently developed a Climate and Fisheries Initiative, which will provide the information and capacity resource managers and stakeholders need to reduce impacts and increase resilience in a changing climate.

The Biden Administration continues to prioritize offshore wind development, with a goal of deploying 30,000 megawatts by 2030, which could be as many as 2,000 turbines. Northeast and Mid-Atlantic States have committed to buying 25,000 megawatts of offshore wind power by 2035.

Mr. Pentony advised that Ms. Janet Coit was named the new assistant administrator for NOAA Fisheries in June 2021, and that the majority of staff of the National Marine Fisheries Service (NMFS) and the NEFMC are still working remotely. All offices have returned to Phase 0 and only mission essential personnel remain on site

Mr. Pentony advised that the NEFMC is continuing to develop the Herring Rebuilding Plan, and that the U.S. delegation remains interested in the New Brunswick weir herring fishery and would appreciate an update at the Spring 2022 SC teleconference.

In terms of groundfish, on April 30, 2021, the U.S. published a rule that approved 2021 and 2022 Sector Operations plans and allocated 2021 Northeast Multispecies Annual Catch Entitlements. As part of this rule, the use of an audit model electronic monitoring program was approved to satisfy sector monitoring requirements for fishing year 2021. The NEFMC took final action on Amendment 23 on September 30, 2020. Measures include a target at-sea monitoring coverage rate of 100% for sector groundfish trips, Council approval of an audit model and maximized retention electronic monitoring, and other improvements to the monitoring program. NMFS is expected to make a final decision and publish a final rule in time for the start of the 2022 fishing year (May 1).

In closing, Mr. Pentony advised that the final rule to modify the Atlantic Large Whale Take Reduction Plan was rolled out the week of August 29, 2021. A number of gear modifications will go into effect May 1, 2022, which is the start of the American lobster/Jonah crab fishing year. The changes to the seasonally restricted areas will go into effect 30 days after the publication of this rule.

Mr. Doug Wentzell, Canadian SC Co-Chair, thanked the members of the Transboundary Resources Assessment Committee (TRAC) and the Transboundary Management Guidance Committee (TMGC), who had been meeting over the previous two days to develop fisheries management advice for this Committee’s consideration. He indicated that 2021 was another active year for North Atlantic right whales (NARW) in Canadian waters, with the vast majority of detections occurring in the Gulf of St. Lawrence. DFO Science aerial surveillance between April 14th and August 17th made preliminary identifications of over 115 individual North Atlantic right whales, including eight mother and calf pairs in Canadian waters.

In terms of fisheries management, DFO staff and the Government of Canada continue to provide support to the fishing industry during the COVID-19 pandemic. Work also continues to further support Indigenous fishing rights and Indigenous reconciliation. The Minister introduced a new path forward in March 2021 to build on work done to date to aid Indigenous peoples to fish in pursuit of a moderate livelihood. DFO continues to work with interested First Nation communities to develop and implement moderate livelihood fishing plans while balancing sustainability objectives.

Mr. Wentzell then provided an update on Canadian ocean sector initiatives, noting that the Government of Canada is aiming to protect 30% of Canadian waters by 2030, with an interim goal of 25% by 2025. DFO’s work on a bioregional network design to protect benthic habitats and species will contribute to achieving the 30 by 30 goal. The Government of Canada recently concluded a number of Blue Economy Strategy consultations with regional partners, stakeholders, and Indigenous peoples. This Strategy aims to maximize the benefits from our oceans through the lens of protecting and sustaining ocean resources. When asked how DFO defines “protected” ocean resources, Mr. Wentzell offered to share information on the ranges of protection detailed throughout various Acts (e.g., *Fisheries Act*, *Oceans Act*).

Mr. Wentzell reminded participants that Mr. Paul Gillis was appointed to the position of Associate Regional Director General, DFO Maritimes Region. For executive changes at the national level, Mr. Wentzell advised that Wes Shoemaker was appointed to the newly created position of Executive Head, Pacific Salmon Strategy Transformation; and Kate Ladell was appointed to the position of Director General, Biodiversity Management, Aquatic Ecosystems.

Mr. Wentzell concluded his opening remarks by notifying participants that a Canadian Federal election has been scheduled for September 20, 2021.

