



**Operable Unit 1 Updates and  
East Branch Early Action Overview**  
Newtown Creek Superfund Site  
Queens and Brooklyn, New York City  
November 16, 2022

# Operable Unit 1 Updates

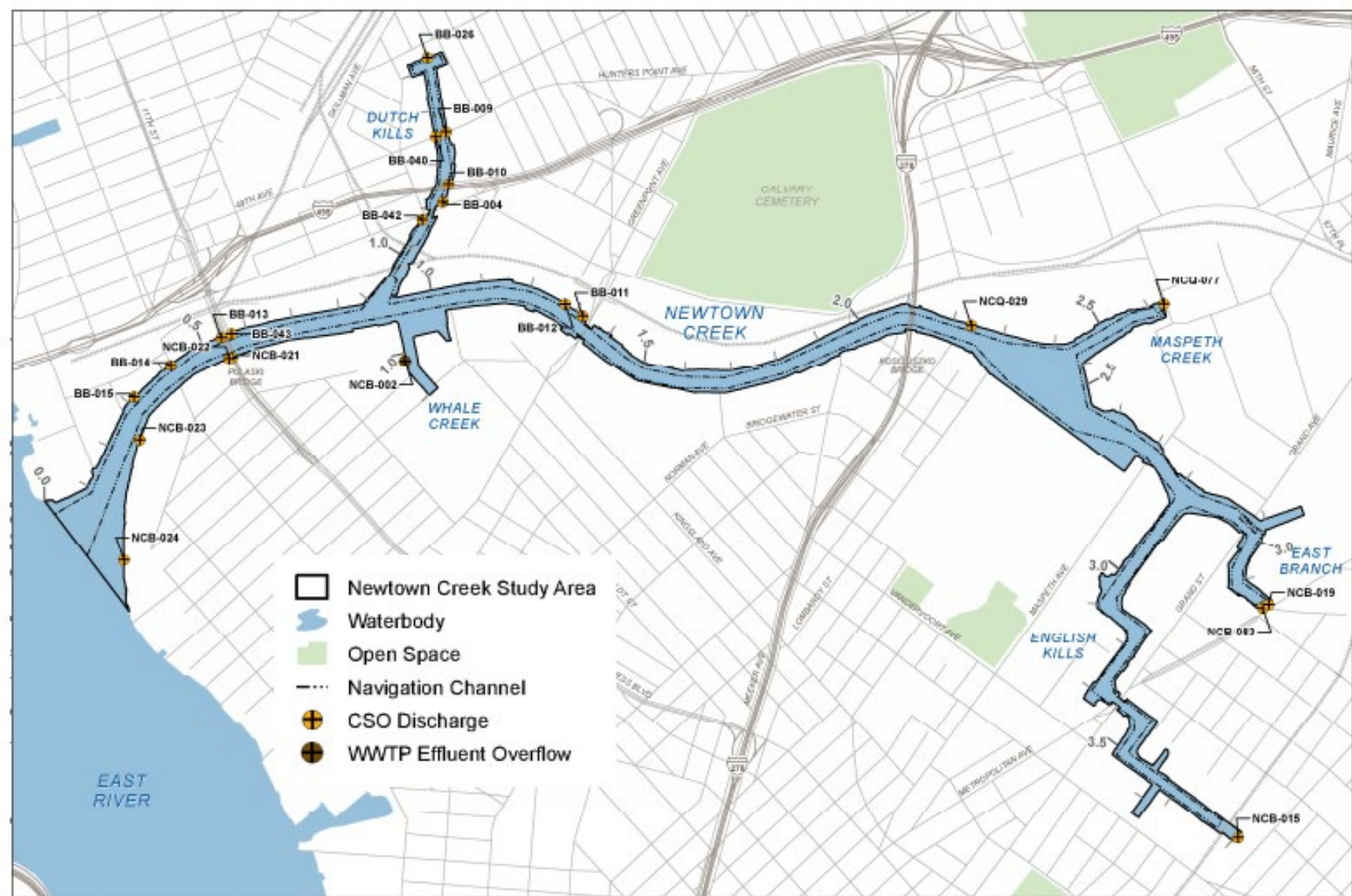
## Current Projected Schedule for All of OU1

- 2022 to 2024 – conduct lateral groundwater study
- 2022 to 2024 – conduct NCG-led supplemental sampling program
- 2023 – finalize RI report and continue work on FS report
- 2025 – submittal of draft FS report (after completion of additional field work)
- 2026 – revised draft FS report
- 2027 – release Proposed Plan; CSTAG/NRRRB review will be required
- 2028 – Record of Decision for OU1

