



Newtown Creek Superfund Site Technical CAG Meeting, February 20, 2018



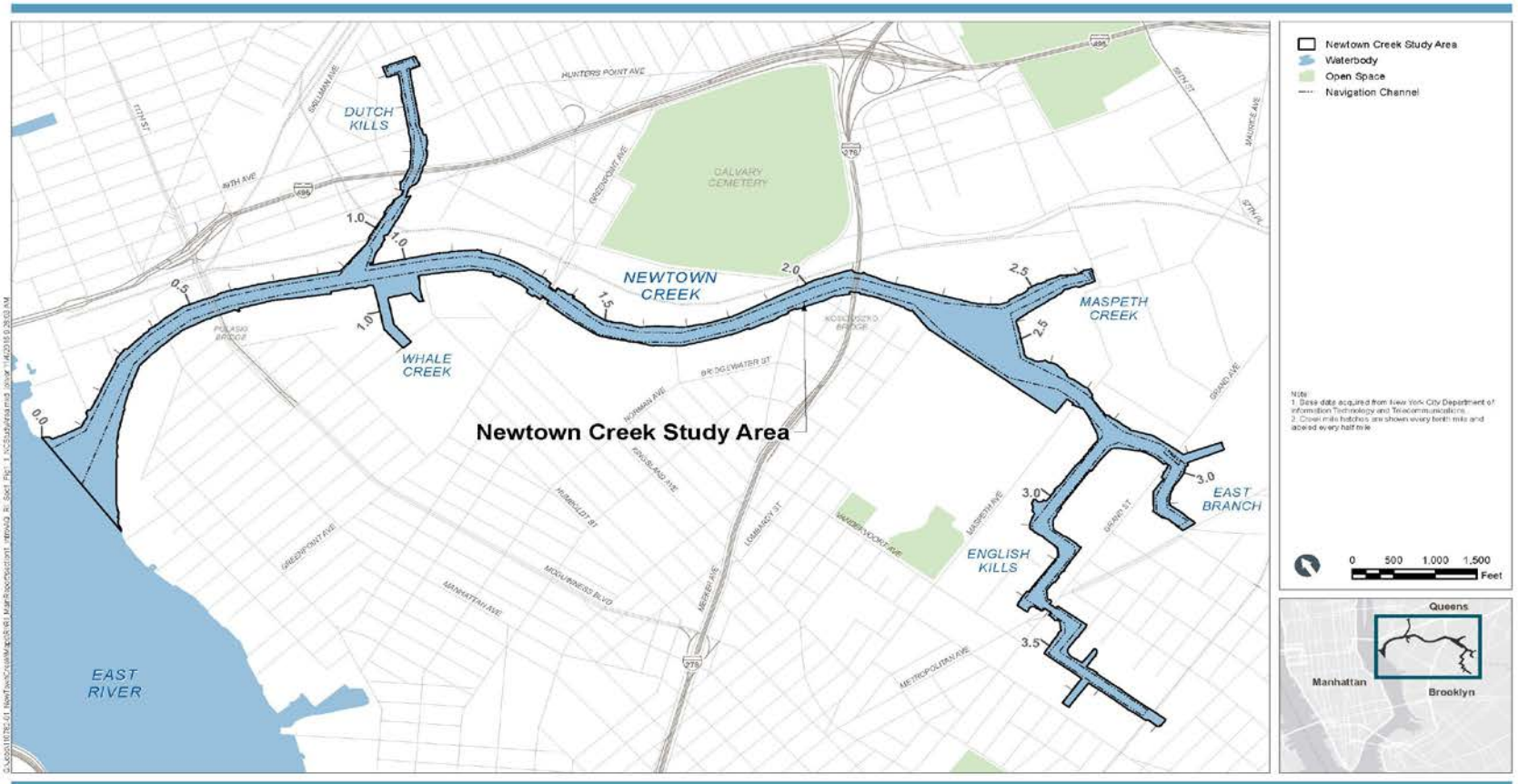


Presentation Overview

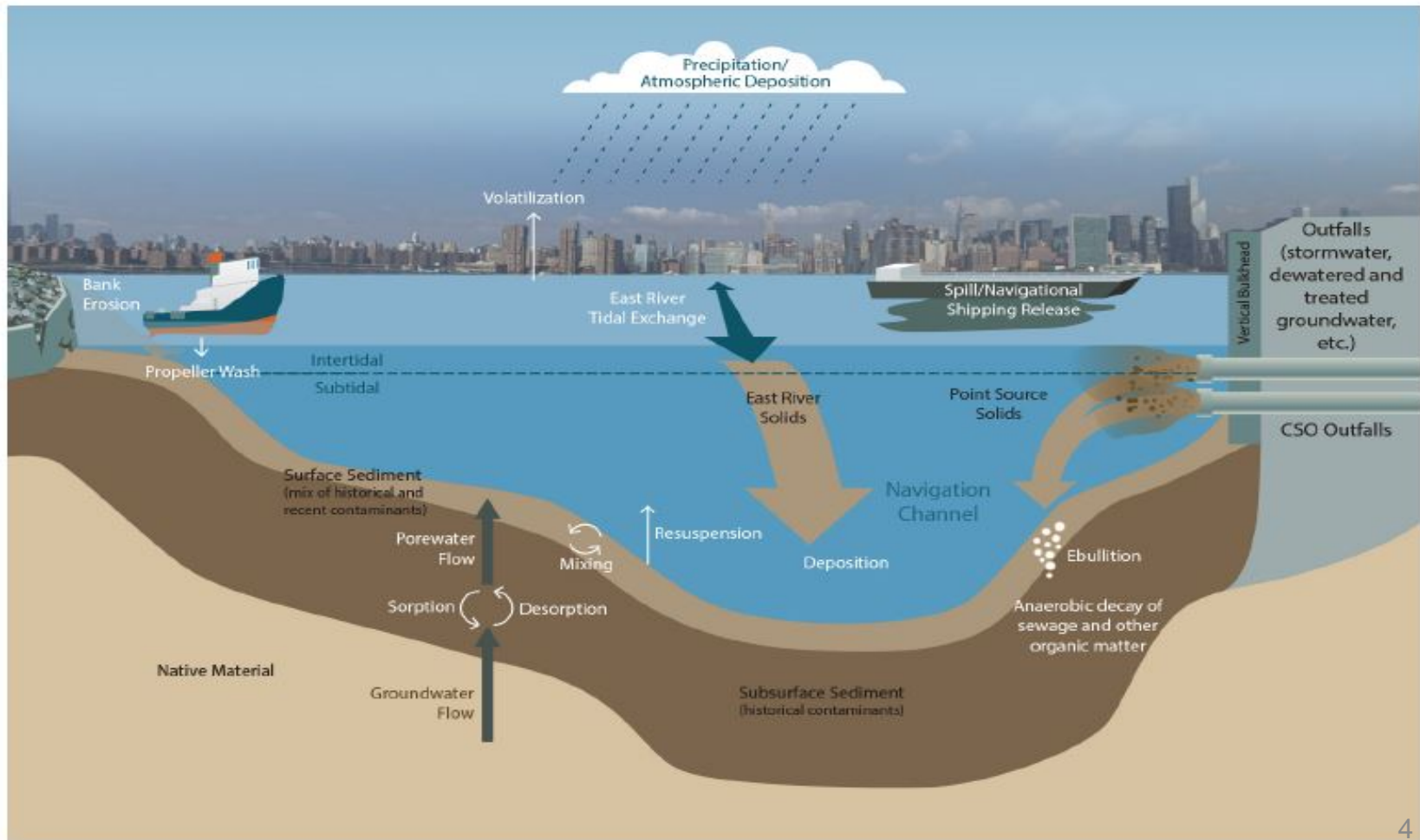
- CAG requests
 - What chemicals are in greatest concentrations in surface and subsurface sediments?
 - How do these concentrations vary by reach?
 - How do these concentrations vary at different levels in subsurface samples?
 - How do these concentrations compare to reference sites?



Newtown Creek Study Area



Generalized Physical Conceptual Site Model (CSM)



