# **Kingston Waterfront Flooding Task Force**

The Art Society of Kingston 97 Broadway, Kingston, NY 12401 July 16, 2013, 3:00 – 6:00 pm

### **Meeting 7 Summary**

# **Action Items**

- Planning team give Task Force members who missed the meeting a chance to add their names to the list of Task Force members endorsing the recommendations.
- Planning team make final edits to recommendations per discussion.
- Planning team circulate a draft of the final report for Task Force review.
- Planning team, mayor, and other city staff determine the steps for adoption of the report.
- Planning team and others further explore options for sharing the results of the Task Force's work with the community.
- All see outreach suggestions on page 5.

#### Welcome and Introductions

On July 16, 2013, members of the Kingston Flooding Task Force met at the Art Society of Kingston for their seventh and final meeting. The 21 meeting participants are listed in Appendix 1. Meeting handouts included an agenda, an updated draft recommendations document and optional handouts on Cornell Cooperative Extension workshops on changes in flood insurance and FEMA's Build Back Stronger. Ona Ferguson (CBI) provided a welcome and led introductions.

# <u>Presentation of COAST Cost-Benefit Analysis</u>

JT Lockman (Catalysis Adaptation Partners, LLC) presented an overview of the Coastal Adaptation to Sea Level Rise Tool (COAST), and the results of an updated Flooding Vulnerability Assessment and a cost-benefit analysis for the City of Kingston. The cost-benefit analysis estimated the financial cost of action compared to the financial benefit of avoided damage of four adaptation scenarios for the Strand/Ponckhockie area that were previously identified by the Task Force:

- A. No adaptation action,
- B. East Strand St Raised to 11 feet of elevation,
- C. Bulkhead/levee/promenade raised to 11 feet of elevation, and
- D. Purchases of rolling easements, with transfer of title to city in year 2060 or when Mean Higher High Water (MHHW) reaches 6.0 feet.

The assessment modeled the impacts of flooding under low and high sea level rise (SLR) on the East Strand / Ponckhockie study area, which includes built parcels and the sewage treatment plant. The model estimated the following cumulative damage under high and low sea level rise for the four scenarios:

SLR Scenario	Scenario A No Action	Scenario B Elevate E.Strand	Scenario C Raise Bulkhead	Scenario D Rolling Easements
Low SLR	\$46,400,00	\$4,900,000	S241,000	\$36,900,000
High SLR	\$44,100,000	\$4,700,000	\$446,900	\$39,576,000

The study modeled and compared the Benefit/Cost Ratio for the four adaptation scenarios (a higher number indicates greater financial return relative to financial costs on adaptation investment). Scenario D received the lowest ratios for both low and high SLR with a ratio of 3.7 and 1.8, respectively. Scenario C received the highest ratio with 27.1 for low SLR and 25.7 for high SLR.

	Scenario B: WITH ELEVATION OF EAST STRAND STREET TO 11 FEET (NAVD 88)		Scenario C: WITH ELEVATION OF BULKHEAD/WITH LEVEE & PATH TO 11 FEET (NAVD 88)		Scenario D: WITH PURCHASES OF ROLLING EASEMENTS, WITH TRANSFER OF TITLE TO CITY AT 2060 OR WHEN MHHW REACHES 6.0 FEET (NAVD 88)	
	Low SLR	High SLR	Low SLR	High SLR	Low SLR	High SLR
Cumulative Damage to East Strand Study Area With No Action <sup>1</sup>	46,400,000	44,100,000	46,400,000	44,100,000	46,400,000	44,100,000
Cumulative Damage with Adaptation Strategy in Place 1	4,900,000	4,700,000	241,000	466,900	36,900,000	39,576,000
Avoided Damage (Row 1 – Row 2) or BENEFIT	41,500,000	39,400,000	46,159,000	43,633,100	9,500,000	4,524,000
Estimated COST of Adaptation Strategy	8,000,000		1,700,000		<sup>2</sup> 2,540,000	
BENEFIT/COST Ratio (The higher the number is above 1, the more favorable is the ratio.)	5.2	4.9	27.1	25.7	3.7	1.8

<sup>&</sup>lt;sup>1</sup>Discount Rate of 3.3% applied.

In Scenarios A and D, as water level rises, the sewage treatment plant would be inundated and therefore need to be closed; in Scenarios B and C adaptation measures would prevent inundation and allow it to remain in the same location. In Scenario D, the cumulative costs to landowners in the community

<sup>&</sup>lt;sup>2</sup>Does not include purchase of easements at five city-owned properties, and sewage treatment plant remains unprotected.

remain high as landowners are likely to remain on their land until their title is turned over to the city several decades down the road, so damage to their property continues to accrue during those years.