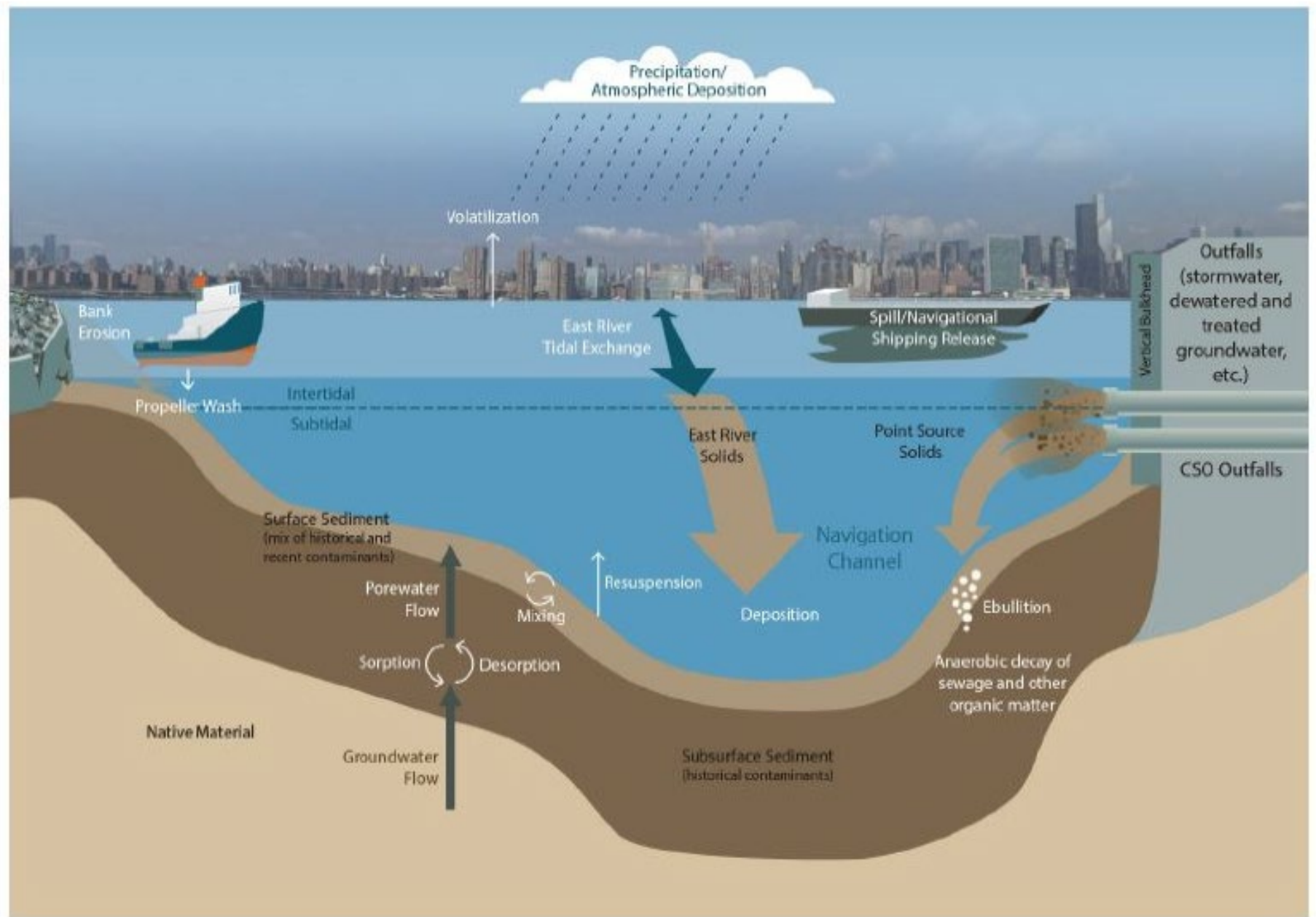
# Key Considerations Impacting Schedule

- Uniquely complex system
- Multiple ongoing sources under many authorities
- Navigation
- Future Use/Reuse

# Study Area



# General Conceptual Site Model



# Current Areas of Focus

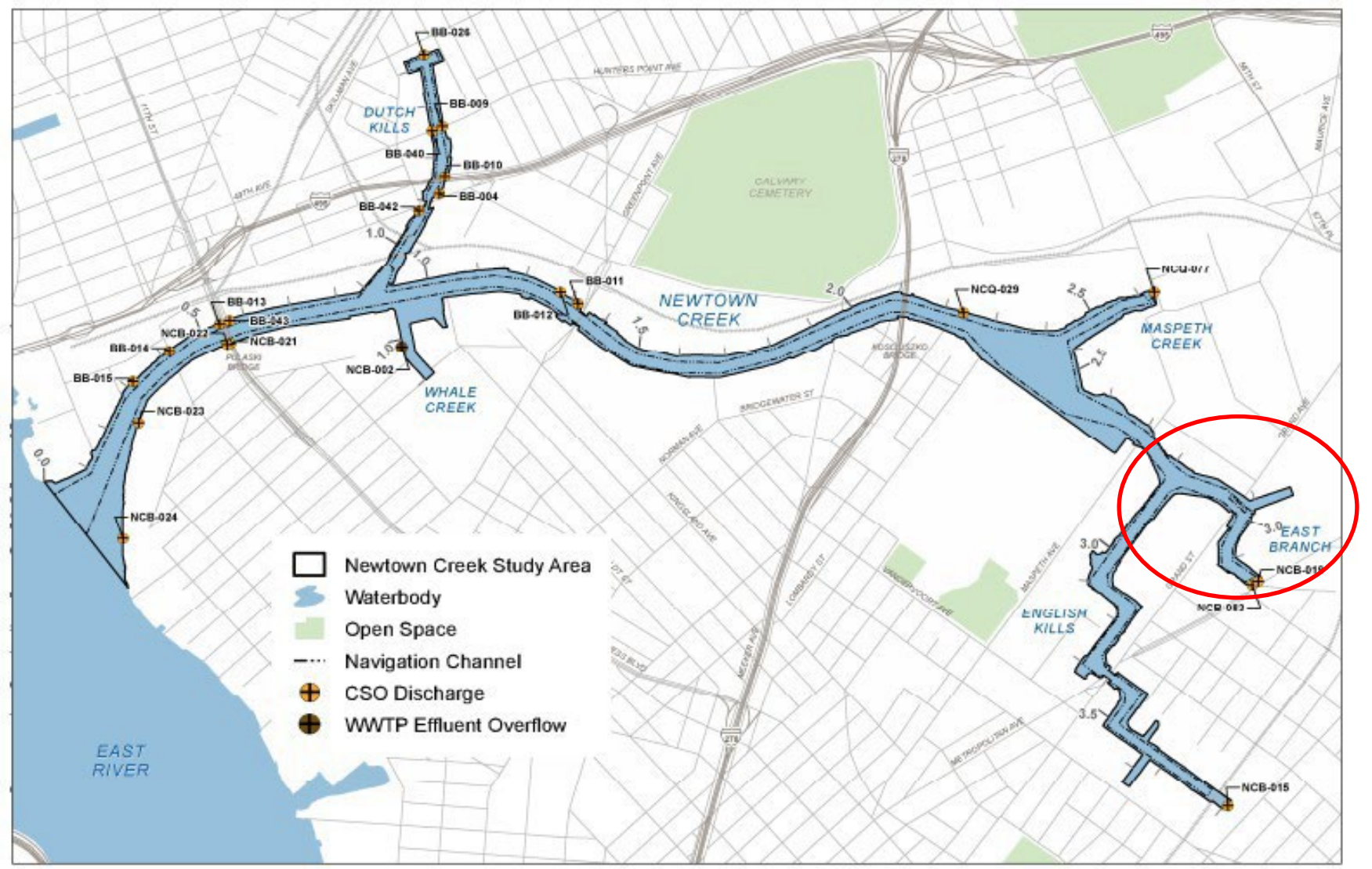
- Development of Remedial Action Objectives and Preliminary Cleanup Goals
  - Role of background
  - Coordination with various regulatory authorities
- Development of alternatives for different sections of the Creek
- Complete modeling framework
- Resolve navigation issues and future use concerns
- Coordination with NYCDEP and NYSDEC on Clean Water Act requirements
- Evaluate Early Action for East Branch