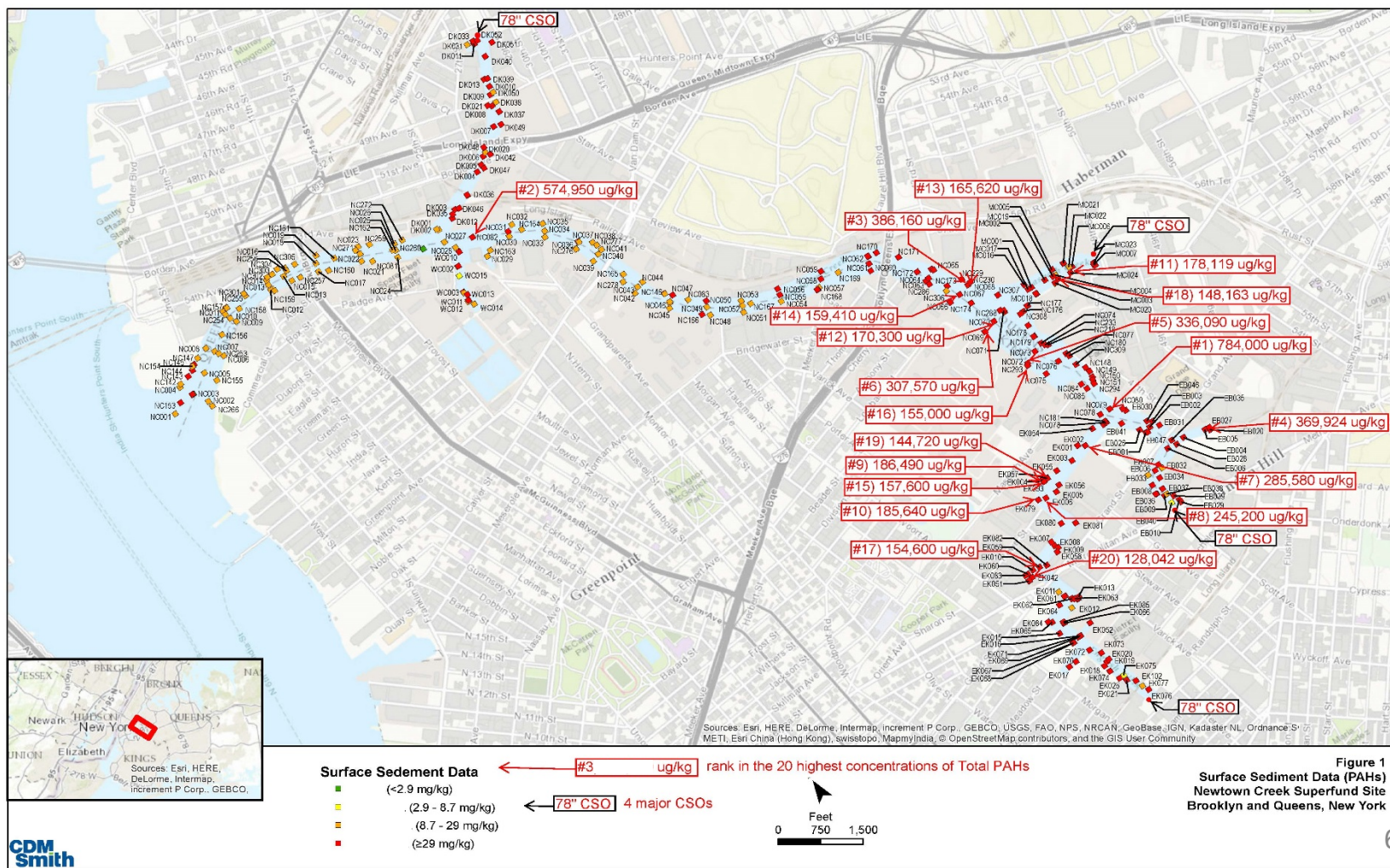


PCB & PAH Sediment Distribution

- PAHs and PCBs are key contaminants in Newtown Creek Sediment
 - Figures show horizontal distribution of total PAHs and total PCBs in surface and subsurface sediment
 - For visualization purposes, sediment PCB and PAH concentrations were compared to ecological screening levels
