

New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116 C.M. "Rip" Cunningham, Jr., *Chairman* | Thomas A. Nies, *Executive Director*

MEMORANDUM

DATE: July 29, 2013

TO: Groundfish Oversight Committee (OSC)

FROM: Groundfish Plan Development Team (PDT)

SUBJECT: PDT Conference Call, July 10, 2013

The PDT held a conference call to discuss (1) **Framework 51** (2) **other groundfish issues**, (3) **Amendment 18** and (4) **other business**.

Participants

NEFMC Staff	Jamie Cournane, PhD (PDT Chair), Fiona Hogan, PhD, and Rachel Feeney
	(A18 lead)
NMFS NERO	Tim Cardiamenos, Michael Ruccio, Sarah Heil, Dan Caless, and Will
	Whitmore, PhD
NEFSC/SSB	Paul Nitschke and Chad Demerest
State	Sally Sherman (ME DMR) and Steven Correia (MA DMF)

1. Framework 51

At the June 2013 Council meeting, the Council initiated FW 51. At that time, the PDT was tasked with providing advice to the Groundfish OSC on which measures to include in this framework. Items with regulatory requirements include: 1) revise the GOM cod rebuilding plan, 2) revise the American plaice rebuilding plan, 3) specifications for white hake, and 4) US/CA TACs.

1.1. Update on Recent TRAC Assessments, June 2013

The Transboundary Resource Assessment Committee (TRAC) met June 25-27 in St. Andrews, NB to conduct assessments for Eastern Georges Bank (EGB) cod, EGB haddock, and GB yellowtail flounder. TRAC status reports (TSRs) were drafted at the meeting and available at www.nefsc.noaa.gov/saw/trac. An overview of the results is provided here:

EGB cod

Following the benchmark assessment earlier this year, although there was no consensus on the most appropriate model, it was agreed to provide catch advice on a single assessment model (VPA M 0.8) for EGB cod. In this model, natural mortality (M) was fixed at 0.2 for all ages in all years except for ages 6+ in years after 1994 (i.e., assumed higher natural mortality of M=0.8 for older ages post-1994). The estimated adult population biomass from the assessment model at the beginning of 2013 was 11,160 mt. F in 2012 was estimated to be 0.07. The 2003 year class is estimated to be the highest recruitment since 2000 (excluding 2010). The initial estimate of the 2010 year class is that it could be stronger than the 2003 year class based on the 2013 assessment. Average weight at length, used to reflect condition, has been stable in the past, but has started to decline in recent years. Lower weights at age in the population in recent years and poor recruitment have contributed to the lack of rebuilding. The TRAC conducted analyses and provided advice at F=0.11 because Fref= 0.18 is no longer consistent with the VPA M 0.8 model, given the increase in natural mortality on the older age groups. Although the VPA M 0.8 model results are not reliable for population trends (due to retrospective bias), comparison with sensitivity analyses that adjusted for the instability indicated similar catch advice. A 50% probability of not exceeding F =0.11 implies catches less than 1,225 mt. A consequence analysis showing the risks associated with the assumptions of the VPA M 0.8 model and the ASAP M 0.2 (reviewed at the 2013 benchmark) was also considered. Given the extremely low SSB, the TRAC advises that management should try to realize the growth potential from the 2010 year class to rebuild the spawning stock biomass. In order to not exceed F=0.11 and to achieve a 10% increase in biomass, catches must not exceed 600 mt.

EBG haddock

The 2013 adult population biomass increased to 183,600 mt. The current estimate for the very strong 2010 year class is 474 million age 1 fish, which would make it the largest cohort in the assessment time series. The preliminary estimate for the 2012 year class is 15 million fish. Fishing mortality in 2012 (0.16) was below Fref=0.26. Fish condition has generally been below the time series average since 2000. Assuming a 2013 catch equal to the 10,400 mt total quota, a combined Canada/USA catch of 31,500 mt in 2014 results in neutral risk (50%) that the 2014 fishing mortality would exceed Fref=0.26. The probability that the 2015 biomass will not increase is greater than 75% at the Fref catch level and it is unlikely that it will increase by 10% at any of the catch scenarios considered. Biomass at the beginning of 2015 is projected to be very high at 240,000 mt, if fishing at Fref. The TRAC considered but did not recommend a benchmark for haddock.