Results of the model will be useful in guiding future adaptation decisions, but the Task Force was not asked to endorse one single adaptation scenario based on the results of the COAST analysis. The Task Force asked JT clarifying questions and discussed the following:

- One member felt that the easement cost modeled in Scenario D was far too low, guessing offhand that purchasing conservation easements could run closer to \$25M than \$2.5M.
- Someone questioned the validity of the assumption that as properties become more inundated
  they become less valuable, since there may in fact be lucrative uses for areas of flooded/marshy
  land. This person suggested that adaptation planning identify, take advantage of, and plan for,
  these potential solutions sooner rather than later. Task Force members said that the
  investigation of a resiliency plan for flooded land merits further investigation.
- There was a discussion of the logic of applying a discount rate of 3.5% per year and a standard inflation rate to future damage costs, as JT did in the analysis. Some wondered whether in fact real estate values might rise more than inflation, while others said given real estate values in Kingston this was not likely.
- Participants asked how study results and potential adaptation scenarios might be
  communicated to landowners who are confused about flooding risk and impacts on property
  values. There was no formal response about reaching out to this community, though there will
  be community outreach in the fall (see below in this summary) and some of the Task Forces'
  recommendations are about engagement with particular groups in Kingston.
- A few Task Force members wondered how certain adaptation approaches JT considered would work on their own property.
- Some noted that planning for and implementing adaptation solutions sooner rather than later will allow Kingston to reap greater returns and realize greater community resiliency.

#### <u>Task Force Recommendations: Discussion and Endorsement</u>

Ona Ferguson presented the Task Force with the written draft Final Recommendations (draft of July 12 sent to Task Force members on July 12). The recommendations document was discussed at the June Task Force meeting, revised based on that feedback by the planning team and then the new version was circulated to the TF for their detailed feedback via an online survey. The following themes emerged from the survey, which was completed by approximately 20 people:

- There are too many recommendations, the recommendations are too long, and they need to be more concise.
- Some recommendations are too prescriptive, requiring particular action, given the limited time the Task Force has had to work through details.
- People were especially uncomfortable with the idea of (a) an expanded coastal risk area (expand existing flood hazard overlay district or add additional freeboard in the district) and (b) the description of financial incentives to promote resiliency and their implications, which

people said were confusing and about which they would want more information before endorsing.

In the July 12th draft, the planning team sought to address all issues and suggestions raised by Task Force members. The primary changes made were:

- Where Task Force members suggested improved wording, the team sought to incorporate that language.
- Several recommendations were consolidated, clarified, and shortened. The recommendations were also reorganized.
- Overly prescriptive recommendations were either deleted, generalized or adjusted to reflect the need for further study.
- Reference to an expanded coastal risk area was removed. Language was adjusted to reflect need for further study before expanding the area or changing requirements in the area.
- Reference to financial incentives was framed as a list of topics worthy of investigation.

For this in-person discussion, Task Force members were asked how comfortable they were with the recommendations as now written. *The Task Force members present unanimously endorsed the recommendations*, pending the following small changes:

- Recommendation #2: Add a reference to Ulster County Community Reconstruction Zone
   Planning and transportation planning
- Ensure that the Task Force is named consistently throughout the recommendations
- Make final copy edits for readability, but don't change content.

#### Finalizing the Task Force Report

The Task Force and planning team discussed next steps for finalizing the full report of the group's work. These include:

- 1. The planning team will revise the Draft Recommendations and make the changes recommended above.
- 2. Planning team will check in with all Task Force members absent from this meeting to find out if they would like to endorse the recommendations.
- 3. The Planning Team will assemble (a) the report (overview of process and recommendations, 10-20 pages) and (b) supplementary materials that were produced for this process.
- 4. The Planning Team will send the draft report and supplementary materials to Task Force members for their feedback.
- 5. The Planning Team will revise the report and supplementary materials given Task Force feedback and finalize the documents.
- 6. Scenic Hudson staff will lay-out and format the document for publication

Task Force members recommended considering the dual audience of: 1) Kingston residents and officials and 2) broader audience elsewhere such as other communities engaging in a similar process. They also

noted the importance of developing an exciting, easy to understand, simple document that makes use of graphs, charts, images and text. Further guidance from the group:

- Ensure the report communicates the vision clearly (use advice from Emilie Hauser's climate change communication workshop), especially for the executive summary.
- Include a matrix of recommendations in the executive summary.
- Include a glossary.
- Include a letter from the mayor as the first page.
- Use a clear, communicable title for the report.
- Understand that "A ten page report is more desirable than a 20 page report"
- Highlight the need for adaptation now during storms, not only 50 years or more down the road.