 - The top 20 concentrations are flagged in each of the figures.



Total PAHs – Surface Sediment





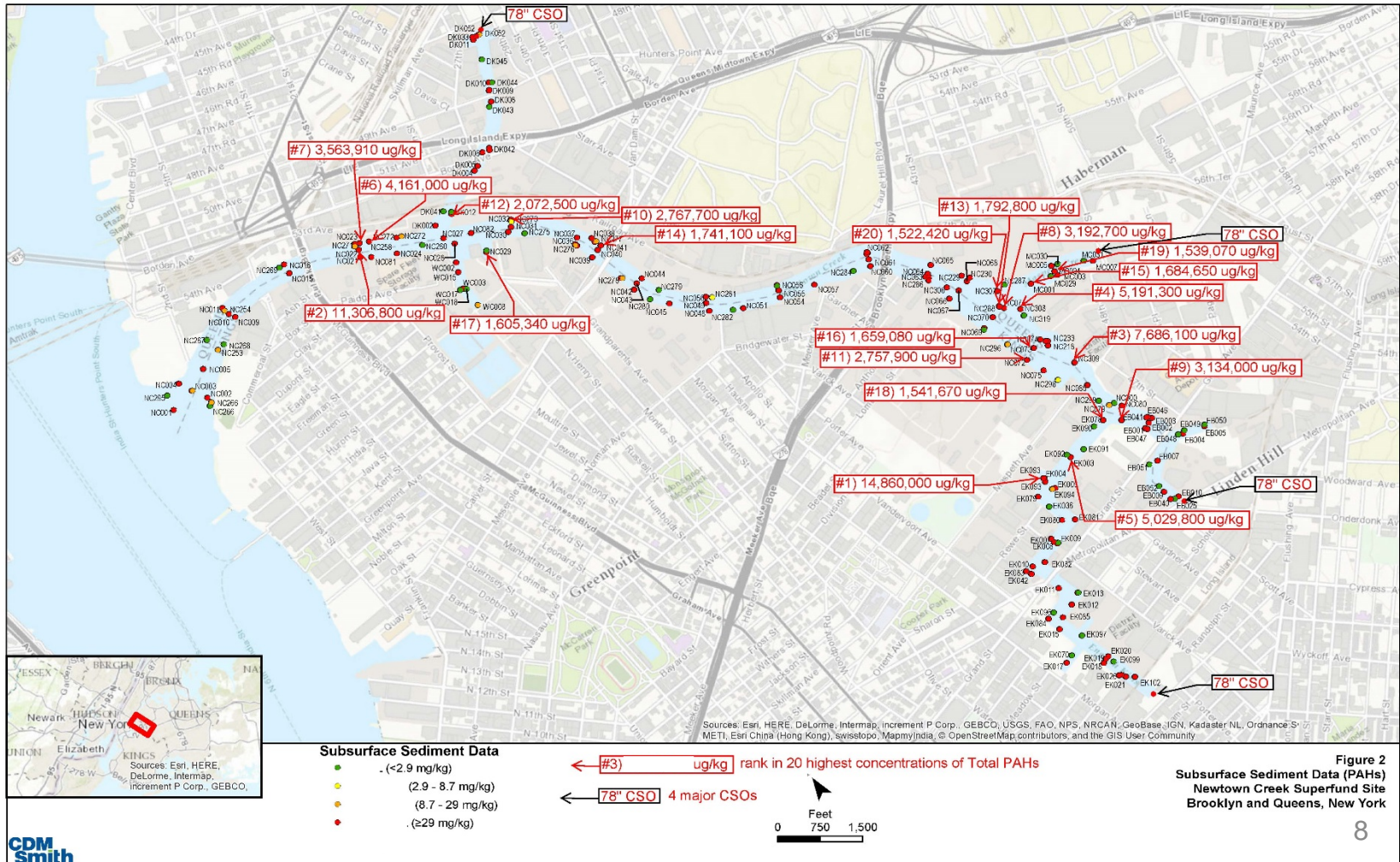
Total PCBs – Surface Sediment



Figure 3
Surface Sediment Data (PCBs)
Newtown Creek Superfund Site
Brooklyn and Queens, New York