GB yellowtail flounder

The Split Series VPA, which splits the survey indices between 1994 and 1995, was used for the stock assessment, but a retrospective adjustment (denoted rho adjustment) was applied to the terminal year estimates for both status determination and when providing catch advice. The TRAC acknowledges that the assumptions made about population dynamics in the model do not fully capture the trends in the data. However, the model's conclusion that stock conditions are poor is valid. Adult population biomass (age 3+) at the start of 2013 and spawning stock biomass in 2012 are both estimated to be the lowest values in their time series when the rho adjustment is applied. Recruitment of the three most recent cohorts is estimated to be the lowest in the time series. Fishing mortality for fully recruited ages 4+ is estimated to be above the reference point

of Fref = 0.25 for the entire assessment time series. To achieve a high probability that F in 2014 will be less than Fref, a 2014 quota of less than 200 mt would be required. In order to achieve high probability that adult biomass will increase from 2014 to 2015, a 2014 quota of less than 500 mt would be required. Due to the assumption used for the 2012 year class in the projections, the increase in adult biomass will be optimistic if the 2012 year class is as poor as the recent year classes. Catches well below 500 mt are likely needed to achieve the harvest strategy. The TRAC considered but did not recommend a benchmark assessment for yellowtail flounder.

Resource Shares

The US shares for 2014 will be:

- EGB cod 22% (up from 16% in 2013)
- EGB haddock 39% (up from 38% in 2013)
- GB YTF 82 % (up from 43% in 2013).

Briefly, the PDT discussed why the Canadians cannot catch their entire haddock quota and concluded that other stocks might be limiting access (e.g., Eastern Georges Bank cod). The PDT also was interested in how natural mortality was determined in the recent benchmark stock assessment for Eastern Georges Bank cod, which set M=0.8 on the 6+ age group after the split in the survey (a change from previous assessments) for the VPA 0.8 model¹.

1.2. Georges Bank yellowtail flounder

The PDT had an initial discussion on the findings from the TRAC's recent 2013 Georges Bank yellowtail flounder assessment (see above for summary of the assessment). They discussed the catch advice and whether or not it could be trusted considering recognized model uncertainties (e.g., model assumptions do not capture stock dynamics, accuracy of the SSB estimate, retrospective pattern in SSB, need for the Rho adjustment in the terminal year SSB). The PDT was also concerned that the conflicting advice coming out of the assessment that seemed to be very precise (e.g., F_{ref} = 123 mt; e.g., catches less than 200 mt to achieve F_{ref} or well below 500 mt to increase adult biomass from 2014 to 2015), given the caveats about the model². Some PDT members wondered if there is much of a difference in providing catch advice between 100 mt and 500 mt, since such advice compared to past catch advice is so low. The PDT agreed with the assessment that the stock is in poor shape and discussed the past performance of trans-boundary management. Recent rebuilding has not occurred despite the stock assessment findings and subsequent management advice. The PDT discussed whether a benchmark assessment should

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¹ Note: Natural mortality was model driven; the retrospective was minimal when M=0.8 in the VPA, and the rationale was that seals were consuming cod in Feb-Mar when migrating south from Canadian waters, although no quantitative results were presented at the benchmark assessment. Related to the no consensus on a benchmark model was the concern of some TRAC members that the 0.8 model was unstable; when the additional year was added, the model wanted M to be ~ 1.5 for the 2003 year class. Not all TRAC members believe M has changed this dramatically for EGB cod.