**Questions?**

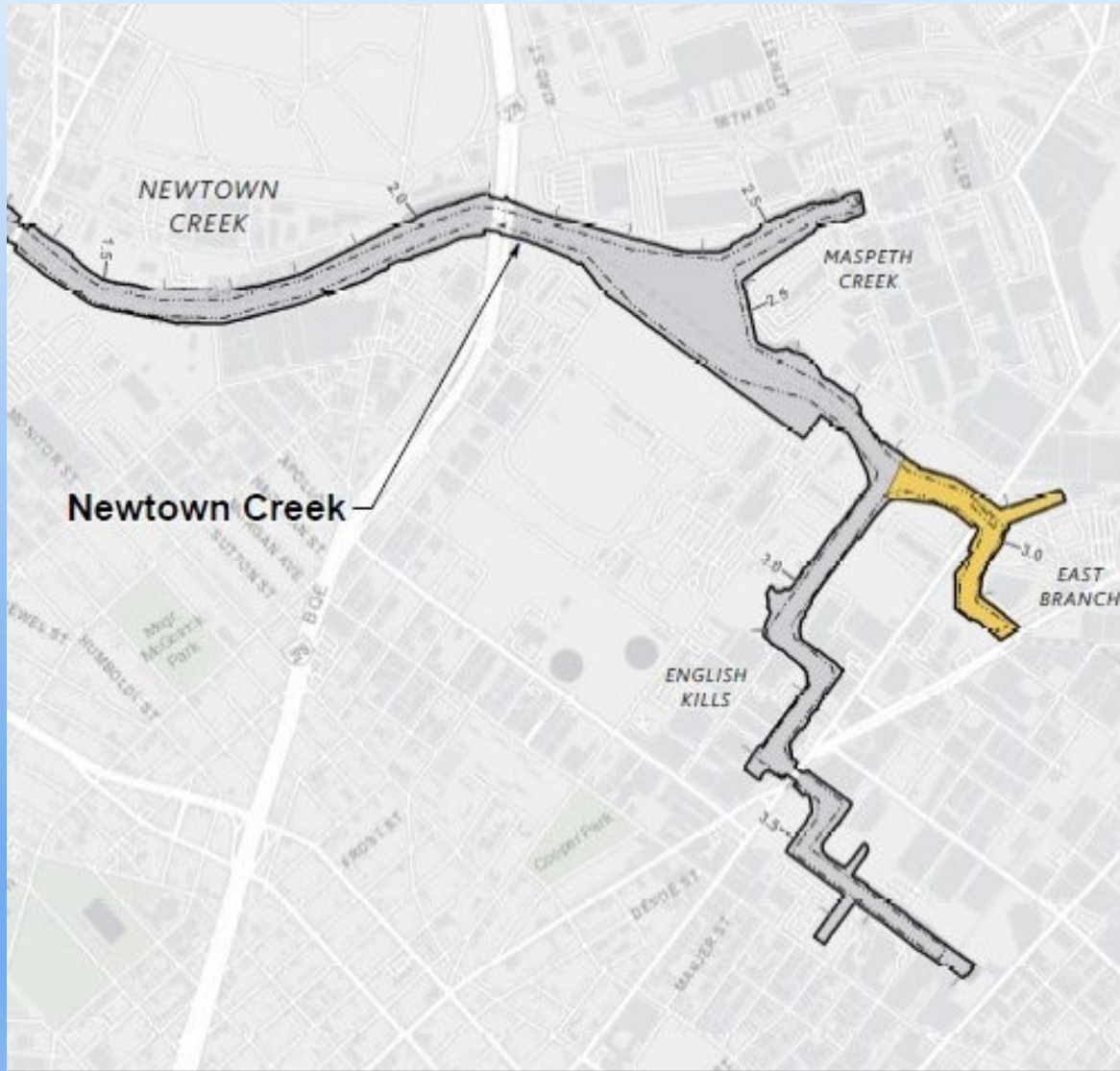


# East Branch Early Action Overview

# Study Area



# East Branch Early Action Study Area



- Tributary of Newtown Creek
- Approximately 0.5 miles in length
- Surface area ~10 acres
- Depth 10.3-16.5 ft in channel and shallower at head of tributaries
- Extensive investigations completed as part of the Remedial Investigation (RI) and Feasibility Study (FS)