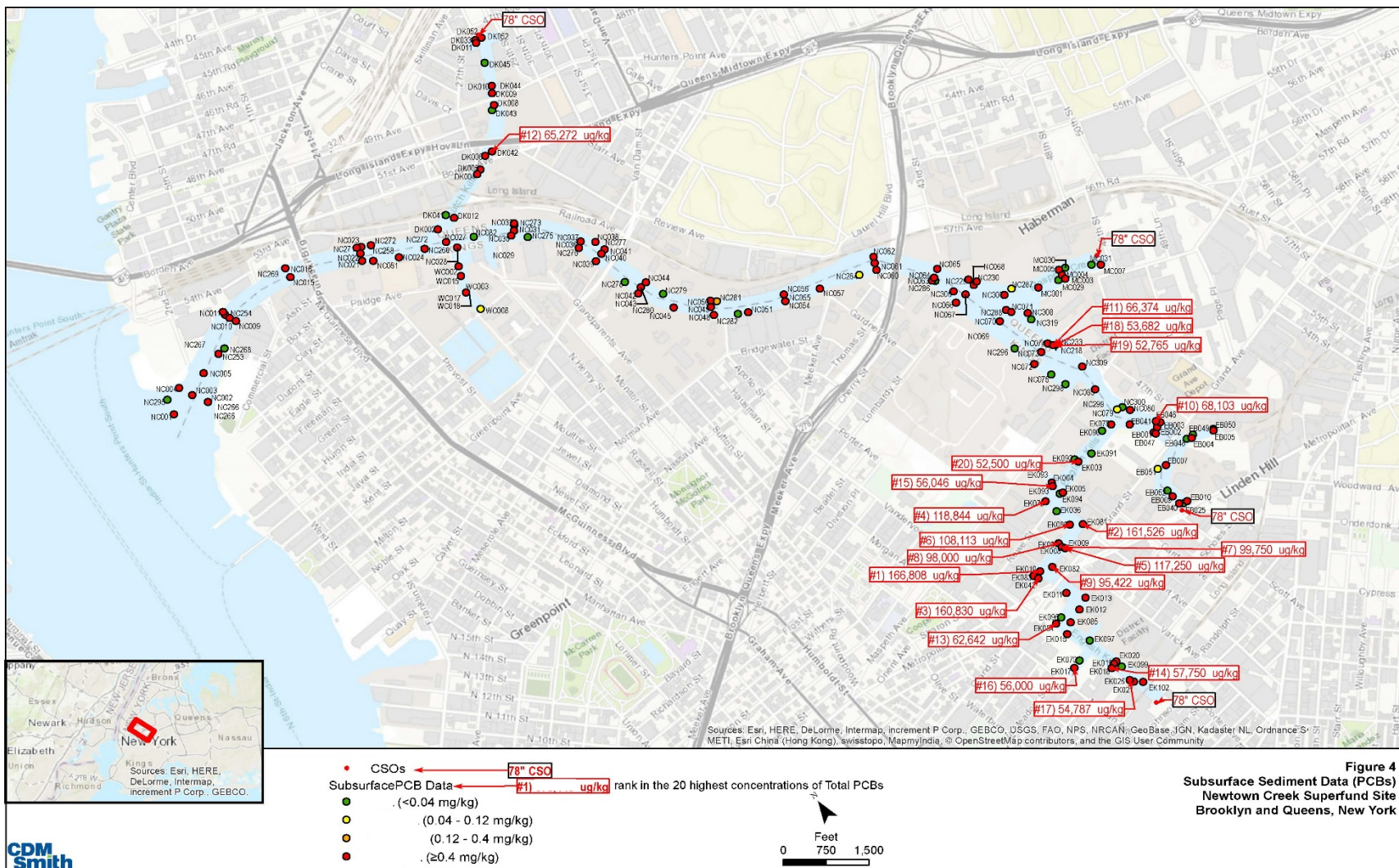


Total PAHs - Subsurface Sediment





Total PCBs – Subsurface Sediment



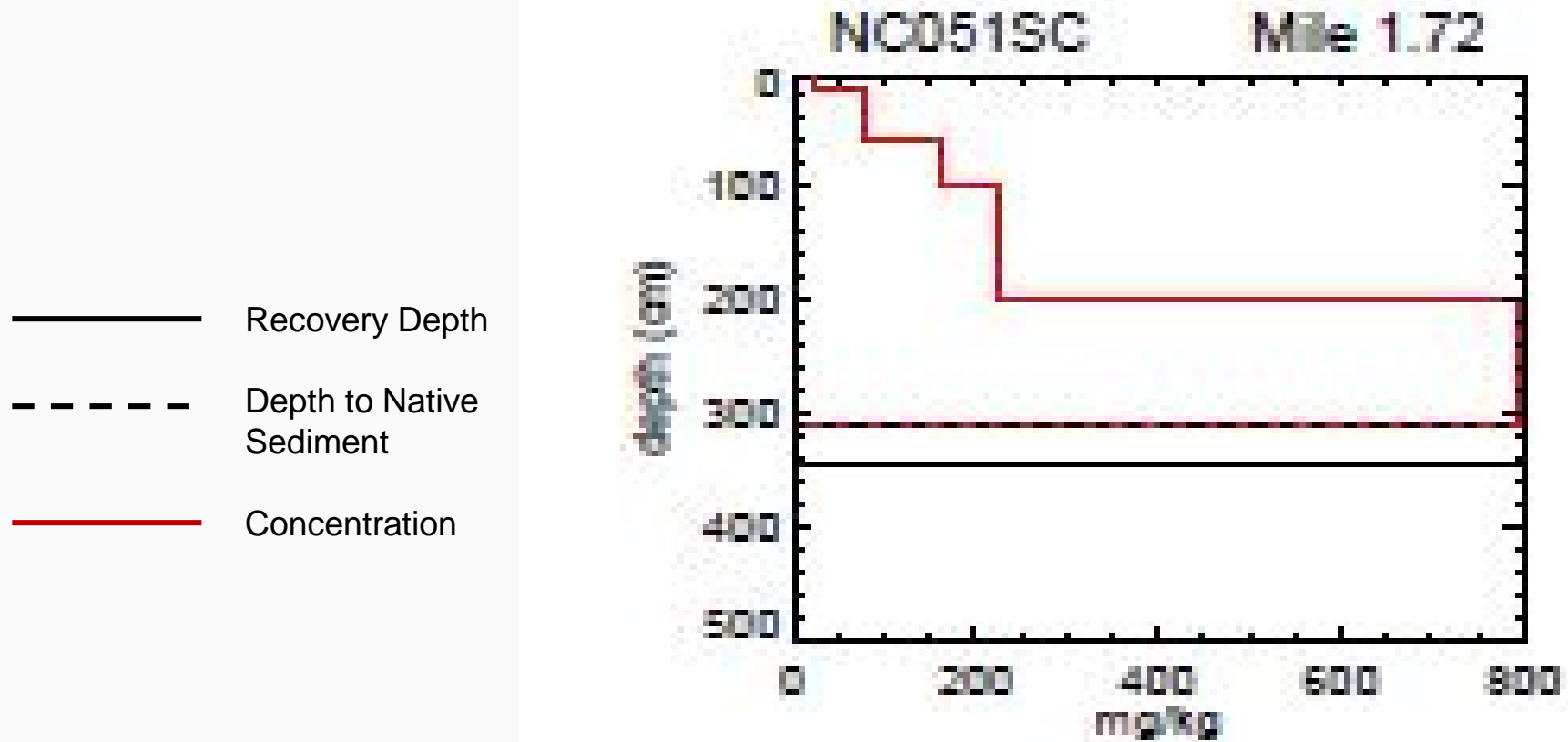


Total PAH and PCB Depth Profiles

- How do concentrations vary at different levels in subsurface samples?
- Depth/concentration profiles illustrate how contaminant concentrations vary with sediment depth