² Note: The TRAC has a harvest policy to not exceed Fref, and when stock is in poor condition to further reduce F to promote rebuilding. The 500 mt is mentioned here, relative to risk to biomass increase as quota is increased. To meet the Fref policy, the quota would need to be123 mt to not exceed Fref and if there is to be any growth in the stock, catches would need to be 300 mt or less. The TRAC does not have a biomass reference target, just the Fref.

occur for this stock, however without additional data they feel that it may not be warranted at this time. However, the PDT did discuss whether or not data poor approaches might be a better choice for this stock (e.g., an index-based method). They did not make any conclusions on such an approach for Georges Bank yellowtail flounder.

Mr. Correia, Mr. Nitschke, and Dr. Cournane agreed to discuss the stock assessment in further detail and report back to the PDT at the next PDT meeting. It was also noted that Dr. Hogan and Dr. Cournane would be attending the upcoming ICES World Conference on Stock Assessment Methods (WCSAM) on July 14-19 (the first two days included a workshop with Georges Bank yellowtail flounder as one of several focal species). The PDT requested an update on any relevant findings from the workshop and conference at the next PDT meeting.

1.3. GOM cod and American plaice rebuilding plans

GOM cod and American plaice are making inadequate progress toward rebuilding by 2014 and 2017, respectively. The PDT discussed possible changes to rebuilding plans and subsequent analyses. Mr. Nitschke provided an overview of analyses to date on both stocks. The PDT provided advice on additional considerations for revisions to the rebuilding plans. Mr. Nitschke agreed to develop rebuilding plans for GOM cod and American plaice and present these at the next PDT meeting. In addition at the next PDT meeting, Mr. Correia, Mr. Nitschke, and Dr. Cournane agreed to summarize concerns about rebuilding plans (e.g., past performance, use of information from assessments, percent increases per year needed to achieve rebuilding plan targets).

GOM cod

Mr. Nitschke discussed his initial analysis of two rebuilding options which both avoid $F_{rebuild}$ becoming the limiting factor. Both options would (7 year and 10 year plans) involve an extension of time, with no change to the ABC. The current trajectory for cod at 75% F_{MSY} would need an additional 8 or 9 years to rebuild, but any time period less than that is when $F_{rebuild}$ would be limiting. The PDT advised Mr. Nitschke to develop rebuilding plans for GOM cod under 7 year and 10 year plans, keeping ABCs in projections and estimating $F_{rebuild}$ afterwards, using both the F_{ramp} and Base Case models (from the recent assessment). Some members were concerned about use of the F_{ramp} model, since mortality increases over time and whether or not that would continue into the future. Rebuilding plans will include trajectories under 75% F_{MSY} and F=0 as well.

American plaice

The PDT advised Mr. Nitschke to develop rebuilding plans for plaice (7 year plan and 10 year plan). The current trajectory for American plaice at 75% F_{MSY} would need an additional 7 years to rebuild, but any time period less than that is when $F_{rebuild}$ would be limiting. Rebuilding plans will include trajectories under 75% F_{MSY} and F=0 as well.

Some on the PDT expressed concerns that rebuilding plans do not always work well. Rebuilding depends on recruitment, and some PDT members expressed that recruitment is so poor for some stocks. Some members questioned if better monitoring was needed, but other members thought recruitment is so unpredictable for some stocks that they were unsure if additional monitoring would lead to improved understanding of the recruitment dynamics (e.g. the large 2003 Georges

Bank haddock year class ending up rebuilding with F at much higher than what would be placed in a rebuilding plan). Some on the PDT were concerned that rebuilding plans keep being extended.

As an example, Mr. Correia discussed the new SNE-MA winter flounder rebuilding plan. To rebuild from 7,076 tons of SSB in 2010 to 43,661 tons in 2023, this would require a 15% annual growth rate. Median growth when the stock was increasing was 6.6%. At 6.6% growth, the stock will be at approximately 16,241 metric tons in 2023 (37% of Bmsy, still overfished). However, the period of these low annual growth rates occurred simultaneously with high fishing mortality rates and declining recruitment. Periods when annual stock growth was near or exceeded 15% were associated with above median recruitment (mid-1990's) or the recent period with low recruitment and relatively low fishing mortality rates. A return to high recruitment would be needed to rebuild.