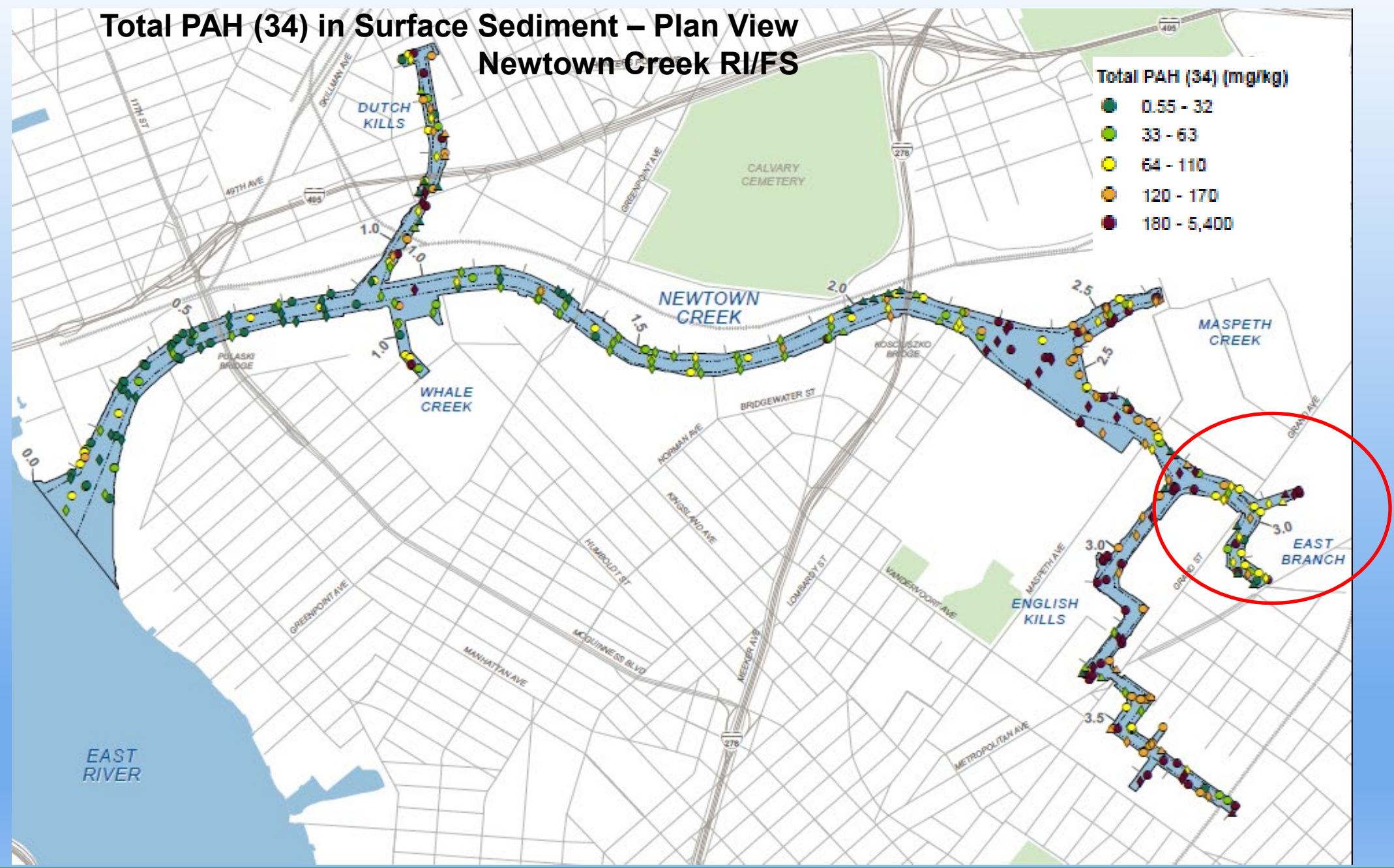
# Why the East Branch?

- Widespread sediment contamination
  - An action here would lead to significant mass removal and/or risk reduction
- An action involving complicated features can help inform future actions
  - Non-aqueous phase liquid (NAPL)
  - Ebullition
  - High PCB concentrations in sediment
  - Aeration system
  - Bulkheads
  - Bridges
  - Combined sewer overflows (CSOs)
  - Navigation
  - Restoration Opportunities

