

Newtown Creek CAG DRAFT COMMENTS—USACE-HATS

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RE: Call for public comments on the 2022 *NEW YORK-NEW JERSEY HARBOR AND TRIBUTARIES COASTAL STORM RISK MANAGEMENT FEASIBILITY STUDY*

Dear Mr. Wisemiller,

We thank you and your colleagues for extensive work on the issue of storm surge barriers and for inviting public comments on the feasibility study.

Below are issues of concern raised by members of the Community Advisory Group (CAG) for the Newtown Creek Superfund based on the information we have available to us today. The Newtown Creek CAG is a diverse group of local stakeholders including residents, property owners, public health experts, and government representatives who have an interest in the cleanup of Newtown Creek. These comments regard the fate of toxic Creek sediments and contaminated shoreline substrate under hydrodynamic forces introduced by a storm surge barrier at the mouth of Newtown Creek, as well as the effect of the barrier on community efforts to increase public access and habitat restoration along the Newtown Creek shore.

Our comments are summarized below and their discussion follows:

1) The proposed barrier gate opening narrows the mouth channel by 67% of its current width. As a result, average flow velocity through this narrowed opening would increase beyond its current value at the mouth channel. Outflow current velocity would be expected to decrease progressively more peripheral to the opening as the outflowing current hits the barrier wall and is forced into a lateral flow towards the opening. Extreme turbulence could occur immediately adjacent to the barrier opening, where large volumes of water are reflected by the barrier. Such central turbulence would slow lateral flow from more peripheral regions of the channel, potentially causing the slowing or eddying of water. As a consequence of altered flow velocities, sediment deposition could occur laterally and sediment scouring centrally. Contaminated benthic sediments could be suspended and redistributed.

¹ U.S. Army Corps of Engineers (USACE). 2022. New York-New Jersey Harbor and Tributaries Coastal Storm Risk Management Study. Appendix A5: **Clean Water Act Section 404(b)(1) Evaluation**. USACE, New York District.

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2) Increased flow velocity through the gate opening may be insufficient to sustain the current volume of water moving into and out of the waterway with the tides. With reduced tidal flux, increased volumes of retained water and decreased mixing of Creek and East River water bodies can be anticipated. The deleterious impact of CSO and MS4 events upon water quality could be magnified by increased water retention. As described, CSO mitigation measures appear inadequate to address reduced tidal flux.

3) Closing the barrier gate because of storm surge could occur in association with heavy rainfall. If gate closure cannot be timed with the low tide, or if the low tide is already higher than normal, then a massive volume of runoff and a rising water table could flood neighborhoods around the Creek. This could result in retention of highly contaminated water within these neighborhoods.

4) Current modeling to determine appropriate remediation protocols under the Superfund effort are based upon existing dynamic interactions between the waterway, the surrounding water table, and the waterway's drainage system (surface run-off and point source). If the nature of these interactions change, then EPA models developed under the remediation and feasibility study would no longer accurately reflect existing conditions and could no longer guide a remedy.

5) The proposed storm surge barrier plan prioritizes protection of the built industrial shoreline of the Creek over efforts to restore wetland habitat and public access to the shore. Extended retention of water with low to negligible salinity and/or heavy sediment load within the intertidal zone could decimate its expanding ribbed mussel population and populations of other invertebrates within the aquatic community here. It is not clear how fish and bird populations will be affected by any dramatic alteration of the waterway's hydrodynamics and disruption of ecological function.

6) The absence in this study of Newtown Creek as a recognized Superfund site on the NPL is troubling and confusing³.

Discussion of Comments:

1) The storm surge gate can be expected to dramatically alter water flow velocity differentially between central and peripheral regions of the main waterway. How these different rates of flow alter sediment distribution is a critical concern because of sediment resuspension and contaminant transport¹. We are also concerned that both the narrowing of the mouth and potential high velocity currents near the structure will

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create adverse impacts and navigational conflict for the various types of recreational and commercial waterway users (tug boats, barges, municipal tankers, human powered vessels, sailboats, motorboats, research vessels, etc) that frequently transit between the East River and Newtown Creek. It is currently unknown what impacts the construction phase of the proposed storm surge gate could have upon marine transit commerce for businesses along the Creek. Moreover, the construction of the storm surge gate and the resultant narrowing of the passable channel at the mouth of the creek may present an increased risk to navigation, life, and property.

2) Any change in water retention throughout the tidal cycle would impact the intertidal zone. It is possible that mean high and low tide heights will be altered. This is a critical issue for efforts to restore intertidal biota by developing suitable habitat. Such efforts have already been initiated, and a major goal of the CAG is to significantly expand salt marsh restoration throughout the Creek. Additionally, changes to flood/ebb tidal velocity and mean tide levels could alter lateral groundwater and benthic sediment transport, and by association NAPL transport throughout the system. Also, given the massive volume per year of CSO loading into Newtown Creek, and the relatively broad distribution of major CSOs throughout the Creek system, it is not clear how USACE, EPA, NYSDEC, NYCDEP will be able to ensure efficient CSO loading mitigation under the current proposal to ensure TMDL thresholds are met and CWA standards are maintained.