Redfish was also mentioned as an example of a stock that rebuilt much earlier than initially predicted because of a series of good year classes. It should have been set to rebuild by 2055.

The PDT is also concerned about poor track record with long-term projections. In some cases, the starting point is lower than what was used in the projections and in other cases F-targets have been missed because of retrospective issues and short-term projections.

1.4. Specifications for white hake

Mr. Nitschke provided an update on progress toward specifications for white hake. In the assessment, two projections were run, one that used the entire recruitment time series and the other that used the last 15 years of recruitment. Recruitment was lower earlier on in the time series, in the short term these assumptions do not make a difference, but in future projections the advice diverges. Also, the best estimate of 2013 catch is needed for the projections. The PDT advised Mr. Nitschke to use the model for short-term advice as recommended in the assessment. Mr. Ruccio noted that in the past white hake was very close to full utilization, but in fishing year 2012 hake might not be limiting. Mr. Caless noted that in 2012 the commercial fishery took about 75% of the quota. In addition, Mr. Caless agreed to provide an estimate of recent catches for 2013. Mr. Nitschke will present an update on the specifications for white hake at the next PDT meeting.

2. Other Groundfish Issues

The PDT also discussed the status of other groundfish items (haddock spillover, EGB cod reporting, whiting, halibut and wolffish AMs, RA authority for in-season US/CA stocks adjustment, disapproved reporting issues in FW48, and carryover issues.

Haddock spillover- The PDT is continuing to work on a memo to the OSC and SSC on this issue.

EGB cod reporting- Mr. Ruccio noted that a letter from the Council was received on this issue. Reporting will shift back to the approach taken in 2010.

Whiting, AMs- Ms. Heil and Dr. Cournane agreed to continue discussing the development of whiting AMs and provide an update at the next PDT meeting. Developing a whiting AM could be a regulatory requirement for FW51.

Halibut and wolffish AMs- Ms. Heil advised that state data is still being finalized for halibut to determine if the total ACL was exceeded in 2012. This would require gear restrictions by area as adopted in FW48. Wolffish catch information for 2012 is also being finalized. Triggering the AMs for halibut and wolffish for an overage in FY12 would be an RA action based on measures adopted in FW48.

RA authority for in-season US/CA stocks adjustment- Ms. Heil informed the PDT that the TMGC is interested in quota trading and this approach would give the RA authority to adjust quotas inseason. Mr. Demerest was interested in how the trades would be conducted and if they would have monetary value. Ms. Heil responded that they would be country to country trades and be in the form of species quota for the trans-boundary stocks on Georges Bank (e.g., X quota of US haddock for Y quota of Canadian yellowtail flounder). Ms. Heil suggested that on the quota trading issue that FW 51 would only need to include the authority for in-season change on quota trading.

Disapproved reporting issues in FW48 and carryover issues- An update on these two issues will be provided at the next PDT meeting.

3. Amendment 18

The PDT reviewed the pertinent motions from the June 2013 Groundfish Committee and NEFMC meetings. The full text of the final motions is included in the Appendix. In essence, the NEFMC voted to replace the prior set of four goals and two objectives with a new set of four goals (objectives were eliminated). The NEFMC also expressed the sentiment that Amendment 18 should not result in turning the fishery into a LAPP.

3.1. Goals as revised

- 1. promote a diverse groundfish fishery, including different gear types, vessel sizes, ownership patterns, geographic locations, and levels of participation through sectors and permit banks;
- 2. enhance sector management to effectively engage industry to achieve management goals and improve data quality;
- 3. promote resilience and stability of fishing businesses by encouraging diversification, quota utilization and capital investment; and
- 4. to prevent any individual(s), corporation(s), or other entity(ies) from acquiring or controlling excessive shares of the fishery access privileges.