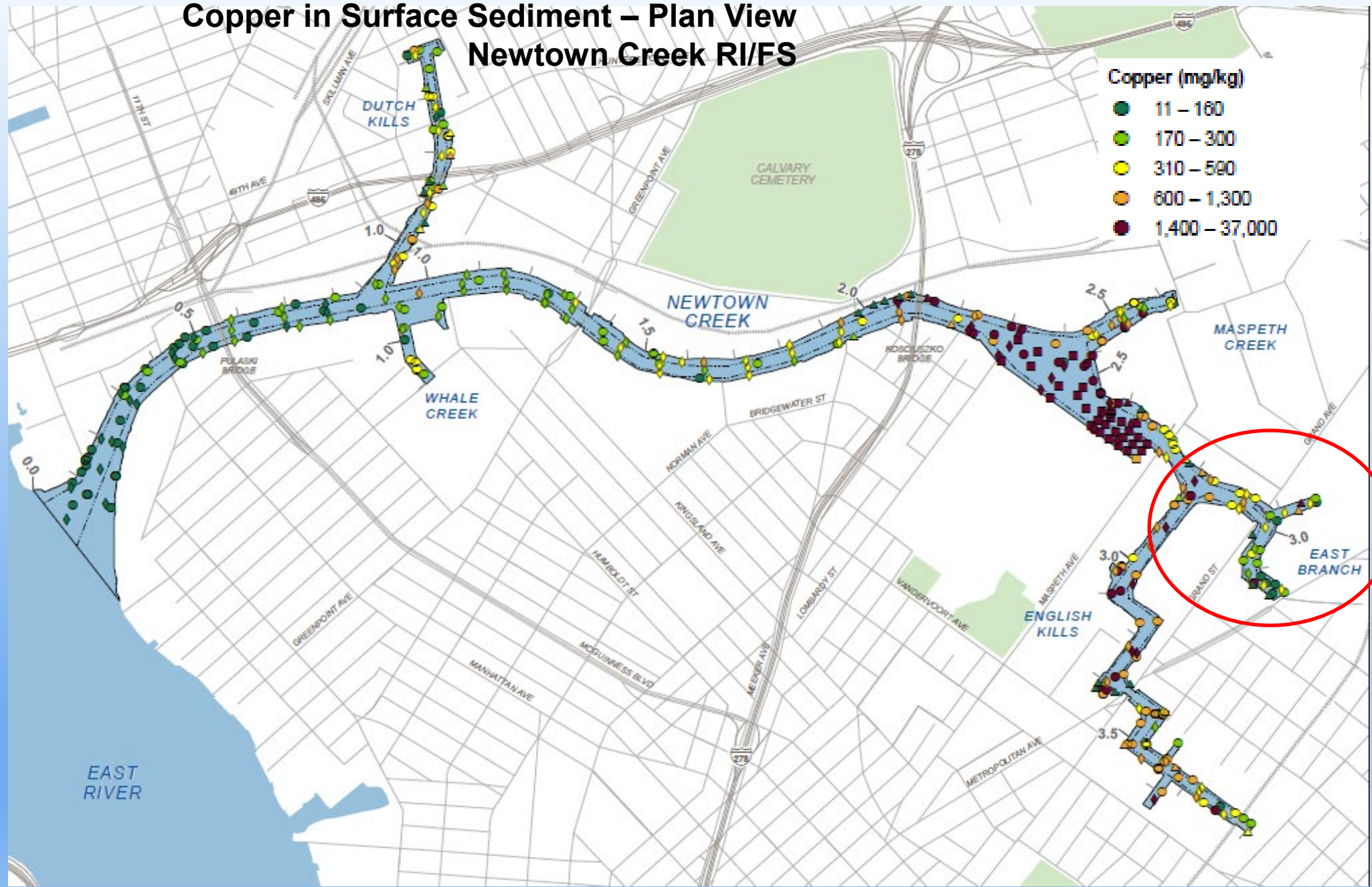
# Contaminants of Concern

- The Contaminants of Concern for sediment are expected to be:
  - Polychlorinated biphenyls (PCBs)
  - Hydrocarbons (including PAHs)
  - Copper
  - Lead
  - Dioxins/Furans

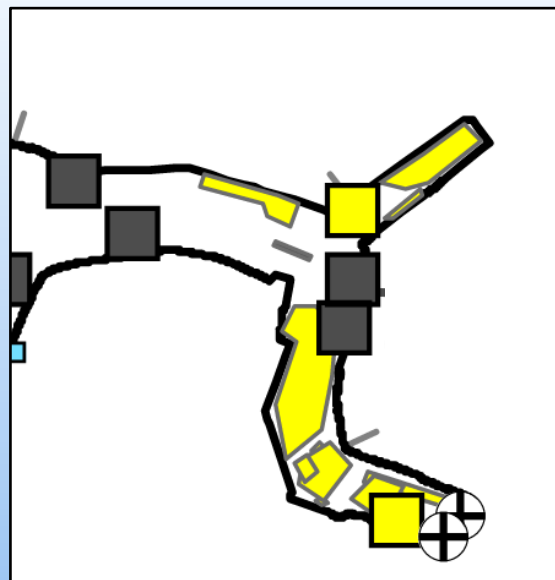
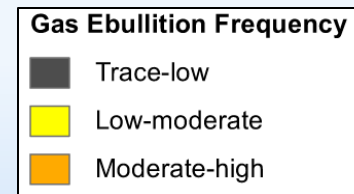
# Total PAH (34) in Surface Sediment – Plan View Newtown Creek RI/FS



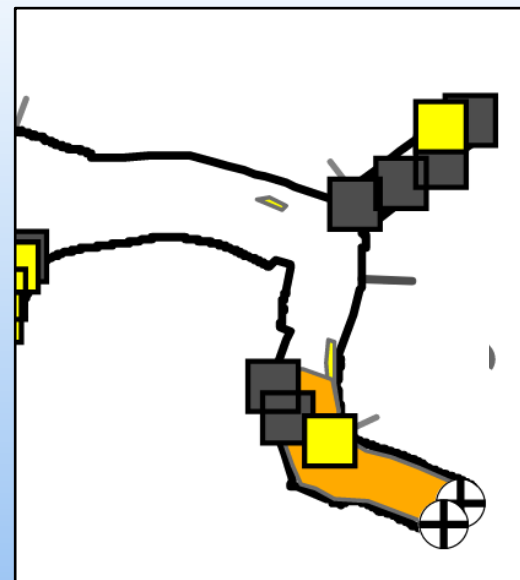
# Copper in Surface Sediment – Plan View Newtown Creek RI/FS