- Depth profiles for Total PAHs and Total PCBs for various reaches of the creek are shown in figures that follow.



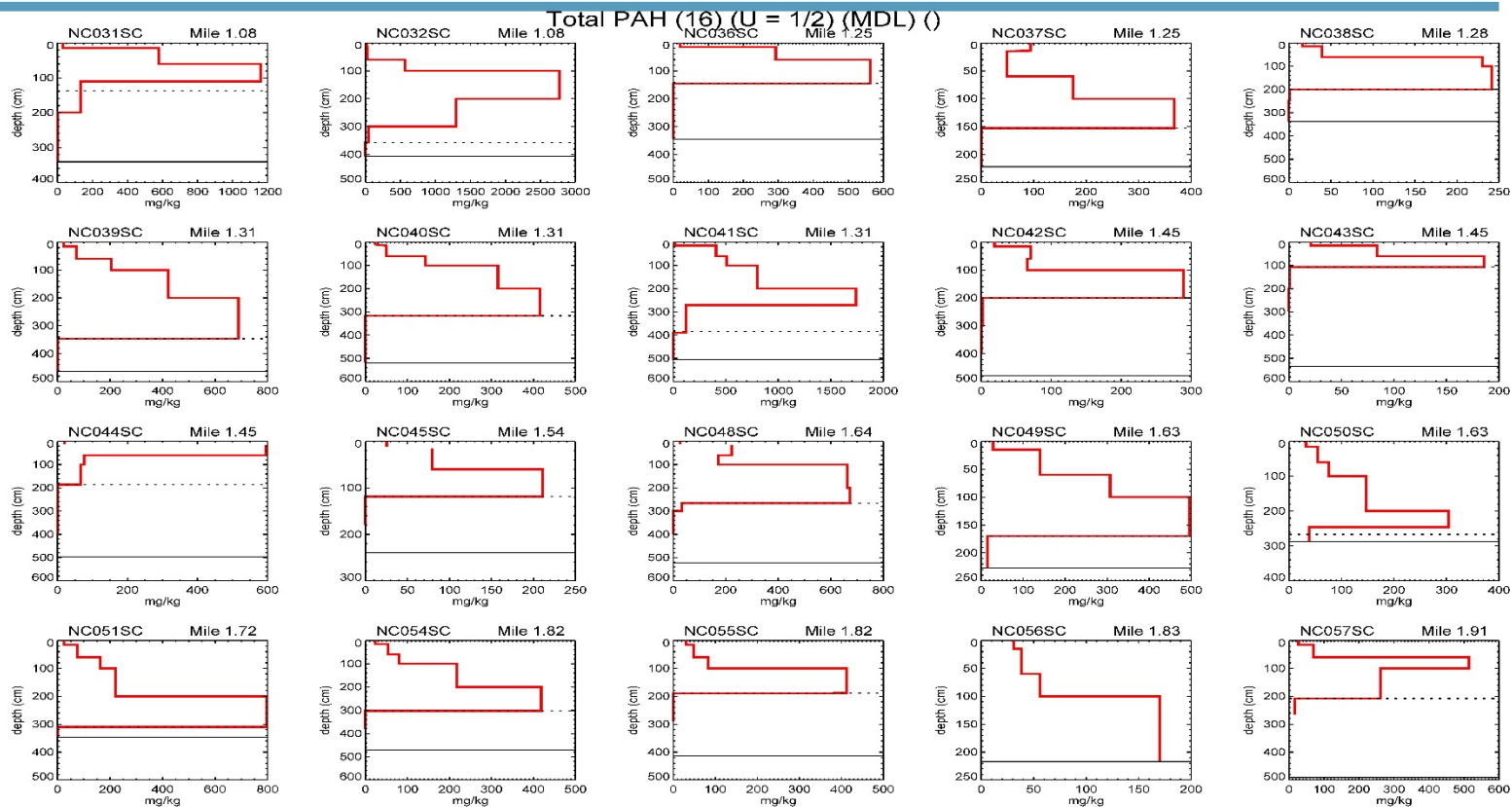
Example PAH depth profile





TPAH Depth Profiles - NC

DRAFT



— Recovery Depth — Detect Sample ■ Test Result Rejected
- - - Depth to Native Sediment — Non-Detect Sample



