

Newtown Creek East Branch Early Action CAG Comments for CSTAG



Willis Elkins
CAG Co-Chair
July 12, 2023

Intro to CAG

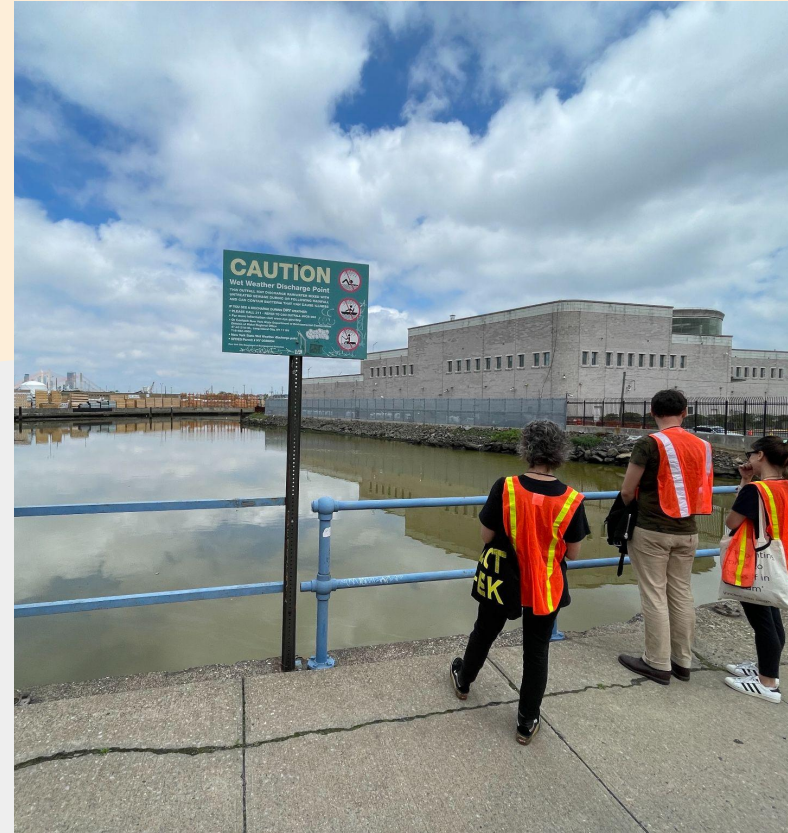
Thoughts on **Current and Future Uses** of the waterbody

Ideas and Insights about the development of the East Branch Early Action FFS cleanup strategy and remedial alternatives

Recommendations for improvement to the **Site Strategy**

Community Concerns about the impact of the project

Ideas about how EPA can best disseminate site-related information and provide opportunities for meaningful **Stakeholder Involvement**



The Newtown Creek Community Advisory Group,
formed in 2012, consists of:

- + Local residents
- + Community organizations
- + Local business owners
- + IBZ non-profits
- + Recreational waterway users
- + Commercial waterway users
- + Local educators
- + Regional environmental orgs

We hold monthly public meetings with
EPA, PRP's, and Elected Officials.

newtowncreekcag.org



Vision Principles for Newtown Creek

Developed by Newtown Creek CAG (2016)

1. Remove All Contaminated Sediment
2. Address CSO and Stormwater Discharge
3. Make Safe for Fish Consumption
4. Improve Water Quality to Swimmable Levels
5. Protect and Promote Marine Ecosystems
6. Shoreline Restoration in Tributaries
7. Allow for Navigational Channels
8. Preserve Industrial Core
9. Continued Mixed Use of Waterway
10. Robust Community Participation
11. Increased Public Access for Education
+ Recreation
12. Plan for Climate Change



CURRENT + FUTURE USES

Current conditions/uses of East Branch:

No commercial uses in the waterway.

Shallow waters.

No water access, but a few areas to view the water.

Visually dominated by the NYCDEP aeration system from May-September.

Abundant wildlife (wading birds, fish, mussels).

Visited recreationally by paddlers.

Largely impacted by CSO (NC-083).



CURRENT + FUTURE USES

The CAG's vision for the future of the East Branch tributary includes:

Elimination of **all pollution sources** (seeps, groundwater, ebullition, CSO, etc) and remediation of existing sediments.

Non Navigable Waters beyond Grand Street Bridge.

Extensive **wetland and shoreline restoration**, integrated with resilience and upland flood protection.

Improved **public access** at the Grand Street Bridge, Western Beef parking lot, and Metropolitan Avenue.