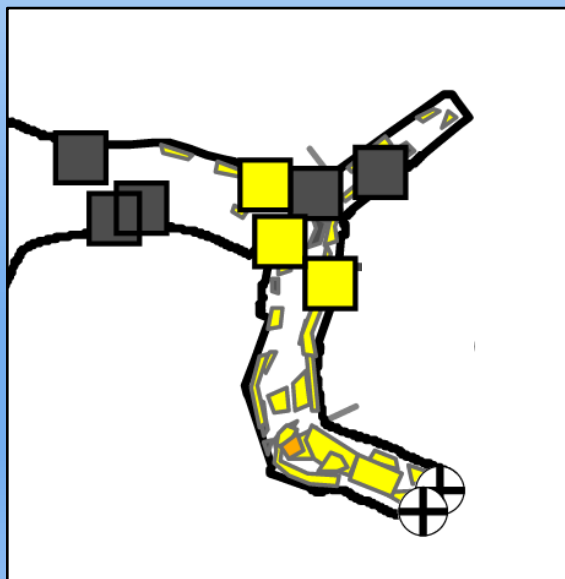
# East Branch – Characterization Ebullition



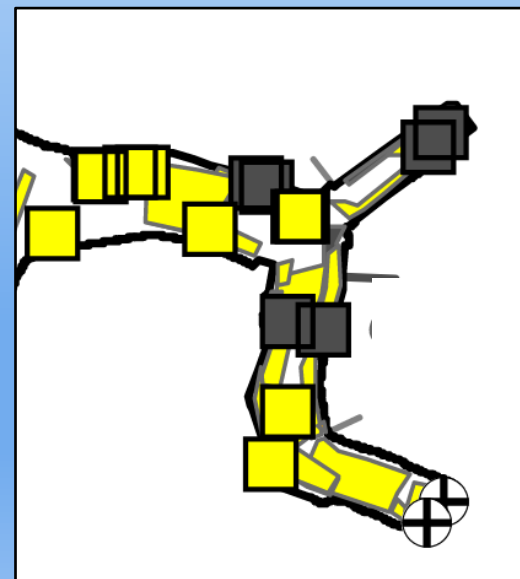
- Ebullition at Low Tide – 9/16/2016



- Ebullition at Low Tide – 9/17/2016



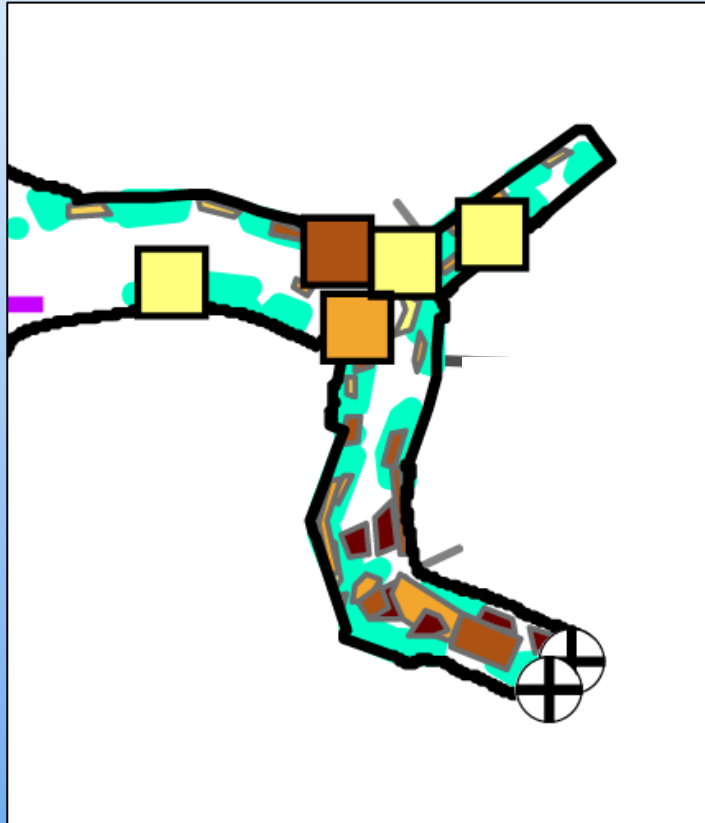
- Ebullition at Low Tide – 9/18/2016



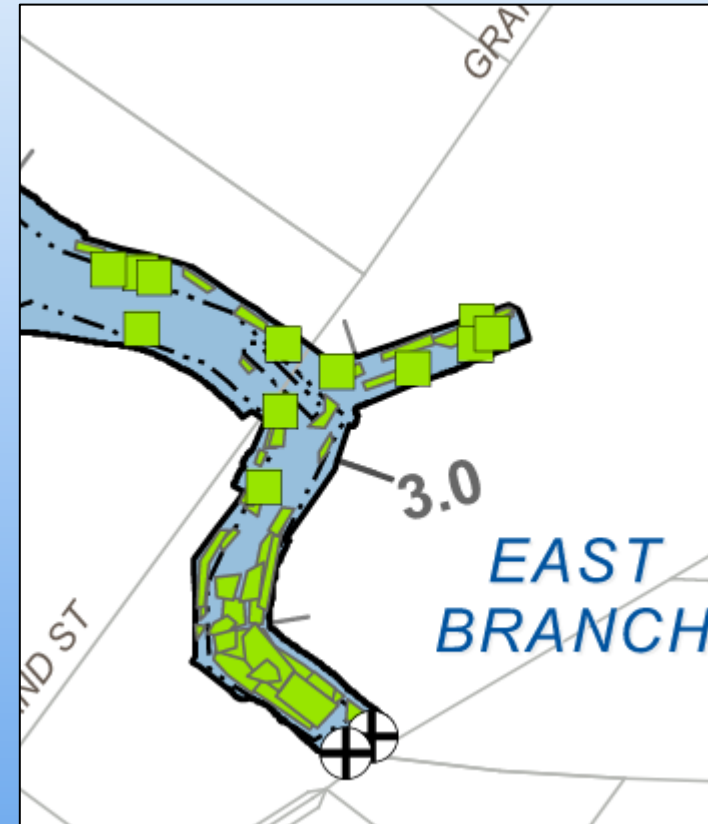
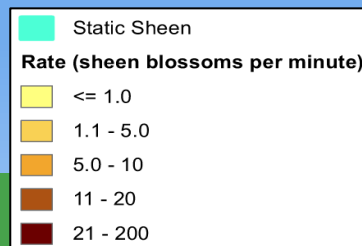
- Ebullition at Low Tide – 9/19/2016