### Getting the Report Adopted within Kingston

- Ensure it is presented as a Mayor appointed project, with his endorsement and letter up front.
- Present in full to an appropriate committee of the City Common Council (Earlier consultation
  with Council President indicates that this is likely Public Safety) and then a shorter version at
  the beginning of a full Council meeting in effort to gain their vote to adopt it. This would make
  the document sit in policy without the difficulty of turning it into a local law. This process could
  take 10 months.
- Strive to have it adoption under general municipal law 239 by the Council.
- Advocate incorporation into the upcoming Comprehensive Plan and the General Environmental Impact Statement for the Strand
- Present findings at the October Hudson Valley Greenway meeting.
- Use to gain grant funding.
- Release it publicly so people can refer to it. Lynn Woods from Ulster Publishing is interested in writing an article and attending the final meeting.
- Have a conference/training with the Planning Board, ultimately the primary user of this document, to unravel our process and findings.
- Request that the City put out a press release.
- Identify 2-3 Task Force members to represent us.
- Make sure the story comes from the Task Force, not the planning team.
- Spread the word beyond Kingston. For example, Libby and Mark will be presenting this at an APA chapter conference in September.
- The Waterfront Advisory Committee or the Heritage Area Commission could be the ambassadors of this document after the Task Force process is over.
- Post the document to the NYS Clearinghouse and DEC website and newsletters.
- Present on a Climate Smart Communities webinar.
- Public forum not necessary since the public have been invited all along.
- Could strategically wait until January 2014 to present to a newly elected Council since we are in the midst of an election season

• Make sure city employees understand this work.

# Outreach and Raising General Public Awareness

Participants briefly discussed the importance of spreading the word in Kingston about the results of the Task Force. They suggested that members of the Task Force and Planning team meet with the press to reduce misinformation. They wanted the story to go up on the DEC's website, be sent to Climate Smart Communities (CSC) email list, and be the subject of CSC webinar in the future. They recommended presenting the final report at a public meeting this fall, potentially on the covered barge at the Maritime Museum. This could be part of a CAC presentation process. The goal should be to gain acceptance by Kingston residents and to be seen and useful as a model for other communities.

### **Final Thoughts**

Task Force members and the Planning Team spent the last few minutes at this, the final meeting of the Kingston Waterfront Flooding Task Force, sharing their reflections on the process and their final thoughts. These included:

- The process was very interesting and unique.
- Members were surprised by the outcome being different from what they initially thought.
- We have learned a tremendous amount, which is a success, and there is more to learn on this complex topic in coming years.
- After all of the Task Force's effort, it is critical to roll out the final report out intelligently, including a lot of public outreach.
- There was impressive and diverse expertise represented on the Task Force and Planning Team.
- A congenial tone and strong relationships were developed as a result of numerous meetings.
- It would have been nice to have bolder final recommendations and more information on innovative options and the full range of what is actually possible for Kingston.
- This is the first step in implementing the adaptation aspect of Kingston's Climate Action Plan.
- This process is new worldwide, we should be proud to begin work on such a complex issue.

### **Appendix 1: Meeting Participants**

#### **Task Force Members**

Dave Allen representing Mark Brown, Kingston Fire Department Steve Finkle, S. Finkle Associates, Inc. / Hudson Landing Tom Hoffay, City of Kingston - Common Council Ward 2 Ann Loeding, Friends of Kingston Waterfront Kevin McEvoy, Kingston Land Trust Jon McGrew, Trolley Museum Jennifer Schwartz Berky, Kingston Resident Alan Shope, Clearwater Board President Arthur Snyder, Ulster County

# **Project Team Members**

Ona Ferguson, Consensus Building Institute
Emilie Hauser, NYSDEC HRNERR
JT Lockman, Catalysis Adaptation Partners
Mark Lowery, NYSDEC Office of Climate Change
Libby Murphy, NYSDEC Hudson River Estuary Program / Cornell WRI
Julie Noble, City of Kingston - CAC
Sacha Spector, Scenic Hudson
Gregg Swanzey, City of Kingston - Economic Development

#### **Others Present**

Dave Conover, Clearwater
Meredith Cowart, Consensus Building Institute
Steve Rosenberg, Scenic Hudson
Maude Salinger, NYSDEC Hudson River Estuary Program