**ACTION: Mr. Wentzell to share links to the Acts that cover the range of protection of ocean resources.**

**Species at Risk Working Group Updates**

Ms. Jean Higgins, U.S. Species at Risk Working Group (SAR WG) Co-Chair, provided a brief presentation on NMFS’s Atlantic Large Whale Take Reduction Plan (ALWTRP), which was recently finalized. Ms. Higgins notified participants that the Batched Fisheries Biological Opinion for numerous Northeast species was finalized by May 31, 2021 – in accordance with the court-mandated deadline. This Biological Opinion assessed how the proposed *Marine Mammal Protection Act* (MMPA) Take Reduction Measures change the fisheries and includes further risk reduction efforts as outlined in North Atlantic Right Whale Conservation Framework for Federal Fisheries in the Greater Atlantic Region. Ms. Higgins noted that NMFS determined (in this Biological Opinion) that fishing activities are not likely to jeopardize the continued existence of any of the protected species, including north Atlantic right whales. Ms. Higgins shared that NMFS’s Northeast U.S. Implementation Team (NEIT) met in July 2021; participants can expect updates soon on NEIT’s website (<https://www.fisheries.noaa.gov/new-england-mid-atlantic/endangered-species-conservation/north-atlantic-right-whale-recovery-plan-northeast-us-implementation-team>) regarding team recommendations surrounding vessel strikes and overall NARW monitoring efforts. Additionally, the NEIT Population Evaluation Tool (PET) sub-group is expected to release a tech memo this winter.

In terms of the ALWTRP, Take Reduction Planning is required under the MMPA if incidental mortality and serious injury exceeds Potential Biological Removal; therefore, the ALWTRP is focused on recommendations that will help reduce mortality and serious injury to NARW. Phase 1 of the ALWTRP introduces a number of gear modifications and restricted area configurations that are closed to persistent vertical buoy lines to reduce the number of NARW entanglements in the Northeast lobster and Jonah crab trap/pot fisheries. The gear measures under Phase 1 take effect May 1, 2022. Ms. Higgins added that Phase 2 was announced during summer 2021 and the public comment period will remain open until October 21, 2021. Ms. Higgins closed her SAR WG updates by sharing a ALTRWP fact sheet (<https://media.fisheries.noaa.gov/2021-08/ALWTPFACTSHEET2021.pdf>) with meeting participants.

Mr. Donald Humphrey, Canadian SAR WG Co-chair, provided updates on *Species at Risk Act* (SARA) listings. DFO is in the process of determining whether or not to list nine populations of Atlantic Salmon under SARA representing approximately half of the designatable units in Canadian waters. Three of the populations are found in DFO Maritimes Region (including Outer Bay of Fundy, Eastern Cape Breton, and Southern Upland) and an additional population (Inner Bay of Fundy) has been listed since the Act came into force in 2006. Mr. Humphrey anticipates a listing decision for these populations in early 2022. If listed, a series of recovery planning processes will be triggered, including the development of a recovery strategy and one or more action plans, as well as the identification of critical habitat.

On August 12, 2021, the Government of Canada announced its intent to move forward with developing a new or renewed approach to conserving wild Atlantic salmon more broadly across Canada. DFO’s current approach is guided by Canada’s Wild Atlantic Salmon Conservation Policy and its accompanying Wild Atlantic Salmon Conservation Implementation Plan, which ends this year. To contribute to a new or renewed approach to conserving wild Atlantic salmon, DFO will lead discussions over the coming months with Indigenous communities and organizations, government partners, and conservation organizations, as well as recreational fishing associations and the general public.

Mr. Humphrey noted that as of August 17th, 2021 there were 934 NARW visual encounters in Canadian waters by aircraft or boat (for a total of 1334 NARWs sighted, including duplicates) and 1161 definite NARW near real-time acoustic detections made by specialized buoy systems and automated underwater vehicles called gliders. DFO Fisheries Management continues to implement measures to protect Right Whales, with the primary objective being the prevention of fishing gear entanglement.

The Government of Canada made some new investments in Species at Risk under Budget 2021 through the renewal of the Nature Legacy Initiative – a $2.3 billion investment in a wide variety of initiatives intended to conserve and restore aquatic species and habitats. The renewed Nature legacy Fund will provide an additional $23M on top of the $55M already provided to 56 various stewardship groups through Budget 2018 to support conservation projects taking place between April 1, 2022 and March 31, 2026, including one new project DFO funded with the Peskotomuhkati Nation at Skutik to undertake a number of studies on the St. Croix watershed which runs along the border between Canada and U.S.