# East Branch – Characterization Static Sheen and Dynamic Sheen

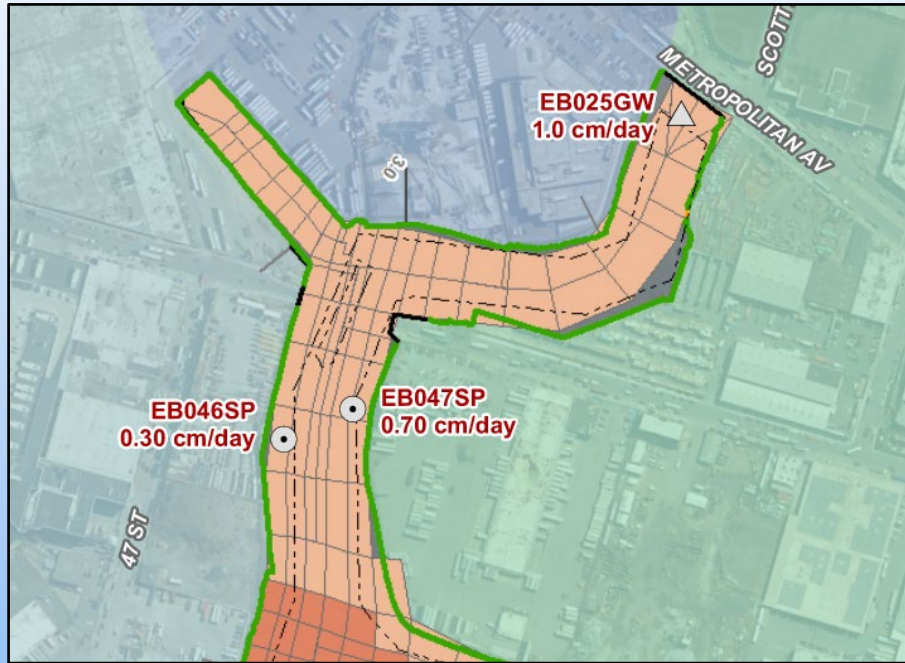


- **Static sheen and dynamic sheen** from a single low tide event in 2016.



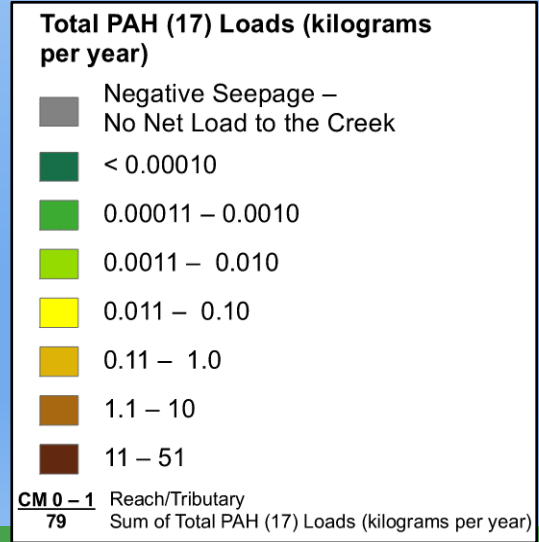
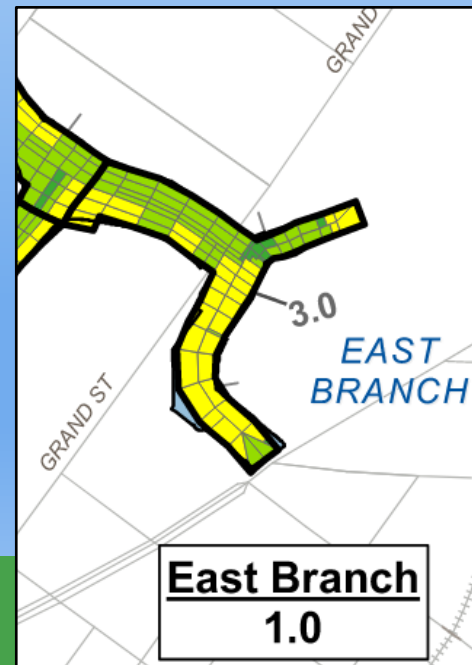
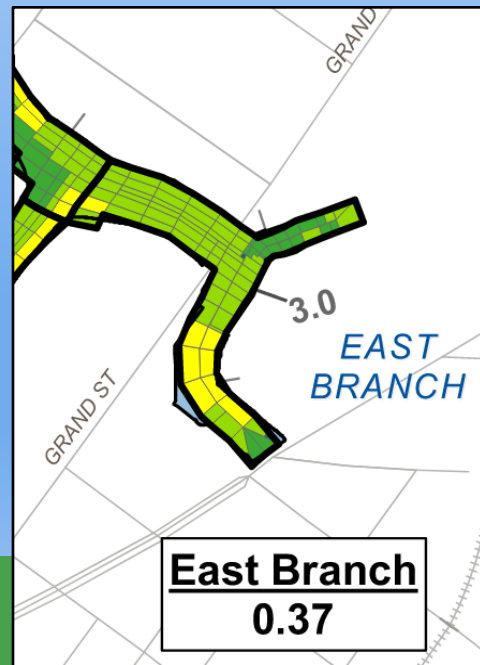
- **Dynamic sheen** (sheen coincident with ebullition) information compiled from 2015 and 2016.