3.2. In addition, the Committee or NEFMC tasked the PDT with:

- Developing an option for an ownership cap that would limit multispecies permit ownership by any individual or entity, with the exception of permit banks, to 5% of the total of the limited access permits issued. This option should grandfather ownership levels to the individual or entity ownership level that exists prior to the control date.
- Reviewing the Northern Economics report "Designing Measures to Limit Accumulation of Fishing Privileges in the Northeast Multispecies Fishery" to determine if its

- recommended approaches for limiting accumulation of permits and PSC and for use of ACE on vessels would help the Council achieve A18 goals and objectives.
- Developing a regulatory definition for permit banks and alternatives to establish appropriate permit caps for permit banks commensurate with their value in protecting diverse fishery access and supporting the goals of this amendment.
- Examining US solutions that provide access to capital for individuals, new entrants, sectors and community entities (e.g. halibut new entrant finance program called Community Quota Entities, NMFS fishery obligation fund financing for quota).
- Considering the concept of the Northeast Hook Fishermen's Association proposal as outlined in their April 7, 2013 letter to the Council.

The PDT reviewed the Northern Economics report and the Northeast Hook Fishermen's Association proposal. Ms. Feeney presented a draft table summarizing PDT input on the feasibility of the measures outlined in these reports and those specified in other PDT tasks (e.g. legality, enforceability, data availability, analytical challenges). This table with a PDT memo will be made available to the OSC for review at their August 14 meeting [see August 8 PDT memo to the OSC]. Mr. Demerest, Mr. Ruccio, Dr. Whitmore, Mr. Caless, and Ms. Sherman agreed to take the lead with Ms. Feeney on completing the A18 table.

3.3. Northeast Hook Fishermen's Association proposal

The PDT reviewed the proposal and discussed what the proposal was aiming to achieve. The PDT discussed whether, rather than create a sub-ACL for the HA permit holders, they should start their own sector or join an existing sector. The PDT discussed the cost associated with starting a sector and potential non-profits (e.g., The Island Institute) that work with groups trying to form sectors. Some PDT members asked if the Association would need quota for species in addition to cod to achieve their stated goals. Another PDT member expressed concerns that monitoring these quotas would be significantly challenging. Dr. Whitmore offered to reach out to the Association to find out more about their proposal.

3.4. Northern Economics Report

The PDT reviewed the report and will continue working on filling in the table. Some members noted that some of the measures mentioned in the report might be more appropriate for IFQ systems. The PDT will provide an update on the feasibility of measures in the report at its next meeting.

3.5. Permit Banks

The PDT discussed the concept of defining non-state permit banks. If the Community Quota Entity (CQE) concept were adopted, Dr. Whitmore expressed caution that the current non-state permit banks are not necessarily linked with place-based communities. Mr. Ruccio mentioned that CQEs in the Northwest US are required to reinvest money within a geographic designation. He suggested that it may be easier for such a definition to be broader. Dr. Whitman questioned how broadly a CQE is connected to the citizenry in its community. Depending on the definition, perhaps none of the current entities would meet that definition. Some members discussed incentives (e.g., a higher allocation limit) that may be necessary for permit banks to agree to restrictions on quota use. Other members noted that any new definition will need a system to

monitor performance, including metrics to track their progress toward meeting any objectives. The PDT concluded that the OSC should clarify its intent with defining permit banks.

3.6. US Solutions for Access to Capital

Mr. Demerest informed the PDT that the NEFSC Social Sciences Branch has an intern currently working on this review. He will provide an update on progress at the next PDT meeting.

4. Other Business

Council staff is setting up a SharePoint site for Groundfish PDT work. More information will be provided at the next PDT meeting. Mr. Ruccio mentioned that NERO is working on a new system to name files, which could also potentially be of use for the new SharePoint site.