Elimination of the **aeration system**, due to outstanding concerns for transport of pollutants and air quality impacts.



CURRENT + FUTURE USES

EPA/DOT/USACE Coordination

To ensure a proper cleanup and timely replacement of the Grand Street Bridge it is critical for there to be proper coordination amongst various agencies. These are the major concerns:

It will not be possible to thoroughly remediate the entire East Branch due to extensive footprint of the current in-water bridge infrastructure

If bridge is replaced with non-movable structure it may impact remediation

NYC DOT has yet to determining new bridge structure as well as interim mitigation plan during construction



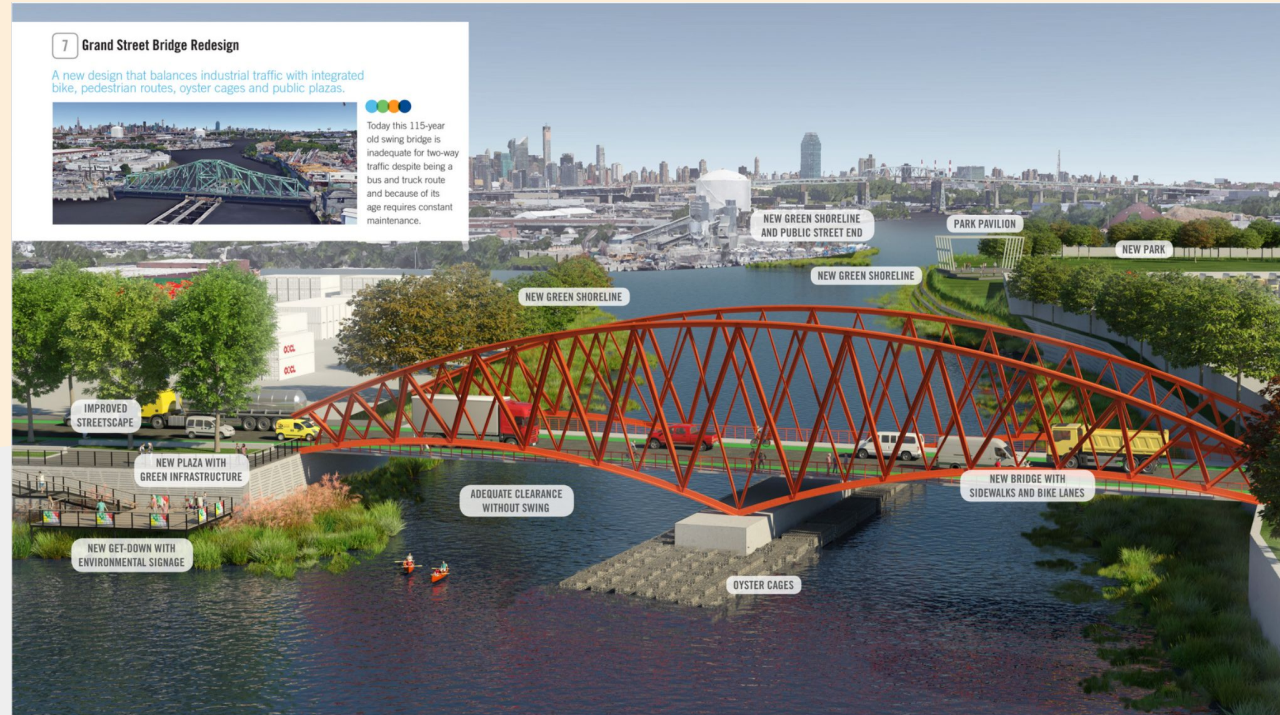
A proposed timeline for Bridge/Remediation:

USACE de-list navigation beyond the bridge.

DOT designs new bridge plans based on a non-navigability AND the EPA EA plan.

Coordinate bridge removal and remediation so they can happen simultaneously (as it will be easier to conduct remediation with no bridge footings in place, or openings required).

Complete remediation;
install new bridge.

