

Meeting Notes

Science and Technical Advisory Panel,
NH Coastal Risks Hazards Commission
January 13, 2014
(via Conference Call)

Attending: Paul Kirshen (Chair), Cliff Sinnott (guest), Cameron Wake, Matthew Huber, Sherry Godlewski, Steve Miller, Mary Stampone, Rob Flynn, Ann Scholz

The meeting convened at 2:05PM.

Paul Kirshen welcomed everyone and stated who was on the call. He thanked everyone for his or her willingness to participate and contribute to the Panel.

1. Review Charge to the Committee (Cliff)

Paul asked Cliff Sinnott to relay the 'charge' of the Panel as it was conceived by the CRHC Steering Committee and endorsed by the Commission. Sinnott summarized from an email he sent the previous day what he hoped would be a good starting point:

BACKGROUND

The idea for establishing a Technical and Science Advisory Panel was initially suggested by Paul during a discussion at the Steering Committee about how the Commission might get to a consensus on what assumptions should be made regarding future climate related changes in risk in coastal areas - primarily changes in sea level rise, storm surge, storm intensity and flood levels. This approach was further supported by Senator Watters who forwarded the report of a SLR Science and Technical Panel from Maryland and suggested that it may be a good approach and model for us.

<http://www.umces.edu/sites/default/files/pdfs/SeaLevelRiseProjections.pdf>

(In addition, the Massachusetts report is available here.

<http://www.mass.gov/eea/docs/czm/stormsmart/slr-guidance-2013.pdf>, *the Table of Contents of each report is at end of the minutes)*

The CRHC's second listed duty in the legislation is: "The commission shall review [NOAA] and other scientific projections of coastal storm inundation and flood risk to determine the appropriate information, data and property risk." It is evident that we will need help in interpreting some of this information, particularly where conflicting or highly variable information is presented.

Most members of the Commission do not have the means or basis to independently evaluate and choose between differing estimates and probabilities of given future conditions. For example, for SLR, two important sources, the National Climate Assessment (Dec 2012) report shows a 'highest' global mean sea level 2100 scenario (2 meters), while the IPCC 5 report shows the

highest scenario of under 1 meter. That degree of variation is hard for a policy making (recommending) body to deal with when the consequences he actions that might be required are potentially so large.

While it is understood that certainty is not possible here, we must have confidence that the recommendations we make are for a likely future condition that is strongly supported in peer reviewed science and based on a well informed reviewed of that science.

CHARGE

There are three parts to what the Commission needs from the Panel:

- 1. To ensure we are aware of and are using the best available and relevant scientific and technical information to inform our recommendations;*
- 2. To assist the Commission in interpreting and reconciling conflicting projections, scenarios and probabilities about future conditions.*
- 3. To review, evaluate and respond to any major theory and supporting evidence put forward refuting the high likelihood of continued, accelerated sea level rise and increased coastal risks and hazards.*

As a final product, what will be most helpful is a report summarizing your findings and recommendations on what estimates the CRHC should use for the major coastal hazards, primarily relating to projected flood hazards (inundation, storm surge, erosion) that should be planned for in 2050 and 2100. Recommendations for other coastal specific climate hazards would be welcome as well (extreme precipitation, drought, temperature, ecosystem impacts) but, as a second priority (in my view at least).

Matt Huber commented that conflicting projections cannot necessarily be reconciled because of uncertainty. Some uncertainty is irreducible; some doesn't make much difference to the result. It is best to explain uncertainty in terms of degrees of risk. Sinnott said that this is the sort of guidance the Commission needs to reach a consensus on the range of future conditions for which the state should prepare.

2. Adding New Members

Paul said recommendations for adding new members have been made to him, and he wanted the Panels' view on this. One is Kevin Knuuti, of ACOE Cold Regions Research lab who had done extensive SLR modeling for ACOE. The second pertains to Representative Rice's request for someone, identity to be determined, to represent a skeptical viewpoint about global warming, current climate change and sea level rise. Discussion followed on the parameters of information that would be included in the Panel's source and reference materials. It was unanimously agreed that to be consistent with the legislation, our review and deliberation is limited to scientifically accepted information, which the Panel interprets as peer-reviewed science. It was agreed the Mr. Knuuti and a "skeptic" who is qualified in climate or a related science will be invited to join the Panel. Sinnott noted that he is not a member of the Panel having neither scientific or technical expertise, but will be available to participate in meetings if needed to convey CRHC requests, or to act as a sounding board.

3. Parameters of Interest

It was agreed, again based on the language of RSA 483-E, that the Panel's work should focus on expected ranges of future coastal flooding resulting from sea-level-rise, storm surge and changes in storm frequency and intensity. Other subjects to be included are drought and heat. It was agreed that SLR literature review/source information would include ACOE, NOAA, IPCC and Ramstorf, perhaps others. It was agreed that the Panel's report include guidance about how to integrate uncertainty with decision-making, e.g. considering adaptive and iterative policy approaches to allow for adjusting the response as uncertainty decreases.

4. Schedule

Sinnott explained that the Steering Committee hoped that some sort of interim report could be available in March so that the Commission can begin to formulate some early actions to include in its next interim report (November 1, 2014). In retrospect this is probably not realistic, but a report by June-July 2014 would be extremely helpful. It was concluded that the SLR component would be tackled first with the hope that a draft section on this topic could be ready at the end of March.

5. Responsibilities for Report

It was decided that the initial report would have roughly 4-5 components. Panel members with lead responsibility for each were worked out, as follows:

- Sea level rise - Cameron Wake, Rob Ryan, Kevin Knuuti
- Storm Surge - Paul Kirshen & Mary Stampone (also possibly with Ellen Douglas)
- Integration of SLR and Surge & QA/QC - Matt Huber
- Context for Using the Science ('Receiver /Operator curve") – Sherry and Steve

Rob Flynn will help on groundwater/surface water interactions. PHK: Could that include salt water intrusion ?

Sections could include:

- physical basis
- observations
- Paleo climate
- basis of projections
- regional and local effects

All based upon peer reviewed information.

6. Other

- Paul will report on the panel's progress at the next CHRC Commission meeting.
- The Panel will meet again at 10AM on February 3rd. Paul will send out meeting information prior.
- Sinnott will investigate if the Advisory panel is considered a public body re RSA 91:A which would dictate certain posting requirements, meeting procedures and record keeping. In the meantime it would be prudent to act as if we are subject to these requirements.

Massachusetts SLR Report 2013

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