

PWG meeting notes

12/12/17

Present: Beth Turner, Matt Liebman, Ivy Frignoca, Priscilla Brooks, Aaron Strong, Erik Chapman, Conor McManus, Ru Morrision, Jackie Motyka, Kelly Canesi, Chris Williams, Sarah Cooley

New personnel: Kelly introduced herself to the group. She has recently been hired by NERACOOS as the program coordinator for NECAN. She will be on NECAN activities and will be helping to develop an online information exchange and collaboration forum. She has a background in biological oceanography. Welcome, Kelly!

NECAN updates (Jackie, Kelly, Ru): NECAN is involved in many workshops (see below) and is re-starting their webinar series. If you are interested in presenting, or know someone who would be a good speaker for the series, please let us know.

SG-NECAN-MACAN workshop (Beth, Ru): One of the activities that NECAN is involved in is a joint venture of Sea Grant, NECAN and MACAN (the Mid-Atlantic Coastal Acidification Network). The goals of this are to utilize the communication and outreach expertise in SG to help construct conceptual models and communicate the drivers and consequences of coastal acidification. A workshop will be held in April to bring representatives from both the NECAN and MACAN regions together, hone our understanding of the relative influence of different drivers in the different regions and think about how to communicate this understanding.

NROC-NECAN workshop (Aaron, Beth, Jackie, Sarah Erik, etc.): On Dec 8, NECAN partnered with the Northeast Regional Ocean Council to discuss monitoring of coastal acidification in conjunction with nutrient monitoring. Attending were state monitoring programs, shellfish farms, scientists and NH political representatives. Discussions explored how nutrient monitoring can be connected to coastal acidification monitoring, priorities on where to monitor, and what can be done with monitoring data. Some of the impetus of this came from a similar workshop held on the west coast, and comparisons of the workshop output could be useful. A workshop report will be drafted soon and circulated to help regional monitoring planning efforts. Industry representatives were interested in an online knowledge exchange. Some acknowledged that developing monitoring strategies might be the easy part compared to developing understanding of vulnerability, uncertainty and risk.

NH Commission report (Erik): The N.H. Coastal Marine Natural Resources and the Environment (CoMNaRE) Commission has completed its first year of activities, which dealt with coastal acidification. The commission concluded that NH is likely seeing some acidification effects, but we don't have direct evidence with regard to specifics. A [report is available](#) that provides 3 recommendations:

1. Develop monitoring plans that can help understand status and trends and identify vulnerabilities
2. Develop research priorities specific to NH (a working group from UNH is working on this)
3. Explore mitigation strategies.

The commission is now turning their attention to nutrients and their impacts to coastal resources.

ME (Ivy): The Friends of Casco Bay are discontinuing their Citizen Steward Monitoring Program in its existing format. They are exploring new directions for citizen scientists. The organization is shifting focus to a three prong staff science program, collecting samples by land, sea and at a continuous monitoring

station. All three programs use the same type of data sonde, so the data can be more easily compared. Through the continuous monitoring station, they have been collecting more frequent and more detailed data from which they can calculate ocean acidification parameters and other impacts of climate change. Citizen scientists will still be part of the overall FOCB program, but will be focusing on other monitoring.

The Maine Ocean and Coastal Acidification Partnership (MOCA) will hold their winter meeting on Dec 18. They will be starting to formalize some aspects of their governance as they mature from a grass-roots effort. Panels of scientists will discuss monitoring in Casco Bay, as well as harmful algal and nuisance blooms in Casco Bay (Casco Bay had its first [closure for Amnesic Shellfish Poisoning](#) in December). A keynote speaker will discuss the Regional Greenhouse Gas Initiative and other carbon reduction policies. The next MOCA meeting will focus on aquaculture decisions (tie-in to NROC-NECAN monitoring workshop).

MA (Priscilla): There are 3 bills to form a OA commission (with similar language in each). A hearing on Nov 29 included testimony from Jan Pechenik (Tufts), Hauke Kite-Powell (WHOI), Beth Casoni (Mass Lobstermen's Association), and Dylan Fernandez (sponsoring legislator). The hearing went well, and hopefully a bill will come out that can go to the full House and Senate for ratification.

RI (Conor): The RI commission held their last meeting in June. Expectations are that meetings will resume in the winter, but no dates have been set. While the Commission has discussed OA extensively, other related topics have also been of much discussion as of late, including nutrient reduction impacts on water quality and ecosystem function, as well as harmful algal blooms. . While cleaner waters and less eutrophication is seen with nutrient reductions, some fishermen have expressed their concerns over the methods used in reducing nutrients at waste water treatment facilities (i.e. the chemical byproducts) and are worried if reducing nutrients too low will limit higher trophic level productivity (i.e. does reduced primary production result in fewer fish and crustaceans in the Bay)? A recent symposium tried to hone in on these concerns, with talks and materials available here: <http://seagrant.gso.uri.edu/special-programs/baird/>. As of now, the commission plans to write a report on their discussions and meetings, which may result in a report similar in content and format to what NH recently provided. They are interested in attempts at buffering sediments for wild harvest of shellfish. Work done by Island Institute and Bigelow might apply.

National (Sarah): A bill is going to be introduced in the Senate (Murkowski, Whitehouse, Collins sponsorship) for vulnerability assessments. They are considering the best timing for introduction. While the bill is out of the Ocean Caucus, there are plans to coordinate with the new Estuary Caucus on coastal acidification.

PWG priorities for the coming year (all): Many questions related to policy and decision making:

- What evidence needs to be in place to spur action?
- What actions can be taken?
- Can we take actions before huge impacts are seen?
- Many states have had or are in the process of commission reports. What are the next steps?
- How can we help advance to "stage 2" of commission work?

A synthesis of options available would be very useful. We could develop a document that summarized options available at local, regional, national, international scales, how they could impact OCA, what a

timetable might be for implementing and seeing results. DE has data on nutrient reductions and impacts on time series of the C content in DE Bay. Tampa Bay has examples of seagrass rebound and pH response, Mass Bay has reports on nutrient reductions and subsequent improvements. The previous RI example is also relevant. Sarah has a poster that she circulated to the group that began an outline on some of these ideas. An internal EPA group is discussing options under the Clean Water Act.

It appears that an information synthesis product from NECAN around management and policy options would help to bring different examples together. The PWG could take this on as a project in the coming year. We can discuss over e-mail in the interim before our next meeting in Feb.

Beth will circulate a doodle poll for a Feb meeting.