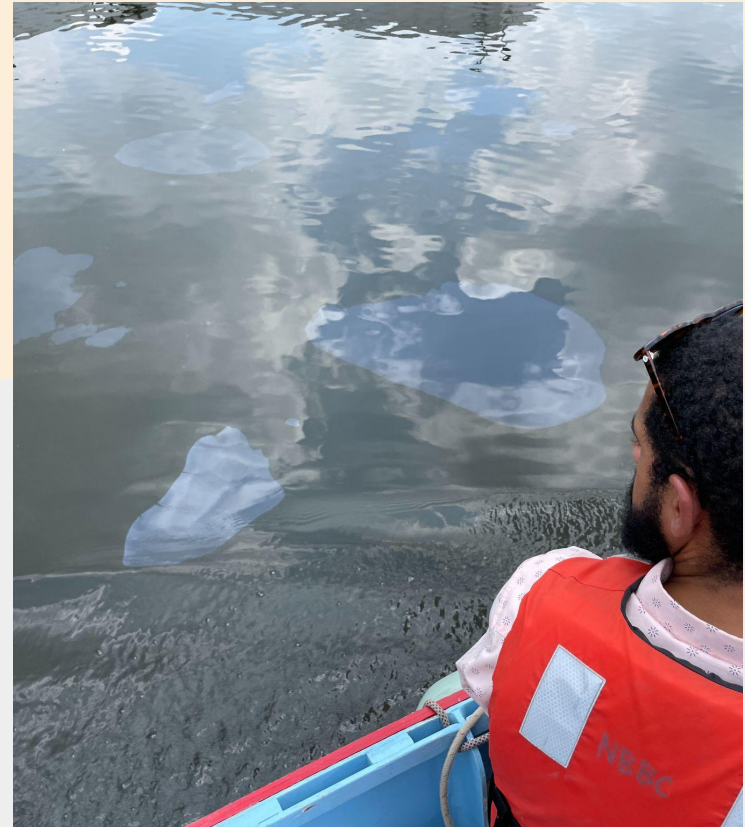


Contaminant Sources/Fate and Transport

The **CAG needs more details on contaminant distribution**, loading, and CSM to be able to evaluate options and to provide the most constructive feedback.

The RAOs suggest that sediment and NAPL are the focus of the EA however the specific fate and transport processes being addressed by each EA alternatives is not specified. The TM further acknowledges there are uncertainties in the understanding of relative source contributions such as lateral groundwater discharge and NAPL seeps which are not being addressed by the EA. **This CAG is concerned that the EA may minimize some sourcing of contamination to the EB only to be re-contaminated by other processes not addressed by the EA.**

Will additional data and evaluations be available prior to selecting the final EA alternatives to assess whether the EA in EB will minimize reduction in contaminant mass to affect the success of the long-term remedy in OU1?



Contaminant Mass/Loadings

The EA TM developed an estimate of COC mass in sediment and loading estimates into EB sediments and surface water. However, **no specific detail is provided on how NAPL and vertical groundwater discharge contributes to overall mass loading.** It appears additional evaluations are necessary to inform the selection of alternatives and not delay all further studies until after the alternatives are selected.

Will there be **additional modeling and evaluations** presented in the FFS on how COC and NAPL mass and associated loading mechanisms supports EA alternative selection? Will a combination of alternatives be selected to allow for application to EB areas where a specific alternative is most suited?

The EA TM mentions in several places what sources the EA will not address (e.g., stormwater, point source discharges, overland flow, lateral groundwater discharge and bank erosion seeps, etc). However, due to the lack of detail on loading from all sources, **it remains unclear if the EA in EB will achieve the RAOs** and improve the ability for the long-term OU1 RAOs.

Will the FFS include additional data and lines of evidence to clearly support the **benefits of an EA in EB while the long-term OU1 remedy is being developed?**

NAPL

It is unclear how NAPL in various forms (blebs, sheen, pools, seeps) will be addressed by each EA alternative and **address uncertainty in NAPL mobility**. A comprehensive understanding of NAPL sourcing mechanisms and fate and transport properties (e.g., ebullition, dissolution) is critical to understand any benefit gained in addressing NAPL as part of the EB EA. There is a concern that sediment will only be re-contaminated from NAPL seeps or other sources not addressed in the EA or worse, cap failure from ebullition.

Will the FFS **include additional evaluations** and also compile results from important NAPL studies such as in NYCDEP's 2020 Upland Seep report to assist in identification of hot-spots to be addressed by the EA alternatives? The CAG sees this as imperative to provide another line of evidence to identify NAPL hot-spots.

The EA TM states that NAPL within EB is immobile and cannot **migrate upward via advection** when very limited data is available to support this concern.

Is NAPL in fact immobile? We have concern that seepage occurs outside of caps, and/or the reactive caps lifespan will be exceeded, thus rendering a cap ineffective against NAPL mobility? **Can a cap adequately address mobility & ebullition?** Are there other comparable examples to draw from?

