



July 28, 2016

Dr. William Karp, Director  
Northeast Fishery Science Center  
166 Water Street  
Woods Hole, MA 02543

Dear Bill:

The Northeast Seafood Coalition (NSC) offers the following comments on the proposed *Northeast Regional Action Plan – NOAA Fisheries Climate Science Strategy*. NSC submits these comments on behalf of our commercial fishing members that participate in the northeast multispecies (“groundfish”) fishery.

Over the years NSC has highlighted the fact that the groundfish fishery is part of a highly complex and dynamic ecosystem. There are predator / prey relationships, water temperature variations and oceanographic changes that have a direct impact on the availability, productivity and rebuilding of groundfish stocks.

The scientific concerns now being raised under climate change have the potential to further complicate this already multifaceted environment. Unfortunately, incorporating ecosystem factors, let alone climate change conditions, into assessments for groundfish stocks has been extremely limited to date.

NSC’s observation through our involvement in the groundfish stock assessment process in the Northeast region since 2002 is that environmental impacts on stock productivity receive rhetorical acknowledgment but rarely influence Status Determination Criteria (SDC’s) at a balanced, logical or meaningful scale. The reluctance to adequately adjust key reference points has resulted in economic fisheries failures while the resource “failure” is only relative to the Bmsy values that do not reflect prevailing environmental conditions.

One example is the science underlying the stock assessment and associated reference points for Gulf of Maine cod. While two decades of projections have consistently proven overly optimistic and prevailing information indicates natural mortality is greater than the rate used to set the SDC’s, the latest assessment only accepts a higher rate of natural mortality that is temporary in nature and continues to base reference points on stock productivity values that have not been observed in decades.

NSC contends that in order to effectively consider prevailing environmental conditions within the context of MSA rebuilding timelines and SDC setting, the rebuilding Bmsy values must be directly derived from prevailing productivity values. Currently, F values are inflated and stock status relative to B thresholds are exaggerated due to a strong resistance to accept prevailing environmental conditions as the primary reasons for failed stock projections.

NSC fishing members are members of the Northeast Fishery Sectors. Although sectors are able to develop alternative harvesting strategies and internal management programs, sector operations remain directly linked to the underlying science, which directs reference points and rebuilding plans. In order for management to be successful, the science needs to reflect the true state of nature. NSC is therefore hopeful the guidance now being offered under climate change science will have direct relevance on the science considered for stock assessments.

NSC supports, with further development and specifications, Priority Action 1 (*Give greater emphasis to climate-related Terms of Reference and analyses in stock assessments*) and Priority Action 2 (*Continue development of stock assessment models e.g. Age Structured Assessment Program, new state-space model, multispecies models*) that include environmental terms e.g., *temperature, ocean acidification*).

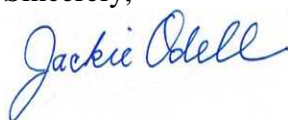
Modifying the Term of Reference (TORs) for stock assessments is a critical first step in truly considering ecosystem and other climate change factors. Notably when considering Bmsy / MSY values and reference points. Such factors need to be addressed under the assessment process prior to being reviewed and vetted by the Science and Statistical Committee (SSC).

NSC strongly recommends climate change factors be included under all assessments not just benchmark assessments. Benchmarks are scheduled infrequently. It has been almost ten years since many groundfish stocks have undergone a benchmark assessment. Since TOR adjustments have been allowed by the NRCC for operational assessments, it should be permissible for ecosystem and other climate change factors, which have direct relevance on Bmsy values, also be considered.

NSC views the climate change action plan as an opportunity to improve the assessment process. Since some groundfish assessment remain highly uncertain with the existing “model” approaches, NSC recommends expanding upon the development of the straight model approach and suggests alternative assessment methods be developed and considered for groundfish stocks. A suite of approaches and their outputs should be provided to the SSC and Council for further deliberation and consideration.

To conclude, NSC supports the Priorities as they relate to improving the best available science incorporated into stock assessments. However, NSC suggests more direct guidance be offered under the draft Plan as it relates to the assessment TORs and consideration of reference points under the climate change regime. NSC also encourages the broadening of the assessment model based approach with multiple outputs provided to the SSC and Council for deliberation. NSC encourages all assessments, not only benchmark assessments, take into account ecosystem and climate change factors.

Sincerely,



Jacqueline Odell, Executive Director