# East Branch – Characterization Groundwater Seepage and Loading

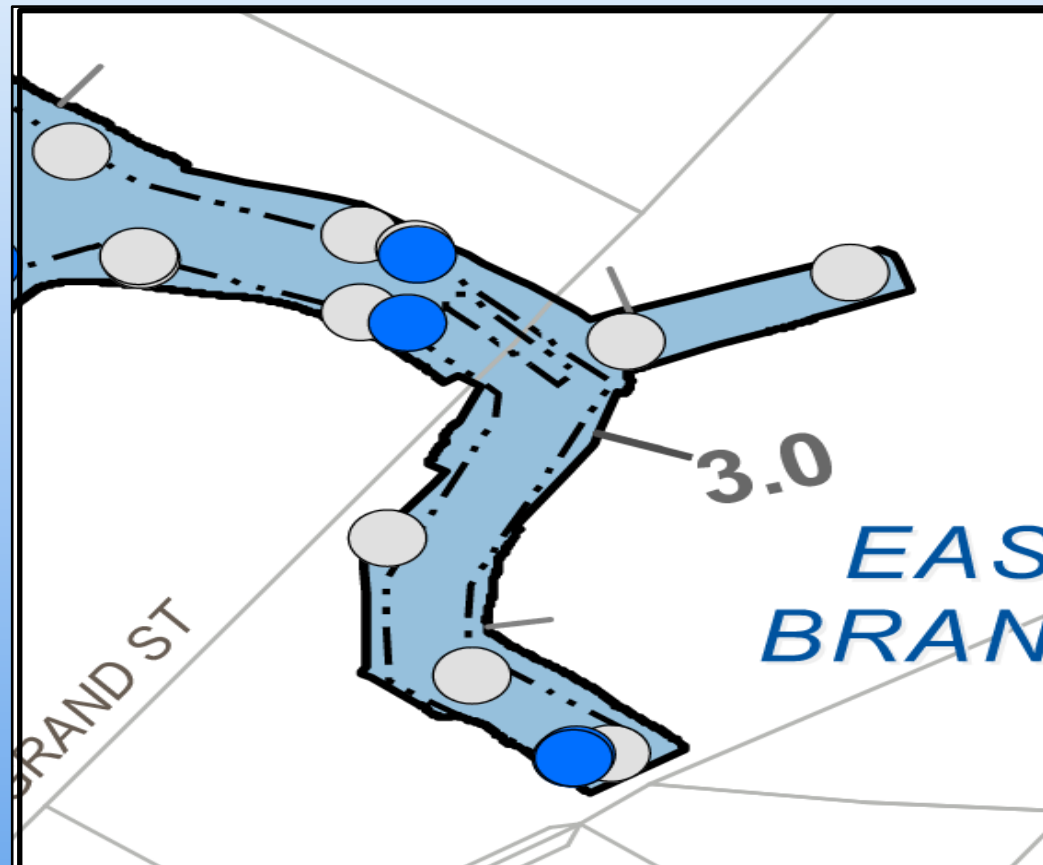


- Interpolated Groundwater Seepage Rates to the East Branch

- Estimate of TPAH(17) Loads to the Creek – Lower and Upper Bound Scenarios



# East Branch – Characterization NAPL



NAPL Observations – Categories

NAPL Category for Coring Station	
Category 1A	Grey circle
Category 1B	Blue circle
Category 2	Orange circle
Category 3	Purple circle

# Early Action Process Overview

- Develop Focused Feasibility Study (FFS) for the East Branch
  - **FFS Work Plan**
  - **Alternatives Memorandum** ← We are currently here
  - Draft FFS
  - Final FFS
- Proposed Plan for Remedial Action (RA)
- Record of Decision (ROD)
- Develop enforcement instrument to implement cleanup
- Remedial Design
- Remedial Action
- Post-construction monitoring

# Planned Path Forward for Early Action

- Tentative Path Forward
  - Develop Focused Feasibility Study – 2023/2024
  - Proposed Plan and ROD – 2024
    - CSTAG/NRRRB review will be required
    - Approximately 4 years earlier than current projected OU1 ROD

# Thank You!

## ◆ For further information, please contact:

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## ◆ Or visit EPA's Site Profile Page for Newtown Creek

- ◆ [www.epa.gov/superfund/newtown-creek](http://www.epa.gov/superfund/newtown-creek)