Mr. Humphrey concluded by noting that core members of the Canada-U.S. SAR WG met on August 20, 2021 to discuss the revised terms of reference (ToRs) and potential areas of focus for a broader meeting in the fall of 2021. Since the working group has not met for some time and there has been some turnover in participants, the focus of the first meeting will likely be on introductions, providing an overview of respective legislations and policies, and identifying key species and areas of interest.

**Transboundary Resources Assessment Committee (TRAC) – Discussion of 2021 TRAC Results - Yellowtail Flounder Assessment**

Ms. Tara Trinko-Lake, U.S. TRAC Co-Chair, presented on TRAC’s Georges Bank (GB) Yellowtail flounder assessment and resulting catch advice. Ms. Trinko-Lake reminded participants that Yellowtail flounder is assessed on the entirety of Georges Bank, rather than a Eastern George Bank area, like haddock and cod. After reviewing the six objectives under the Yellowtail flounder ToRs, Ms. Trinko-Lake noted that the 2020 catch was the lowest in 86 years, with combined Canada and U.S. catches in 2020 totalling 14 mt against a quota of 184 mt. There was no Canadian directed fishery and total Canadian landings were 6 mt.

The survey biomass for both surveys found that the biomass of Yellowtail flounder is significantly diminished, despite reductions in catch to historical low amounts. The DFO 2021 survey determined the third lowest biomass index in 35 years. The NMFS Spring 2021 survey determined the sixth lowest biomass index in 54 years. The NMFS Fall 2020 survey was not conducted due to the COVID-19 pandemic. This stock continues to exhibit low productivity with all available research vessel surveys showing low recruitment. Recent recruitment has generally been below average and age structure is truncated (i.e., both fewer young fish and fewer old fish). Recent catch is low relative to the biomass, but total mortality from all sources remains high. Fishing does not appear to be a major driver of this stock.

Ms. Trinko-Lake presented the findings of a Working Paper by Miller et al. on Yellowtail flounder, which applied models to the Northeast Fisheries Science Center’s (NEFSC) spring and fall surveys. This new catchability analysis lowered the expanded survey biomass and increased the historical exploitation rate from 6 to 7%. Application of the Empirical Approach with new Miller et al. data and an exploitation rate of 7% results in catch advice of 184 mt for 2022. The historical impact of the missing NEFSC fall survey was large, resulting in a 24% decrease in survey biomass. Adjusting for the missing fall survey results in a final catch advice of 243 mt for 2022 under the Empirical Approach.

Ms. Trinko-Lake noted that TRAC recommended employing multi-year catch advice. With GB Yellowtail flounder currently at very low abundance, the Empirical Approach makes minor changes to quota. However, catch is well below the quota. Selecting a constant quota that would hold as long as surveys remain roughly where they are now would simplify management. Ms. Trinko-Lake highlighted the R Shiny app which was developed to explore possible limits within which a constant quota could be applied via a limiter approach. TRAC recommends this approach for future catch advice.

TRAC developed a new approach for generating advice (‘The Limiter Approach’), which will provide advice at a constant level of 200 mt every year, until the survey biomass falls outside the pre-determined limits. TRAC suggests a lower limit of 1,000 mt and an upper limit in the range of 7,300-8,500 mt. The application of the Limiter Approach eliminates advice following survey noise, while remaining cognizant of the low recent catches and poor condition of the stock. Despite the final catch advice of 243 mt for 2022 being derived from the Empirical Approach, TRAC recommends a change to constant catch advice through the Limiter Approach in future.

Ms. Trinko-Lake concluded by noting that the U.S. has a domestic benchmark (now called a “Research Track”) scheduled in 2024 for all their stocks of Yellowtail flounder, and that the U.S. delegation would appreciate Canadian participation.

**TRAC - Discussion of 2021 TRAC Results - Haddock Update**

Ms. Trinko-Lake presented TRAC’s assessment and resulting catch advice for Eastern Georges Bank (EGB) haddock. Following a review of the 2021 Terms of Reference for Haddock, she noted that the combined Canadian and U.S. catches of EGB haddock in 2020 totaled 11,724 mt from a quota of 30,000 mt. The Canadian catch was 11,052 mt out of their 13,800 mt quota, a decrease from roughly 14,000 mt in 2019. The U.S. catch was 672 mt out of their quota of 16,200 mt, a slight increase from 2019.