Dr. Whitmore let the PDT know the closed area proposed rule is being published and would have a 15-day comment period. In addition, he will be meeting with NERO staff to discuss the sector assumed discard rate issue. He hopes to gain feedback from the PDT and perhaps assistance in developing outreach to sectors.

APPENDIX

NEFMC Groundfish Committee & Council final motions related to Amendment 18

June 2013

June 12, 2013 Groundfish Committee meeting

Motion: to recommend the Council replace existing A18 goals with those from the GAP motion 1 from June 10, 2013:

- 1. Promote a diverse groundfish fishery, including different gear types, vessel sizes, geographic locations, and levels of participation through sectors and permit banks.
- 2. Enhance sector management to effectively engage industry to achieve management goals and improve data quality
- 3. Promote resilience and stability of fishing businesses by encouraging diversification, quota utilization and capital investment.

(Mr. Dempsey/Mr. Alexander)

The motion **carried** on a show of hands (6/2/0).

Motion: The committee recommends that the PDT develop an option for ownership cap that would limit multispecies permit ownership by any individual or entity with the exception of permit banks to 5 percent of the total of the limited access permits issued. This option should grandfather ownership levels to the individual or entity ownership level that exists prior to the control date.

(Mr. Alexander/Mr. Kendall)

The main motion **carried** on a show of hands (8/0/0).

Motion: to have the PDT review the Northern economics environmental defense fund (EDF) funded paper "Designing measures to limit accumulation of fishing privileges in the northeast multispecies fishery" to determine if its recommended approaches for limiting accumulation of permits and PSC and for use of ACE on vessels would help the Council achieve A18 goals and objectives

(Dr. Pierce/Mr. Goethel)

The motion **carried** on a show of hands (7/0/0).

Motion: to strike the existing A18 objectives to be consistent with the GAP recommendation. (Mr. Dempsey/Mr. Kendall)

The motion **carried** on a show of hands (4/3/0).

Motion: To task the PDT to develop regulatory definition for permit banks as well as alternatives to establish appropriate permit caps for permit banks commensurate with their value in protecting diverse fishery access and supporting the goals of this amendment.

(Mr. Dempsey/Mr. Alexander)

The motion **carried** on a show of hands (7/0/0).

Motion: to request Council staff assess and provide examples of US solutions that provide access to capital for individuals, new entrants, sectors and community entities, e.g. halibut new entrant finance program called Community Quota Entities, NMFS fishery obligation fund financing for quota.

(Mr. Dempsey/Mr. Goethel)

The motion **carried** on a show of hands (7/0/0).

June 19, 2013 Council meeting

Motion: recommend the Council replace existing Amendment 18 goals with the following from the GAP motion from June 10, 2013:

- 5. promote a diverse groundfish fishery, including different gear types, vessel sizes, ownership patterns, geographic locations, and levels of participation through sectors and permit banks;
- 6. enhance sector management to effectively engage industry to achieve management goals and improve data quality;
- 7. promote resilience and stability of fishing businesses by encouraging diversification, quota utilization and capital investment; and
- 8. to prevent any individual(s), corporation(s), or other entity(ies) from acquiring or controlling excessive shares of the fishery access privileges.

(Mr. Grout/Dr. Pierce)

The motion **carried** unanimously on a show of hands (17/0/0).

Committee motion: to strike the existing Amendment 18 objectives to be consistent with the GAP recommendation.

The motion **carried** on a show of hands (15/2/0).

Motion: to have the Groundfish Committee consider including the concept of the Northeast Hook Fishermen's Association proposal as outlined in their April 7, 2013 letter to the Council in Amendment 18 for analysis.

(Mr. Grout/Mr. Stockwell)

The motion **carried** unanimously on a show of hands (17/0/0).

Motion: that the intent of Amendment 18 is not to backfill Amendment 16 into a limited access privilege program (LAPP).

(Mr. Goethel/Ms. Ramsden)

The motion **carried** on a show of hands (16/1/0).