

Science Advisory Panel to the NH Coastal Hazards Commission (NHCHC)

Notes from Meeting of March 17 2014 by P Kirshen, Held at UNH

Attendees: Paul Kirshen,, Cliff Sinnott (by phone), Cameron Wake, Sherry Godlewski (by phone), Tom Wismuller (by phone), Ann Scholz (by phone), Matt Huber, Rob Flynn (by phone)

We reviewed and approved the minutes from the February 18, 2014 meeting.

The meeting was devoted to the sea level rise (SLR) and storm surge report and the summary needed for the March 21 2014 full Commission meeting.

Discussion started on what the NHCHC might need from the Panel. Cliff responded SLR and surge estimates for 2050, 2100 and use for protecting state assets and natural resources, and municipal guidance.

The Panel will produce tables of projections (1) such as below that contain scenarios of elevations of Mean Higher High Water (MHHW) and 100 Year storm surge floods for Portsmouth NH and (2) also some state of the art work on combining the many sources of SLR into probabilistic estimates of future SLRs. Both can be used in scenario planning. Table will also be produced of other surge recurrence intervals other than 100 years. In both cases, the contributions of the many components of SLR and surges will be broken out. There will also be a discussion of the influence of combined river flooding and surge flooding (P Kirshen will draw together some material from NYC, Boston, and Exeter). The report will also contain discussion of the Panel on how the information can be in risk management. Ann Scholz sent around some material from NHDOT on risk management.

Table 2: Mapped sea level and storm surge elevations

Flooding Scenarios Modeled (ordered by increasing elevation below)				Mapped Elevations (feet) [§]		
Scenario	Water Level	Water level (ft)	Change (ft)	Mapped Elevation	lower bound	upper bound
Present Day	MHHW	4.4	n/a	n/a - reference elevation only		
2100 Low Emission	MHHW	6.9	2.5	7.5	6.5	8.5
2100 High Emission	MHHW	10.7	3.8	11.5	10.5	12.5
Present Day	MHHW Flood	11.2	0.5			
2050 Low Emission	MHHW Flood	12.2	1.0			
2050 High Emission	MHHW Flood	12.9	0.7	13.5	12.5	14.5
2100 Low Emission	MHHW Flood	13.7	0.8			
2100 High Emission	MHHW Flood	17.5	3.8	18.0	17.0	19.0

The base maps used for this study were produced using Google imagery and high resolution

Material to be presented by P Kirshen at full commission meeting on March 21 includes:

Outcomes/Products with example
Process of Developing above
Preliminary Findings

Some upcoming key dates which Sherry will help schedule.

(Note on April 25, 2014, the draft submittal dates were extended by ~ 5 weeks).

April 4 – Present results to date to NHCHC Steering Committee

April 18 – Brief Full Commission on Panel work to date

April 18 – Science Panel SLR and Storm teams submit drafts as they exist to rest of Panel

April 25 – Science Panel meet to discuss draft, 11 -2, tentatively at UNH. P Kirshen finding room.