Only Canadian data was available to determine the fishery catch-at-age. The exceptionally large 2013 cohort (age 7) made up the majority of the Canadian catch. Catches of older (9+) fish were low in 2020. As the 2013 year class exits the population, the population biomass is expected to continue declining into 2022, even if no catches are taken in 2021. For EGB haddock’s survey biomass index, the most recent DFO survey found a 15% decrease in biomass index while the NMFS Spring 2021 survey found a similar biomass to the NMFS Spring 2019 survey.

In the absence of a model, there are no analytical projections to characterize risk for catches in 2022. In order to give some guidance, TRAC examined the survey and fishery indicators and compared them to 2021 TRAC advice. Noting the high level of uncertainty due to lack of an assessment model and missing data due to COVID-19, there are both positive and negative considerations to inform the appropriateness of the 2021 TRAC advice for 2022. TRAC’s examination of survey and fishery indicators found that the average survey biomass (DFO and NMFS Spring surveys) in 2021 is near the time series average. The available DFO survey catch-at-age indicates that many ages are above the median, and the ratio of quota to survey biomass (0.31) is below the time series average (2004-2021; 0.35 for DFO and NMFS Spring). TRAC’s consensus is that the stock condition is not poor. Based on the review of recent survey results and relative F, TRAC considers the 14,100 mt quota set by TMGC for 2021 as appropriate catch advice for 2022 and not likely to be a conservation concern.

**TRAC – Discussion of 2021 TRAC Results – Cod Update**

Ms. Irene Andrushchenko presented on EGB cod. After reviewing the four ToRs for 2021, Ms. Andrushchenko shared that the range of advice for EGB cod for 2022 is 520mt – 650mt. With one of the two available surveys reaching a new series low for biomass in 2021, TRAC asked that the TMGC consider the lower part of the provided range when choosing the 2022 TAC. The total combined Canadian and U.S. 2020 catch was 444 mt, which was 68% of the 650 mt quota. Of this total, the Canadian 2020 catch was 377 mt and the U.S. catch was 67 mt.

As the EGB cod models were rejected in 2018, TRAC proposed the use of the DLMtool as an **interim** approach to providing advice. The two year process of applying the DLMtool to generate an interim method of providing catch advice for EGB cod was completed successfully and TRAC recommends that the DLMtool be replaced or supplemented with at least one functioning population model as soon as possible. Additionally, TRAC strongly recommends a benchmark for this stock.

**TRAC – Groundfish Allocations**

Ms. Andrushchenko presented the Groundfish Allocations through fishing year 2022. She reviewed the ToRs, the first of which was to review the biomass distribution relative to the U.S./Canada boundary and update results with the 2020 survey information. The second ToR was to provide options to TMGC on approaches to deal with the missing survey information due to the impacts of COVID-19. ToR 3 was to provide details on analyses to deal with the missing survey information due to the impacts of COVID-19.

Allocation shares are based on an agreed upon formula that incorporates both historical utilization of the fishery and the survey distribution of the resource from the most recent fishing year. Since 2010, the weighting has been set at 90% for resource distribution and 10% historical utilization (1967-94). Due to the pandemic, two of the three surveys normally used to calculate resource distribution were missing. TRAC filled in the missing survey values for this year’s calculation by taking a two-year average of the previous two years for each impacted survey. This approach was approved by TMGC. Ms. Andrushchenko noted that missing values were filled at the Proportion step of the Allocation data flow rather than the biomass step, as this method is scientifically defensible and minimizes disruption to the negotiated allocation process. The filler values became the accepted 2020 NMFS spring and fall proportion values. It was noted that the 2020 NMFS spring and fall biomass values remained blank, meaning ToR 1 was not met.

Based on the formula and the filler values, the allocation shares for fishing year 2022 are 28% U.S. and 72% Canada for cod, 47% U.S. and 53% Canada for haddock, and 61% U.S. and 39% Canada for Yellowtail flounder.

**TRAC 2022 Terms of Reference and Future Meeting Schedule**

Ms. Tara McIntyre, Canadian Co-Chair of TRAC, shared the 2022 ToRs for TRAC’s assessment of EGB cod, EGB haddock, GB Yellowtail flounder, and Allocation Shares, as well as other information and advice to help support TMGC’s decisions on transboundary resources. For 2022, the cod ToRs remain the same as for 2021, with the addition of a comparison of length-weight, growth and maturity assumptions in the DLMtool, against the available survey data. If the assumptions remain valid, TRAC is to generate the catch advice for 2023 from the agreed-upon management procedures.

