



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner



Response to Questions from the Coastal Risks and Hazard Commission – Nov. 15, 2013

1. What is your agency doing so far (policies, procedures, standards, research, investment, etc) about the issue of increased future flood hazard risk from sea level rise and storm surge and the potential losses in assets that may result?

- A) DES is presently engaged in an internal planning effort which would evaluate this very question in a systematic way. Building on our agency-wide “cookies and climate” workshops, each bureau in the agency will be assessing how it impacts, is impacted by, or can ameliorate the impacts of climate change. Adaptation to changing sea level, storm surge and precipitation is a major aspect of that evaluation. To date, 4 of our 19 bureaus have made progress on this task, and have discovered a number of potential actions needed to be better prepared for the future. Below are some examples of potential actions from the Drinking Water and Groundwater Bureau, much of which was determined based on surveys of water suppliers. These should just be considered as potential actions, more analysis is required to understand the implications and required authority to make any such changes.
- a. Use updated flood mapping to evaluate locations & elevations of DW systems.
 - b. Guidance developed for asset management plans, incorporate climate change impacts into risk assessments.
 - c. Require critical system components of Small Community Water Systems to be a set elevation above 100-year flood level (3 feet is already required for Large Water Systems).
 - d. Require pump run time meters for large & small Community Water Systems. (helps operators evaluate capacity of their wells, ensures longtime viability, important in light of the potential for longer periods of drought)
 - e. Require automatic transfer switches for generators at new Small Community Water Systems.
 - f. Require isolation devices at each side of distribution pipes crossing water bodies greater than 15 feet in width (Already required for Large CWS)
 - g. Amend rules for emergency plans to include considerate of climate change impacts and system responses.
 - h. Review siting and design standards on a routine basis to evaluate the standards against future climate change impacts.
 - i. Changes to regulations on the design of wells and water systems in the seacoast area.
- B) Evaluations of potential threats and opportunities.
- a. Information on which stream crossings are the greatest risk for prioritization of rehabilitation or replacement – tying together the work on culvert assessment between DOT, DES, HSEM, the RPCs, and others.
 - b. Drafting the new coastal resources section of the wetlands rules re-writing; outreach sessions to solicit public comments are being scheduled.
 - c. Research on coastal inundation, salt marsh migration, community vulnerability and visualization tools through the Coastal Adaptation Workgroup – funding from NOAA through the NH Coastal Program.
 - d. Drinking water facilities and wastewater treatment facility data collection & outreach effort - potential requirements for energy efficiency (design phase); flood proofing & protection; elevating electric equipment; etc.

2. **What existing statutes, regulations or policies that pertain in your area(s) of function:**
 - will be directly affected by increased coastal flood risk itself?
 - may act as barriers or impediments that need to be removed before your agency can respond as needed?
 - represent gaps that need to be filled before your agency can respond as needed?
 - A. Coastal Regulations:
 - a. State regulations -- Land Resources Management Program – Wetlands, Shoreland, Alteration of Terrain and Subsurface. Each of these programs has a role to play in tidal surface waters and wetlands, coastal shorelines, sand dunes, and the tidal buffer zone.
 - b. Federal Regulation – Federal consistency review applies only in the 18 coastal zone communities. This is a Coastal Zone Management Act provision which has a state role. Current approved state policy: “Reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to preserve the natural and beneficial value of floodplains, through the implementation of the National Flood Insurance Program and applicable state laws and regulations, and local building codes and zoning ordinances.” It is unclear if future projections are allowed under this policy.
 - c. State and local interaction -- Changes to highest observable tide line over time may impact state regulations and local ordinances where they reference highest observable tide line.
 - B. Allocation of state resources – will requests for assistance in hazard planning, response and restoration increase in the future as conditions change? How will DES response with its limited resources?

3. **At this stage, what actions or changes in state law, if any, can you identify that will be needed?**
 - A. CAW identified a few potential actions:
 - Adopt a standard state or regional SLR projection that can be used for planning purposes.
 - Incorporate SLR projections & best available precipitation data into all basic planning, zoning, permitting & infrastructure designs.
 - Shoreline alteration/hardening permits shall only be issued to protect critical infrastructure.
 - Require use of living/soft shorelines along freshwater and tidal areas.
 - B. Other potential changes identified by other parties:
 - Require infrastructure projects applying for SRF utilize best available precipitation & SLR data and energy efficiency.
 - Changes to instream flow policies to reflect increasing drought conditions.
 - Enforceable policy than allows state regulatory processes (e.g. Fed. Consistency and 401 certification) to include future projections.

4. **What have been your interactions (including guidance provided to, and guidance received from), other levels of government (Federal, regional, local) over this issue?**
 - A. DES works closely (providing & receiving information) with:
 - EPA
 - National Oceanic and Atmospheric Association (NOAA)
 - North East States for Coordinated Air Use Management (NESCAUM)
 - New England Interstate Water Pollution Control Commission (NEIWPPCC)
 - Rockingham & Strafford Regional Planning Commissions
 - UNH and Antioch
 - Coastal Adaptation Workgroup Members

- Coastal community members

Other state agencies:

- Office of Energy and Planning (flood insurance rate maps & insurance changes)
 - Fish and Game (Great Bay staff & headquarters)
 - Department of Transportation
 - Homeland Security & Emergency Management
- B. Examine the regulations, policies and practices of other New England and Atlantic states, as well as the regulations of our federal partners, to inform the re-drafting of coastal resource-related rules.
- C. Positive interactions and guidance from EPA assisting state governments and drinking water systems plan for climate change.
- D. Provide guidance to regulated entities, including local government-owned drinking water systems, on planning for climate change.