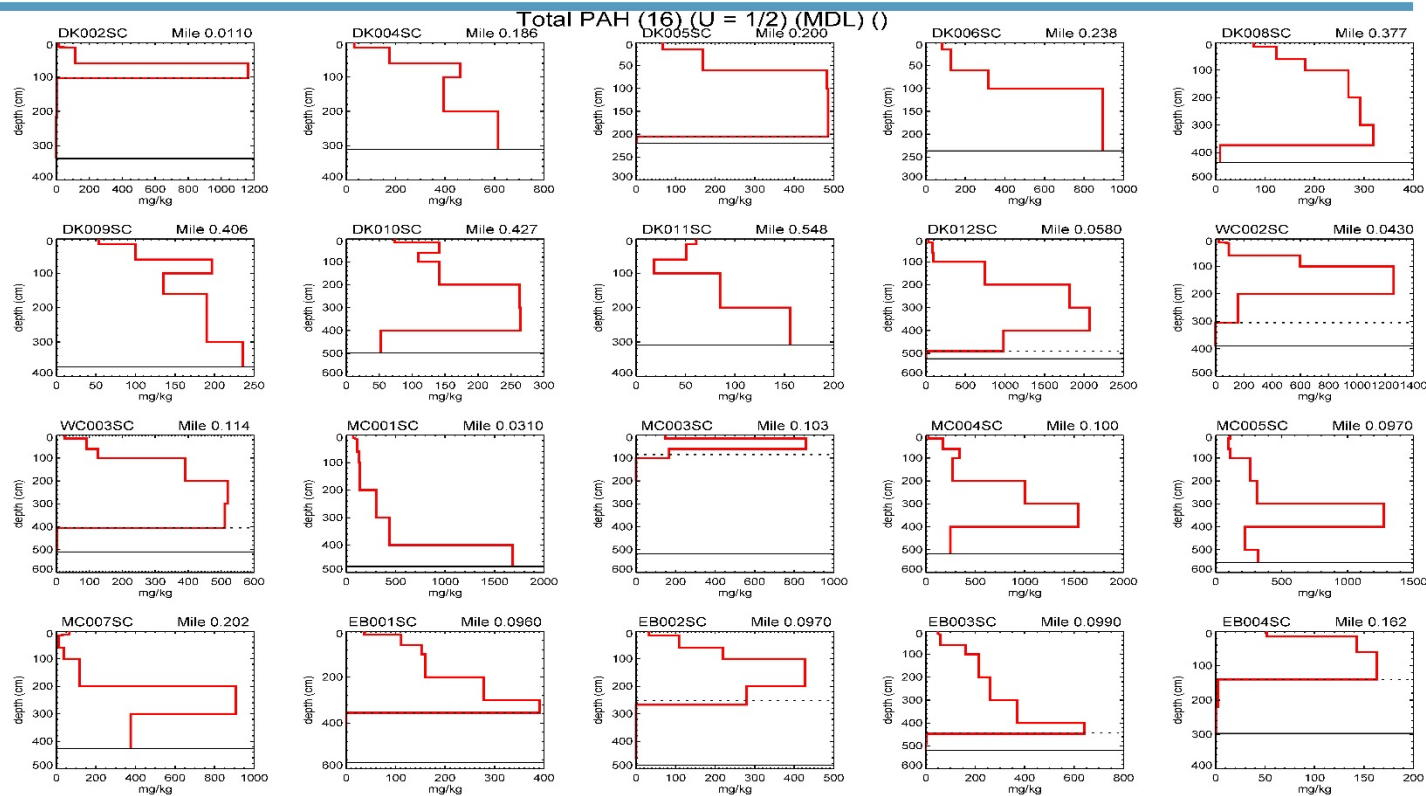
Figure B5-1168
 Subsurface Sediment Data Depth Profiles
 Phase 1 RI Data Summary Report - Submittal No. 2
 Newtown Creek RI/FS

"Not submitted for analysis" means the core was not sent for analysis for this particular analyte
Non-detect included at method detection limit.



TPAH Depth Profiles – DK, MC, EB

DRAFT



— Recovery Depth — Detect Sample ■ Test Result Rejected
- - - Depth to Native Sediment — Non-Detect Sample

Figure B5-1170

Subsurface Sediment Data Depth Profiles
 Phase 1 RI Data Summary Report - Submittal No. 2
 Newtown Creek RI/FS

"Not submitted for analysis" means the core was not sent for analysis for this particular analyte.