For EGB haddock, the ToRs remain the same as they were for 2021, with the addition of three bullets:

* If an analytical model from the research track is available for application to the EGB management area, provide catch advice for 2023. For a range of total catch values in 2023, estimate the risk that the 2023 fishing mortality rate would exceed Fref. Include a table showing the 2023 catches corresponding to low (25%), neutral (50%) and high (75%) probability that the F would exceed Fref respectively. For a range of total catch values in 2023, estimate the risk that the biomass at the beginning of 2024 would not achieve a 0%, 10%, or 20% increase compared to the beginning of 2023.
* If the research track assessment does not result in an analytical model, apply the empirical or index based back-up approach developed by the research track.
* If the research track assessment cannot be applied, comment on the application of the 2022 catch advice for 2023.

For Yellowtail flounder, in addition to the bullets from 2021, TRAC proposes to apply the limiter approach rather than the benchmark assessment (empirical approach) used for 2021, to provide catch advice for 2023, and describe any adjustments to the limiter including impacts on the advice given to TMGC. TRAC will report on the progress of ongoing discussions with TRAC and TMGC on the limiter approach and changes to the bounds or harvest strategy. TRAC will examine available results funded by the research set aside program that could provide context to the TRAC catch advice.

For Allocation Shares, TRAC will review the biomass distribution relative to the U.S./Canada boundary, and update results with the 2021 survey information.

Additionally, TRAC will report on any changes to the surveys that might impact the assessments, such as changes to vessels, timing, area coverage, etc. and describe any potential impacts of these changes. TRAC will also discuss, as appropriate, the impacts of COVID-19 restrictions in each country on achieving or completing work on any ToRs, including any alternatives to address data shortfalls. TRAC will also update on the Atlantic cod research track working group, and draft terms of reference for the 2023 TRAC assessment of Eastern Georges Bank Cod, Eastern Georges Bank Haddock, and Georges Bank Yellowtail Flounder. Lastly, TRAC will share progress on research that may be applicable.

Ms. McIntyre noted that participants can expect an update on the Atlantic cod research track by July 2022. Additionally, TRAC is planning a meeting for July 2022, as well as TMGC intersessional meetings in the fall 2021 (on DLMTool and Yellowtail flounder) and spring 2022 (on haddock).

Mr. Nies asked for clarification regarding the ToR to “share progress on research that may be applicable to TRAC.” Mr. Alain d’Entremont, Canadian Co-Chair of TMGC, responded that the discussion on this item was focused on whether to pick individual papers or research, or to leave the process open and bring in papers or research as they come to the attention of the Committee. The decision was to leave the process open.

Mr. Nies then asked how the DLMTool will be used if the assumptions remain valid. Ms. Elizabeth Etrie, U.S. Co-Chair of TMGC, responded that the goal regarding the DLMTool was to develop a shared understanding of how it can be used, and if there is a desire for a better shared understanding, this bullet allowed space to adjust/develop Management Procedures at the TMGC intercessional if necessary. Mr. Nies suggested that TMGC members wait for the TMGC intersessional to make edits to the TRAC ToRs.

**Update on Haddock Research Track Process**

Ms. Trinko-Lake shared an update on the progress made toward the twelve haddock Research Track ToRs which are listed in the presentation provided to SC participants in advance of the meeting. Of the twelve, ToRs 5,6,8 and 11 still require completion and ToR 7 is ongoing.

Ms. Trinko-Lake concluded this item by noting that a peer review meeting is scheduled for the week of January 25, 2022 and will include peer reviewers from both Canada and U.S.

**TMGC Report**

TMGC Co-Chairs, Mr. d’Entremont and Ms. Etrie, presented the TMGC Report on the recently negotiated Total Allowable Catch (TAC) based on TRAC advice.

For EGB cod, two management procedures were selected by TMGC to guide TRAC in providing interim advice using the DLM tool. These were status quo from 2018 TAC, and status quo minus 20%, resulting in a range of advice of 520-650 mt for 2022. Given that one of the two available surveys reached a new series low for biomass in 2021, TRAC recommended that the 2022 TAC be in the lower part of the range. TMGC concluded that the most appropriate combined TAC for EGB Cod for 2022 is 571 mt, which is a 10% decrease from 2021. The Canadian TAC is 411 mt (72% share) and the U.S. TAC is 160 mt (28% share). TMGC sought to reduce the quota in 2022, while continuing to balance the utilization of other species, signals of the survey indices, and consideration of risks to the stock. The status of the stock remains poor. Special considerations for EGB cod are included in the presentation.

