

Meeting Minutes
RI DEM • Room 300

Vulnerability Assessments, Part 2

In attendance: Janet Coit, DEM, Council Chair
Jamia McDonald, RI EMA
Dr. Michael Fine, Julia Gold, DOH
Kevin Flynn, DOA/Planning
Jim Boyd (for Grover Fugate) CMC
Chris Kearns (for Marion Gold) OER
Michael Lewis, Melissa Long, DOT
Richard Licht DOA
Hanna Morini (for Marcel Valois) CommerceRI
John Leyden, State Building Code Commission

Director Coit called the meeting to order at 10:04 a.m.

Director Coit began with a reminder of the meeting schedule and goals for this week.

Approval of minutes for April 9, 2014 meeting. John Leyden moved to approve. James Boyd seconded. All in favor.

Housekeeping: Director Coit informed the Council that DEM has an opportunity to bring on Sonia Hamel, a climate change expert and consultant, for a short term contract to help with preparing the report. This is thanks to a grant available from a donor through the Rhode Island Foundation. Ms. Hamel has done a lot of work in the area of climate change and was recommended to Director Coit. It turns out she has worked with both Director Lewis and Jan Reitsma in the past. Director Coit said that not only is Ms. Hamel qualified, but also, she is the only person who has agreed to be available to move quickly to meet our May 1 deadline. She summarized the scope of work and said that, if there were no objections from the Council, DEM would move on this immediately. Director Lewis complimented Ms. Hamel's work. Director Licht congratulated Director Coit for finding outside resources to help pay for this work.

Vulnerability Assessments, Part 2. At Director Coit's request, Jan Reitsma recapped previous presentations and discussion:

- The March 27th meeting included presentations by CRMC, RIEMA and Planning, which gave the Council its first look at the scope of areas vulnerable to impacts from sea level rise (SLR), storm surge, and other flooding events. Jan noted efforts to coordinate, for example using the same colors in different mapping programs to depict the 1', 3' and 5' SLR scenarios; but questioned how much integration (important to, municipalities for example) is occurring.
- The April 4th meeting included a panel moderated by Kevin Flynn, who discussed work done by Planning programs, including work with DOT on the vulnerability of transportation infrastructure. He also explained the structure and methodology of vulnerability assessments, including the three stages of the actual assessment: exposure, sensitivity and impact analyses.

DEM presented on the vulnerability assessment of wastewater infrastructure, which is now underway as DOH presented on its projects and approaches (drinking water assessment completed, current focus on impacts from heat, flooding and increases in waterborne diseases, emphasis on need to consider particularly vulnerable populations, different impacts on different, for example, age groups, and ensuring communications are targeted and tailored to the right audiences, including doctors sometimes). DOH also raised issues relating to capacity to do appropriate monitoring and tracking and to limitations in the available data. In addition, DOH briefly addressed the vulnerability of health care facilities such as major hospitals in flood-prone areas and the need to take into account changes that are likely to happen in the health care system. Finally, the Council heard from National Grid that it shared many of the same concerns and perspectives, is very interested in the data mentioned by DOH, is very focused on the “hardening” of infrastructure in response to experiences such as Sandy in NY and NJ, but also believes that resiliency is about more than that (e.g., ability to get back to impacted areas, get back into business, and developing longer term, sustainable strategies). This meeting also underscored both the need and opportunity for coordination, for example, with respect to the transportation infrastructure assessment, which has been limited to SLR scenarios only, but could be expanded with data on storm surge and riverine flooding available from other agencies. In addition, questions were posed to the Council for its further consideration, including how to fund implementation of recommendations the Council makes; how we address gaps in vulnerability assessments and allocate responsibility for following up on the assessments; how we identify and resolve deficiencies in coordination and pooling of resources; and how we can develop a communications program that gets the right information to the right people and facilitates meaningful engagement of public and private sector stakeholders at local and state levels.

Jan Reitsma mentioned that Tom Kogut of the DPUC had been expected to make a presentation on the Energy Assurance Plan and its vulnerability assessment aspects at today’s meeting, but that he was unable to come. Chris Kearns of OER was available to address this topic.

Director Lewis noted that the transportation vulnerability assessments focused on a limited number of specific locations and that, to address the needs of communities on a broader scale, we need to do broader-scale assessments, based on well documented projections and scenarios.

Director Coit introduced DEM’s Lenny Giuliano, who will be increasingly involved in statewide climate science efforts.

Director MacDonald noted that EMA has a mandate, and funding, under which the agency’s critical infrastructure staff must coordinate with Homeland Security on retooling critical vulnerability assessment tasks. This necessarily includes coordination with various state agencies (like DEM for wastewater) and municipalities. This could provide a mechanism for developing and implementing the coordinated strategies the Council is discussing. Her office is also able to access other resources, an example of which is a recent memorandum of understanding with the Coastal Institute at URI, which will be aggregating data sets for use in vulnerability assessments related to climate change.

Director Licht noted the need for prioritization, not just gathering, of information. This resulted in an exchange between Directors Licht, MacDonald, Flynn, Lewis, and Coit on prioritizing assessments, conducting cost-benefit analyses, and incorporating such studies into existing planning efforts.

