RE: Comments on the proposed seawall and tide gate

October 23, 2018

Nancy Brighton, Chief
US Army Corps of Engineers

Dear Chief Brighton,

Thank you for inviting comments on the Army Corps proposals for storm surge protection. A challenge is facing NYC and contemporary coastal cultures: finding ways to live on shorelines that embrace, celebrate and support a healthy ocean. Most of the NYC metro region in its present megalopolis form has been here for less than 100 years, and during this brief time we have built a great culture (arguably, the center of the western world). We have placed ourselves and rigid structures in low areas that are vulnerable to high water.

Flooding is a natural part of how the planet operates, and we are in a flood zone. Flooding is inevitable, but we look to our great maritime engineers and modelers to figure out how to hold onto buildings and territory that we occupy, and keep it from slipping into the sea. A wall is a direct approach, but is a muscular engineering solution setting up war with the ocean. And what happens to New Jersey and Connecticut if we send all this highly energized water up onto their shores? Also, the proposed sea gates, seawalls and wave breaks, while reducing the rare intense waves and storm surges, do not address flooding from increasingly frequent heavy rainfall, or from sea level rise.

We were a society focused on industrial growth, and now we are transitioning into a society structured to be life-sustaining. Long term, we should be removing buildings from floodplains and restoring/recovering armored shores. Over time, some of the rigid structures built on shorelines could be relocated to higher ground. Many or most could be modified to let floodwaters flow and recede beneath them.

For a long-lasting coastal society that protects itself while conserving wildlife and the health of the ecosystem, we need to recover some of the regional natural floodplains. Floodplains have abundant value: filtration, holding flood water temporarily, wildlife corridors, vital nesting areas and feeding habitat for many other regional species.

Priorities for the resiliency proposals should include: clean water, natural processes that cycle nutrients and oxygen, marine life, and shorelines that are capable of adjusting to changing conditions normal to systems at the interface of earth, sea and atmosphere. There is danger in compromising ocean ecology; we do not want to cut off our oxygen supply or induce crashing populations of fish, lobsters, oysters, shrimp and birds. We urge that the ecosystem services of the existing conditions not be disturbed or lost, and that long-term projected costs of maintenance and costs to the harbor’s shipping, fishing, recreational and scenic resources be considered in the cost/benefit analysis.

The modelers of the sea wall proposal predict destruction of the continuity of the ancient natural drainage and circulation systems in many areas. This has impacts for the Bight, the Hudson River and the estuary that are multifunctional and complex, with elaborate multivariate feedback loops, and possibly unknowable results. The changed patterns of water and sediment will change mixing, flushing, oxygenation, habitat and the evolution of the wildlife in countless interrelated and probably unpredictable ways.

As we understand it, the best and most proven ways to protect ourselves are to:
1. In advance of big storms, evacuate people from low areas.
2. Anticipate/prep for flooding so that infrastructure and energy systems are minimally damaged by high water.
3. Release flood-prone lands from structures that can go elsewhere.

We suggest that the Corps and their consultants work with marine biologists and restoration ecologists to address long term adaptation to local warming and the expanding sea; anticipated storms, and wise use of NYC’s floodplains.

We feel there must be an independent, objective and comprehensive EIS by well-qualified people that evaluates the environmental impacts of the proposed structures, with consideration of long-term projected costs of maintenance and costs to the harbor’s shipping, fishing, recreational and scenic resources. The enormity of the cost of a complete surge wall and sea rise protective measures should be evaluated against other potential applications of the money that provide emergency protection and remediation rather than the 5 or 6 off-the-shelf alternatives being studied.

Solutions (modified from http://coastalcare.org/educate/shoreline-engineering, accessed 9.20.18) are to: Design to live with the flexible shoreline environment. Don’t fight nature with a “line of defense.” Base decisions affecting the Harbor and River on the welfare of the public and the health of the environment rather than the demands of floodplain property owners.

Thank you again for this opportunity to make comments and your attention to this important issue.

Respectfully submitted,

Cathy Drew
Executive Director
The River Project