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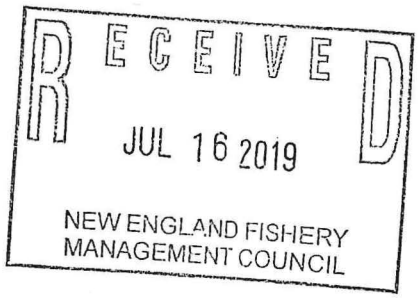
CORRESPONDENCE

Sherie Goutier

From: David Dow <ddow420@comcast.net>
Sent: Tuesday, July 16, 2019 1:18 PM
To: comments
Cc: David Dow
Subject: Fishery Ecosystem Plan Framework Dialog Input



Dear Dr. John Quinn/Tom Nies:

I am a retired marine scientist living and grassroots environmental activist living on Cape Cod, Ma. I have concerns that many species are moving from the Mid-Atlantic region into Nantucket Sound/ southern New England (Summer flounder; menhaden; surf clam; black sea bass; menhaden; etc.), while others are migrating further offshore or into the Gulf of Maine (lobsters; Winter flounder; etc.) or declining in abundance (sea herring; GOM cod; etc.) because of increased "natural mortality".

As prey and their fish predators change in space and time due to warming oceans; increased ocean acidity and nitrogen enrichment which has lead to a shifting baseline in the ocean environment, we need some type of ecosystems-based management approach to augment the traditional population dynamics models (used in the SAW/SARC process) to establish quotas for the 27 managed stocks and evaluating the status of stocks for sustainable stock biomass and fishing mortality targets.

I would encourage you to consider adding the marine food chain to the definition of Essential Fish Habitat to account for shifts in predator/prey dynamics; top down changes in Apex predators effects and shifts in the relationship between plankton and forage fish species. A good example here on Cape Cod is the interaction between migrating forage fish/seal feeding adjacent to our beaches/great white shark predation which has endangered beach goers. One result of the shifting ocean baseline in Nantucket Sound; Cape Cod Bay and the adjacent federal waters is that the "productive capacity" of EFH has changed. EMaX (Energy Modeling & Analysis Exercise) carbon flow modal of the Northeast Continental Shelf Ecosystem included both the grazing food chain and microbial food web that support forage fish and their predators. Enhanced community respiration in the plankton resulted in reduced yield of living marine; protected and natural trust resources managed by the NOAA Fisheries GARFO. The Lenfest Ocean Fisheries is organizing a conference in October to explore research priorities for migrating fish stocks on the East and West Coast.

Another of my concerns is that we are losing our "working waterfront" on Cape Cod to tourist-based endeavors. Commercial fishing and saltwater angling are important to our history and provide an economic multiplier effect to Cape Cod's Blue Economy initiative. If the Mid-Atlantic Fishery Management Council/Atlantic States Marine Fisheries Commission management quotas aren't re-adjusted for species like Summer flounder; scup; black sea bass; surf clams/ocean quahogs; etc. as the migrate into southern New England, this will accelerate the demise of our working water front. For saltwater anglers the pending moratorium on Atlantic striped bass will effect both tourists and Cape Cod residents. Other recreational species will need to be targeted.

Finally the Fishery Ecosystem Plan Framework should address sustainability issues for managed stocks. In the Autumn of 2018 I talked to an English Class at the Cape Cod Academy which was reding a book on the history of cod fisheries in New England. One of the students asked me if the current "cod fishery" was sustainable into the future and I had no good answer to this query (since this differs from not being overfished or not meeting fishing mortality targets). The students were to hear the following week from an employee from the Populations Dynamics Branch at the Northeast Fisheries Science Center- Woods Hole Laboratory. My response to this question focused on the EFH of the 4 life stages of cod and how these were effected by fishing; habitat loss; eutrophication; warming waters and ocean acidity; periodic hypoxia; etc. Given the totality of these human stressors coupled with natural variability in recruitment/total mortality, it was hard to conclude that cod stocks were on a sustainable path over the long term unless changes were made. Hopefully

Ecosystem Plan Framework will address the sustainability concept and develop an appropriate path forwards.

Thank you for the consideration of these comments

Dr. David D. Dow
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