Director MacDonald noted that, as EMA already provides coordination and prioritization as part of hazard-related and planning; she would be comfortable overseeing such efforts.

Director Coit spoke about vulnerability assessments for natural resources, noting that various efforts by DEM were summarized in a December 2013 document that was previously provided to Council members. She highlighted adaptation and mitigation projects at state coastal facilities (such as rebuilding at higher grades and including renewable energy); habitat assessments; the vulnerability assessments for wastewater systems but also studies to assess impacts on onsite wastewater treatment infrastructure; efforts to maintain and increase the network of stream gauges, etc. Director Coit noted that these efforts are very program-specific; there is a need for better coordination, both internally between programs within DEM and with external programs.

Tom Uva of the Narragansett Bay Commission spoke about his agency's approach to dealing with climate change issues, including both mitigation (renewable energy) and adaptation. He noted that wastewater treatment facilities are always located at the lowest possible point and are designed for the so-called 100 year storm, which now occurs every 30 years or more frequently. In 2010, a 500 year storm completely overwhelmed the system. At its Fields Point facility, NBC is primarily concerned with hurricane scenarios, whereas at Bucklin Point it is mostly concerned with riverine flooding, which is exacerbated by serious siltation in the rivers (which in turn makes programs like street-sweeping very important).

Several council members commented on the importance of better communicating and educating the public about the increasing frequency and intensity of storms, and what the implications are. Referring to 100 and 500 year storms is not effective. Dr. Fine noted these designations are based on frequencies looking backward. Director McDonald mentioned an alternative is to use probability terms.

Director Licht asked how, if all 39 municipalities had Hazard Mitigation Plans, they could be coordinated, if not integrated, given that these events or scenarios do not abide by municipal boundaries? Discussion followed of different planning paradigms, for example, local comprehensive plans that have to have a Climate Change element vs voluntary Hazard Mitigation Plans that make towns eligible for federal funding. Jamia McDonald emphasized we should focus less on the end of the process, just making sure the town has a plan, and more on the beginning, providing planning guidance, so the plan is a good one and can be implemented.

James Boyd commented that a major change occurred in 2010 when both CRMC and DEM adopted the storm water manual, requiring storm water controls not only for new development but also for existing urbanized areas with extensive amounts of impervious surfaces.

Director Coit noted the discussion had so far focused on storm water and integration of planning efforts and asked council members to concentrate on developing policy recommendations.

Directors MacDonald, Licht and Coit then led a conversation on post-storm rebuilding and the need for a suite of tools for areas at high risk for future flooding. Strategies include coordinated approaches to provide better information and public education about flood risk, hazard preparedness, response and recovery planning, incentives to adopt resilience-oriented planning and design standards and practices, buyout programs, etc. John Leyden made the point that changes in the building code that are meant to

protect properties from natural hazards will also drive changes in (re-)development both before and in response to storm events.

Director Licht commented that saying “no” to rebuilding may be the right message in some cases but runs into property rights issues that we need to think through.

Julia Gold suggested coordinating state legislative efforts with federal efforts, as there are programs that both respond to flooding and drive development patterns.

Director MacDonald recommended including appropriate criteria in the state’s Capital Asset Program rules. She further suggested incorporating climate change and resiliency considerations in the reviews conducted by the Office of Regulatory Review.

Director Licht noted that FM Global included “resiliency” on the cover of its most recent annual report—a sign of the importance of this issue to the private sector. Director Coit noted that this was the topic of the April 21st meeting, at which a FM Global representative will be on the panel.

Jan Reitsma asked the Council to consider what still needs to be done to produce a report by the May 1st deadline. This includes agencies providing additional information on gaps, for example in terms of sectors that still require (further) assessment. Director Coit noted that the May 1 report will be an initial assessment of: 1) what the state is currently doing in response to climate change; 2) what it needs to do; and 3) what policy decisions and other actions are needed to address the topics in item 2. The report should also serve as guidance for state agencies in preparing a more in-depth and detailed strategic plan by the close of 2014.

Hanna Morini commented that recommendations should be accompanied by some sort of economic impact statements so that costs to the business community can be included. Director Coit responded that we all share the desire not to increase cost for businesses, and that an effort is being made to include the business perspective for that reason, instead of seeing this as separate agendas. Director Licht noted that business opportunities should also be assessed.

Kevin Flynn asked who will ultimately “own” this, i.e. be in charge. Both Directors Coit and Director Licht indicated they believe strongly a senior-level position is needed to oversee coordination of state climate change programs and activities. Director MacDonald again stated that EMA has authorities and resources enabling it to assist and coordinate many of these efforts.

Melissa Long noted that DOT had participated in a White House coordinating survey and inquired if other agencies had as well. Director Coit responded that all state environmental agencies had participated, as well. Ames Cold of the Rivers, Bays, and Watersheds Coordination Team briefly discussed how his organization can play a role, especially with water-related efforts. Director MacDonald asked for an organization chart of agency involvement in climate-related activities, whether as part of existing duties or as they evolve based on event responses. Director Coit suggested that Ames Cold could provide that in some form as the Coordination Team is already aware of much of this information.

Motion to adjourn: Director MacDonald motioned to adjourn. Director Licht seconded the motion. All members voted in favor. The meeting adjourned at 11:33 a.m.