The EA TM mentions that an estimated annual load of NAPL via gas ebullition was developed and ranges from 28 kg/year to 130 kg/year but **NAPL loading via different fate and transport pathways** (e.g., dissolution, ebullition) is not provided like was done for PCBs and copper.

Performance Monitoring

The EA TM states that modeling similar to the Long-term equilibrium (LTE) modeling will be applied to assess remedy performance of the EB EA. However, the LTE model is **specifically addressing solid based COC concentrations** for the long-term OU1 remedy and **not NAPL**.

Will a LTE model be included in the FFS that is designed and tailored to address **EA remedial performance to address the uncertainties** in inherent in these EA alternatives? Will there be any contingencies included in the FFS to address EA performance?

Lateral Groundwater Flow

The contaminant loading from lateral groundwater flow is under **study as part of the OU1 long-term remedy**, however, clarification is warranted why this potential loading is not being addressed by the EA.

Why is lateral groundwater flow not addressed by the EB EA and provide justification that this would not affect the EA for sediments and NAPL.

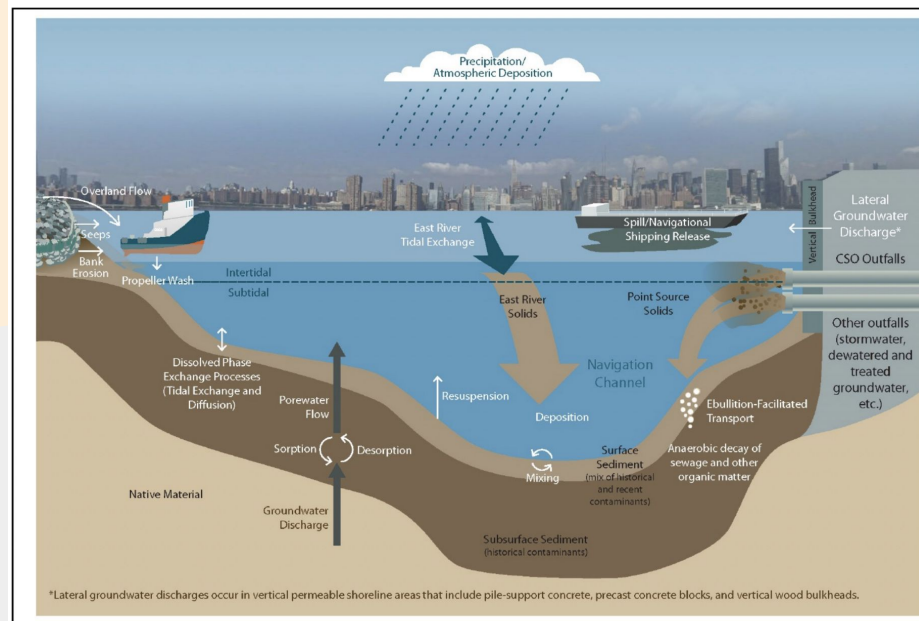


Cleanup Goals

The CAG understands that preliminary remediation goals (PRGs) are site-specific based on a review of other similar sites (Passaic River, Gowanus). The CAG also understands that reference areas can be used to set PRGs as was done for the Gowanus Site for copper and lead versus PRGs based strictly on site-specific toxicity.

How were reference areas accounted for when EPA selected the sediment PRGs?

How can a selected PRG based on surface-weighted average concentration (SWAC) **also be protective of benthic ecological receptors** where a PRG is based on a not-too-exceed value? For example for PCBs the human health-based SWAC PRG of 0.3 mg/kg was selected as the lowest value however, the lowest not-to-exceed PRG is 1.5 mg/kg. Since a SWAC is an average, will confirmation samples be collected to ensure the not-to-exceed value is also achieved?



EA Alternatives

Six EA alternatives (to include the no action alternative) are identified. However, it is unclear if different alternatives will be selected for different portions of the EB based on area-specific conditions due to various factors affecting contaminant distribution in sediment (e.g., presence of permitted and non-permitted point discharges, aeration line, bridge construction plans, navigability designation, presence or absence of NAPL and in what form is the NAPL, etc.). This is important as there are **too many variations in the EB to believe one of the alternatives would be successful.**

Will different alternatives be selected for different targeted areas of the EB in the FFS? If so, the FFS should provide clear rationale and criteria for selection of the alternatives?