TPAH Depth Profiles – EB, EK

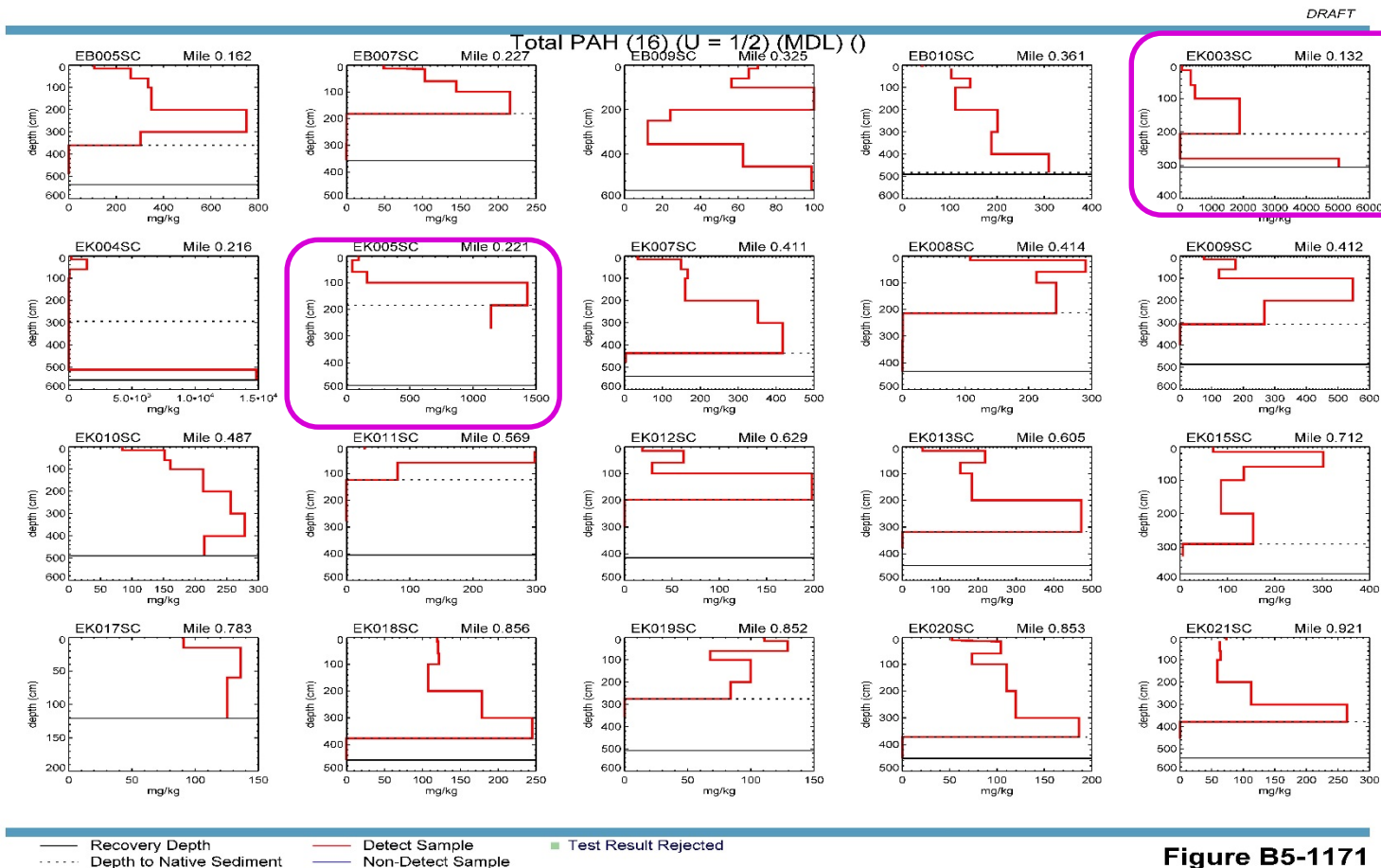


Figure B5-1171

Subsurface Sediment Data Depth Profiles
Phase 1 RI Data Summary Report - Submittal No. 2
Newtown Creek RI/FS

Non-detect included at method detection limit.
"Not submitted for analysis" means the core was not sent for analysis for this particular analyte