3) CSO and MS4 events already regularly compromise minimally acceptable water quality standards. Changes in water retention due to gate closure risk increasing incidences of nutrient pollution, hypoxia, and pathogen exposure with high tide flooding. Specific neighborhoods are already subject to flooding during extreme high tides. Additionally, changes to mean tide levels could alter lateral groundwater transport, and by association NAPL transport throughout the system. The proposed pump stations throughout Newtown Creek do not clearly account for variability in pump capacity to inflow ratio. Were a major storm event to exceed the currently proposed 41% pump capacity, there is no indication as to the duration of time that the pump system would be active, the limits of the pump systems efficacy, or if the pump system would transport more or less toxic and contaminated resuspended sediment out of the Creek system and into the East River tidal strait than is currently transported without a gate or pump system². Given the scope and cost of the proposed pump system (>\$21 million for Newtown Creek)², the CAG views this problem as an opportunity for interagency collaboration. This would ensure that whatever design is implemented in Newtown Creek, agencies would take all necessary measures to ensure that CWA standards are not only met, but are exceeded when the proposed storm surge gate is both open and closed; thereby enhancing and updating the LTCP, which the CAG believes is already inadequate for managing current and future conditions.

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4) The EPA is currently conducting a lateral groundwater study that could be made moot by severe alterations in hydrodynamics. Given the proximity of the Meeker Avenue Plume, Greenpoint oil spill, numerous upland Brownfields, and the EPA's nascent understanding of groundwater transport in the area more generally; it is prudent for this CAG to reject the notion that this issue may be solved by integrated groundwater/hydrodynamic modeling alone, without more information regarding the process by which USACE and EPA will coordinate their efforts to understand and determine risk to the community and ecosystem. Additionally, the scalability of alternative actions in the CERCLA process and the operational life of the proposed storm surge gate with regards to probabilities of sea level rise are not clear from this study. This CAG has established its desire for sea level rise predictions to be integrated into modeling alternative remedies in the CERCLA process. The integration of the most up to date sea level rise data is imperative, and it is unclear how the proposed storm surge gate will coincide with current sea level rise probabilities, and how this may impact remedial action at Newtown Creek.

5) To our knowledge, there has never been such a large engineered change to an aquatic Superfund site independent of remedial action. The proposed plan has severe implications for the community-led commitment and efforts to revitalize Newtown Creek's local ecology and public access, restore salt marsh habitat, soften its shores, and ensure it is a focal point for coastal resilience.

6) It is unclear why Newtown Creek has been omitted from this study as a NPL site when other NPL sites in the region have thorough description (e.g. Gowanus, Hudson River, Passaic etc.). Indeed, Hazardous, Toxic, and Radioactive Waste is defined in such way by USACE ER 1165-2-132 as to qualify Newtown Creek for inclusion in this study;

“ ..Dredged material and sediments beneath navigable waters proposed for dredging qualify as HTRW only if they are within the boundaries of a site designated by the EPA or a state for a response action (either a removal action or a remedial action) under CERCLA, or if they are part of a National Priority List (NPL) site under CERCLA.”³

And so,, it is this CAG's understanding that it is categorically incumbent upon USACE to revise and include Newtown Creek in this study as a CERCLA designated NPL site, which it has been since 2010. As a NPL site associated sources of contamination should be described, such as, but not limited to: the Greenpoint oil spill, Greenpoint Energy Center, Pratt Oil Works, and the Meeker Avenue Plume, which is also now on the NPL. This CAG has no evidence provided by the USACE to indicate that Newtown Creek and its associated toxic sediments, that clearly fall under the mandate of USACE ER 1165-2-13, have been given any not to mention sufficient consideration as part of this study.

In conclusion,

The USACE HATS proposal for a Newtown Creek barrier could generate environmental conditions as dangerous to human life and as disruptive to the estuary ecosystem as the conditions the proposal is

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designed to prevent. USACE and the EPA have not demonstrated to the community that collaboration exists between these agencies regarding the execution of their respective mandates regarding the Newtown Creek estuary, its biota, and its human communities.

With so much public interest and safety resting upon this issue, it is imperative that all stakeholders in the area are engaged. The proposed infrastructure initiative may detrimentally alter remedial action options available to the EPA at Newtown Creek and Meeker Avenue, potentially compromise the effective management of Clean Water Act/Clean Water Rule standards, exacerbate ongoing local flooding, could impede potentially advantageous deposition from the East River, impede local commerce and navigation, alter toxic/contaminant transport and fate, constrict local resiliency restoration, resilience and public access efforts, and detrimentally alter ecological function. Furthermore, the apparent omission of Newtown Creek as a NPL site is not explained.

Therefore, we believe it is unacceptable for USACE to move forward with planning a storm surge gate at the mouth of Newtown Creek until both agencies have come forward with policy specific to Newtown Creek that addresses our concerns both empirically and regarding communication and meaningful engagement.

The CAG also requests that the USACE and EPA initiate a public forum for Newtown Creek specifically, whether at scheduled CAG meetings or another public forum, for the purpose of communicating directly to the community about how the respective agencies are reconciling incongruous details related to HATS planning at Newtown Creek, and the ongoing CERCLA investigation, planning and remediation.

Ultimately, the CAG is concerned that despite public comment on the proposed project, the fate of the Creek will be tied to a decision-making process that excludes the community and instead rests upon non-transparent dialogue between two federal agencies. This outcome would be a clear violation of the mandate for the EPA to communicate transparently with the public under CERCLA, and our right to know.

The CAG is resolved that the novel overlap between the responsibilities of USACE to coastal resiliency and the EPA's responsibility to CERCLA can serve as an opportunity to model community involvement and agency collaboration in addressing challenges that will confront coastal communities with increasing frequency.

Sincerely,

Newtown Creek Superfund Community Advisory Group

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