Subsurface Sediment Remediation

Sediment borings as deep as 16 feet show high levels of contamination. There is concern that a substantial amount of contaminated sediments will remain in place if only 3 feet of dredging occurs with the bulk of contamination covered by a cap.

Will the **FFS include additional evaluations to support the appropriate cap construction** to use in each area depending on presence/absence of NAPL or areas that may be affected by physical factors (flow, point sources/discharges, etc.).?

Dredging vs Capping

The **CAG believes dredging is more protective than capping** due to the potential for cap failures from various factors (e.g., settlement, navigation, weather, ebullition, uncertainties in NAPL mobility) which can damage cap integrity.

Will the FFS include additional detail on how cap failures will be prevented by the EA alternatives? Due to cap failures at other sites (Pine Street Canal, VT where portions of the cap were leaking oil and coal tar one year after placement; Anacostia River gas ebullition led to uplift) there is an **expectation that deeper dredging would be a more permanent solution** that use of shallow dredging and large caps.

Capping

All the EA alternatives except the “no action” alternative, include armored/reactive caps, however the **CAG has concern that such caps are not sufficient** to control the long-term flux of NAPL and dissolved-phase contaminants.

How will the FFS support the selection of cap material to ensure site conditions would **not exceed the life-span of a reactive cap**? How will the FFS demonstrate that NAPL flux will be low enough for a reactive cap to even be considered as a realistic option for EB?

CSO Mitigation

The CAG is deeply concerned that ongoing discharges from the **CSOs in East Branch will disrupt and/or recontaminate potential early action remediation**. The Long Term Control Plan will create an approximate 60% reduction of CSO in East Branch, but will not be completed until the 2040s. Understanding how contaminant loading and volume flow will impact a remedy is critical.

We ask that CSTAG and EPA **consider alternatives for mitigating CSO impacts in East Branch**, including the possibility of extending the primary CSO pipe (NC-083) out towards the main channel of Newtown Creek. An extended pipe would help prevent recontamination (pre and post LTCP) and potentially be integrated into a shoreline stabilization and/or capping remedy.



COMMUNITY CONCERNS

Truck Traffic + Air Quality

Given the high volume of traffic, especially trucks and buses, that cross the Grand Street bridge and transit the area, there is concern about how frequent bridge openings will impact travel, deliveries and transit as well as impact air quality via idling.

Air Quality Monitoring

The CAG is concerned about air quality impacts during remediation, where VOC's may enter the air column and pose risk to local workers, commuters and nearby residents. We ask for a robust monitoring system to be in place, with easily accessible data available in real time.

Communication

As always, any direct impacts to the community, be it in water construction, planned bridge openings, or environmental monitoring, should be thoroughly communicated to local stakeholders including the CAG, Community Boards, Local Businesses, Elected Leaders, etc.



STAKEHOLDER INVOLVEMENT

The CAG has concerns that the technical information presented in the EA TM is **insufficient to provide an adequate scientific basis for the EA alternatives proposed** in this TM. The CAG requests that much more detailed science-based information be provided in the upcoming Alternatives Memorandum to provide the basis of the developing and evaluating EA alternative(s). This should include **more detail on contaminant distribution** and loading (including more extensive data like heavy metal concentrations) as well as the extent and **type of dredging and capping being considered**. This information would benefit with cross sections that show the **conceptual site model for each unique area** of the EB to more accurately portray where dredging and capping could be considered. This information should not all be deferred to remedial design as it is necessary to inform the detailed evaluation of the most appropriate alternatives for the EA in the EB.

The CAG would like **transparency in regards to NCG & EPA communications** (including copies of comments) on previous and ongoing submittals to inform the CAG how specific technical issues were resolved between these entities and in turn, will allow for more targeted feedback from the CAG.



STAKEHOLDER INVOLVEMENT

Summary of recommendations for improvement to the site strategy:

More detailed **science-based information** to support alternatives selection which CAG expects to see in the upcoming EB Early Action Alternatives Memo

A **combination of alternatives** depending on site-specific conditions within entire EB

Coordination between agencies to satisfy a successful cleanup, navigation authorization, and bridge replacement

EJ considerations, especially with cleanup balanced with future uses to improve access to nature/recreation

Make **best use of available information** and data to improve current strategy

Increased coordination between PRPs, EPA and NYSDEC to **advance upland investigations and remediations**.

Fill data gaps with regards to ebullition, seeps, contaminated sediment, and groundwater.



THANK YOU!