For 2022, TRAC compared the index based method to the constant catch (limiter) approach originally presented at the 2020 TRAC meeting, and recommended the adoption of the limiter approach. TMGC agreed with the TRAC recommendation of 200 mt, developed using the limiter tool, but only for fishing year 2022. TMGC intends to discuss a mutual understanding on how to implement the limiter tool before formally adopting it. An intersessional is planned to occur in early 2022. In Canada, TACs are reviewed annually and there are special considerations for years in which there are multi-year TACs TMGC recommends a 2022 TAC of 200 mt, which is an increase from 125 mt in 2021, and is consistent with the TRAC recommendation for 2022. The Canadian TAC is 78 mt (39% share) and the U.S. TAC is 122 mt (61% share) The declining trend of the stock remains, despite reductions in catch to historically low amounts, indicating a poor state of the resource. Available information suggests that current levels of catch are not primary factors impacting stock rebuilding. TMGC sought to balance stock conditions and utilization of other species.

For EBG haddock, based on the review of recent survey results, and relative fishing mortality, TRAC considered that the 14,100 mt 2021 TAC would also be appropriate for 2022, and not likely to be a conservation concern. TMGC agreed with TRAC’s recommendation, of 14,100 mt with a Canadian TAC of 7,473 mt (53% share) and ta U.S. TAC is 6,627 mt (47% share). The TRAC consensus was the stock was not poor. Special considerations for EGB haddock can be found in the presentation provided.

TMGC is planning two intercessional meetings. The Fall 2021 meeting will discuss the DLMTool and Yellowtail flounder Limiter Approach. The Spring 2021 meeting will discuss the potential adoption of joint reference points for haddock.

Mr. Pentony requested additional details on the cod research assessment discussion at TMGC, noting the Canadian participation in the research track and the working group would be extremely valuable. Mr. Wentzell responded that there is interest in Canadian participation but that DFO must first consider its Regional science planning and management priorities. Mr. Michael Simpkins added that all potential Canadian participants can contact him for clarity on the research tracks. Mr. Wentzell intends to follow up with Mr. Pentony on the cod research track after the SC meeting.

**New England Fishery Management Council’s Ecosystem Based Fisheries Management “*Example Fishery Ecosystem Plan*”**

As requested during the previous Spring meeting, Mr. Nies provided a verbal presentation on the NEFMC’s “Example Fishery Ecosystem Plan” (eFEP). Desire has grown over the years to expand past the status quo of single stock management to incorporate ecosystem-based principles and to develop an approach for multiple species, as well as habitat protection. At the broadest level, this eFEP is an attempt to optimize all of the ecosystem services that are provided, which are primarily fisheries resources.

The NEFMC has developed a [draft eFEP for Georges Bank](https://s3.amazonaws.com/nefmc.org/3_Draft-example-Fishery-Ecosystem-Plan-eFEP_190830_113712.pdf) under the conceptual framework for how ecosystems could be managed under fisheries principles. For example, certain stocks would be grouped in stock complexes. The draft eFEP for Georges Bank proposed a limit on total ecosystem catches that consider system-wide primary productivity and net import of energy from neighbouring ecosystem production units. In addition to stock complexes and catch caps, the eFEP also proposes floors, below which a stock is deemed to be in the critical zone. Stock complexes that dip below that level would require action to remedy the issue.

Mr. Nies emphasized the need to educate stakeholders on what a “Fishery Ecosystem Plan” (FEP) actually means. The NEFMC has developed a series of public workshops to develop an understanding of how Ecosystem-based Fisheries Management (EBFM) would work. The NEFMC will be issuing a request for proposals for a contractor to assist in this engagement effort. However, the COVID-19 pandemic has delayed the public workshops until at least next year.

NEFMC recognizes that a lot of work remains to be done on this idea, particularly with respect to legal and policy considerations, jurisdictional issues between different councils and States as well as with Canada, and gear types.

Mr. Nies concluded this item by sharing that the [NEFMC’s EBFM webpage](https://www.nefmc.org/committees/ecosystem-based-fisheries-management) contains a number of documents prepared for the public.

**Closing Remarks**

Ms. Marianne Ferguson of the SC Integration Committee suggested that the week of May 9 would be good for the U.S. delegation for the spring 2022 meeting, the week of September 12 works well for the fall 2022 meeting. Mr. Wentzell tentatively agreed to those dates; meanwhile, TRAC is currently in discussions for potential dates in July.