NAML Meeting notes

Biennial Fall Meeting, Cousteau Center, Tuckerton, New Jersey

25 October 2017

President De Luca brought meeting to order and introduced the general agenda at 9:08 am. Noted 5 field stations under Rutgers umbrella. Gave short slide show on stations. Noted twentynine protected places. Important focus is looking at marsh protection with sea level change.

Noted that agenda will have some time after lunch to do some walking on the Grassle trail that honors Fred and Judy Grassle. Trail is a teaching marsh. There will be sondes wired there and other electronic devices to keep data for the new project. Noted that in evening, there would be tours of field stations, including an oyster bar featuring disease resistant oysters. **R. Dickey** spoke briefly about Port Aransas and its recovery, thanking members for getting the word out about damage and funds needed for repairs.

R Cowen, Chairman, NAML Committee on Public Policy introduced Science Partners to give update on where NAML situated with policy at the moment. Public Policy Update presented by Joel Widder and Meg Thompson. Issues for discussion provided for members. Widder gave overview of federal funding information, including a slide show that was uploaded for viewing. The focus was on non-defense discretionary money which is 16% of the budget. This amount can change yearly. Science is about 12% of that wedge. Presented background materials for comparing degrees from US and other countries. Widder concluded with summary of where interests are for NAML in FY 2018 budget. There is a proposed 20% cut at NIH, 11% cut at NSF, and similar cuts at other science agencies. Widder noted that Congress is at least trying to maintain current levels of funding.

White House has nominated deputy and chief administrator for NOAA. **Tim Galludet** (retired admiral) is assistant and has already been passed. **Barry Myers** (Accuweather) has been nominated as NOAA Administrator. Dr. Jacobs has been nominated for assistant secretary for observation. There is a slo9t below that office open, but no word on nomination. There is also nomination open for position as assistant secretary of conservation and fisheries.

Myers has long history of being active in the weather community, though he is a lawyer. His brother is scientist and co-founder of Accuweather. **Myers** activism is likely in tension with some in government. He is not very experienced in the "wet" side of NOAA. **Galludet** is likely to deal with that side of NOAA. **Myers** not likely to have easy time in confirmation. Weather Service Employee Union is likely to oppose **Myers** as he will likely close some offices.

Review of Sea Change Report 2015-2025: Decadal Survey of Ocean Sciences to frame discussion of whether NAML public policy priorities are in line with current national priorities. NAAML was on record early in supporting the survey. There is not currently a science advisor. Some discussion ensued about what the public policy committee had accomplished and what current objectives were. It was noted that members of NAML need to look more closely at science appointments in near future.

Some discussion of the Subcommittee on Oceans, Atmosphere, Fisheries, and Coast Guard hearing on upcoming Reauthorization of the Magnuson-Stevens Fishery Conservation and Management Act: Fisheries Science. The hearing is the fourth of the series and will focus on the state of our nation's fisheries and the science that supports sustainable management.

NAML white paper draws on Sea Change and current information relative to three priorities: research, infrastructure and instrumentation and education/outreach. Good resource for information on variety of topics including value of ocean/coastal/Great Lakes to economy. Some discussion of NAML collaboration with other organizations to accomplish goals, but this was limited in the introductory section because of discussion later in the meeting.

Fisheries Research priorities discussed for NOAA/NMFS led by **Cisco Werner** (cisco.werner@noaa.gov) (Chief Science Advisor and Director of Scientific Programs). Headquarters for group was just moved in January, so still settling in. **Werner** gave brief discussion of mission and near-term direction for the group. Discussed in some detail the oceans dynamics/resources document soon to come out for public comment. The 2017 Economics and Human Dimensions report was completed. The different foci for NMFS include: strategic planning of center missions, science priorities and stock assessment improvement. New technology interests include acoustics, drones, in-water capabilities and "omics"/DNA. The technology issues are where NMFS can use assistance from NAML groups. There is also an aquaculture piece which includes need to increase seafood production. **Werner** noted that the US needs to export more than it imports. One thought would be to streamline regulatory process. Werner will place powerpoint online.

Break (note that there is change in agenda as Lisa has another speaking engagement) Scientific presentation:

Lisa Auermuller (president-elect NERRS). Discussion of impact of Storm Sandy. Pre-Sandy houses were very low to ground and built on slabs. Constant dynamics of exposure and risk have been considered for long time as the coast is a movable entity. Disaster preparedness and recovery requires debris recovery and disposal. It is important for communities in coastal areas to get FEMA projects on the books for when funding becomes available. Community rating system is FEMA program to get points for flood plain insurance costs. Communities need incentives to do the planning. Resiliency planning and the New Jersey Coastal Project can be example. It is important to educate the next generation. NSF is providing funds for resiliency training. Resiliency field course has been created to inform about how to work with communities as well as the research about science of coasts. Question is how do you deal with deniers? Answer: show what has happened already. Dr. Auermuller will post powerpoint.

Tom Grothues Discussed the need for resolving temporal/spatial scale constraints for marine animal tracking programs. Now using more remote sensing. Pulse Interval Coded Tags encode identification or sensor data in timing between pings of a grouping. PIT tags do not have batteries, signal is weak. Can create multimode tags to overcome some issues. Currently doing horseshoe crab work using mobile adaptive sampling techniques. AUVs can cover a lot of ground and they have programmability. AUVs can detect animals at depth.

Dave Bushek Shellfish research at Rutgers summarized. Did overview of the aquaculture program.

Lisa Calvo Discussed user conflicts with red knots and horseshoe crabs.

Norb Psuty Presented discussion of Coastal Geomorphological evolution by introducing the development of a regional GeoDataBase. This is a networked approach to early detection of environmental change. The Northeast Coastal and Barrier Network has been created. Using National park data has helped provide information on rates of change and spatial distributions of change. A report on this effort along with the database is on the National Parks webpage.

Andrea Habek Discussed the Sentinel Site initiative. Gave brief overview. There are automated data loggers. There is a big push by NERRs system to analyze and manage data. It is important to publish a roadmap for using the data. Plan to produce a marsh report card. Specialized products are under construction.