TPCB Depth Profile - NC

DRAFT

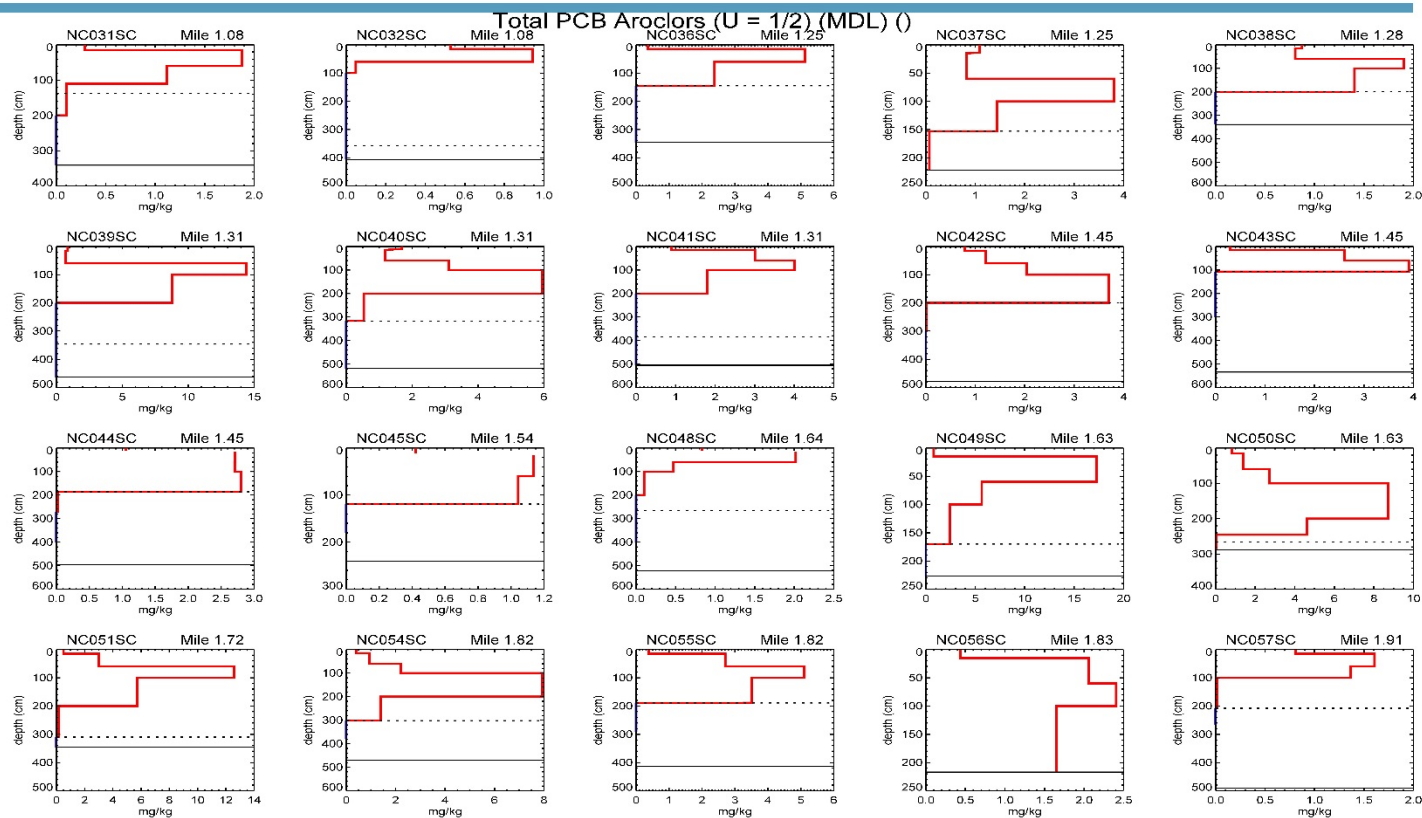


Figure B5-2133

Subsurface Sediment Data Depth Profiles
Phase 1 RI Data Summary Report - Submittal No. 2
Newtown Creek RI/FS



Non-detect included at method detection limit.
"Not submitted for analysis" means the core was not sent for analysis for this particular analyte



TPCB Depth Profile – DK, MC, EB

DRAFT

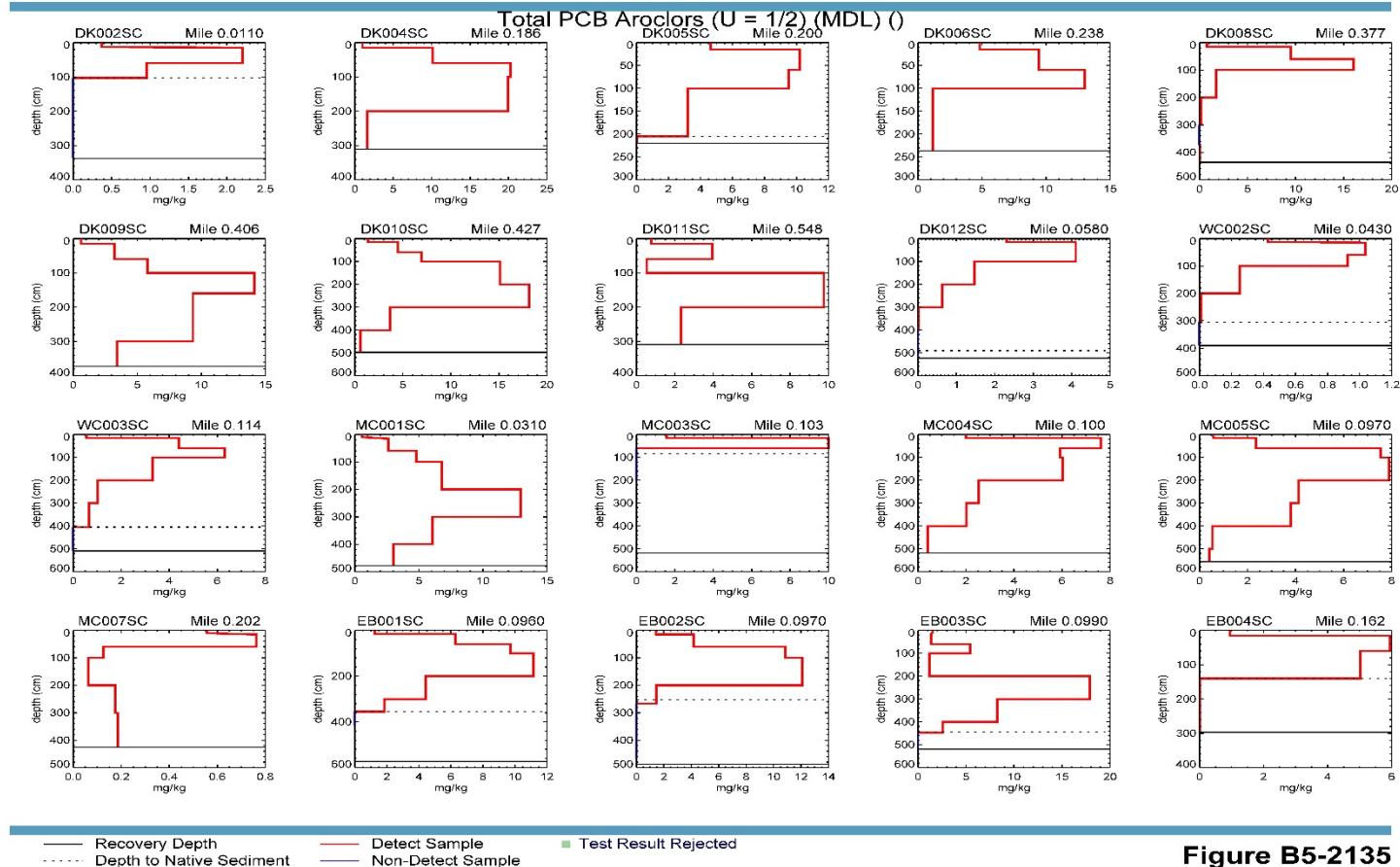


Figure B5-2135

Subsurface Sediment Data Depth Profiles
Phase 1 RI Data Summary Report - Submittal No. 2
Newtown Creek RI/FS

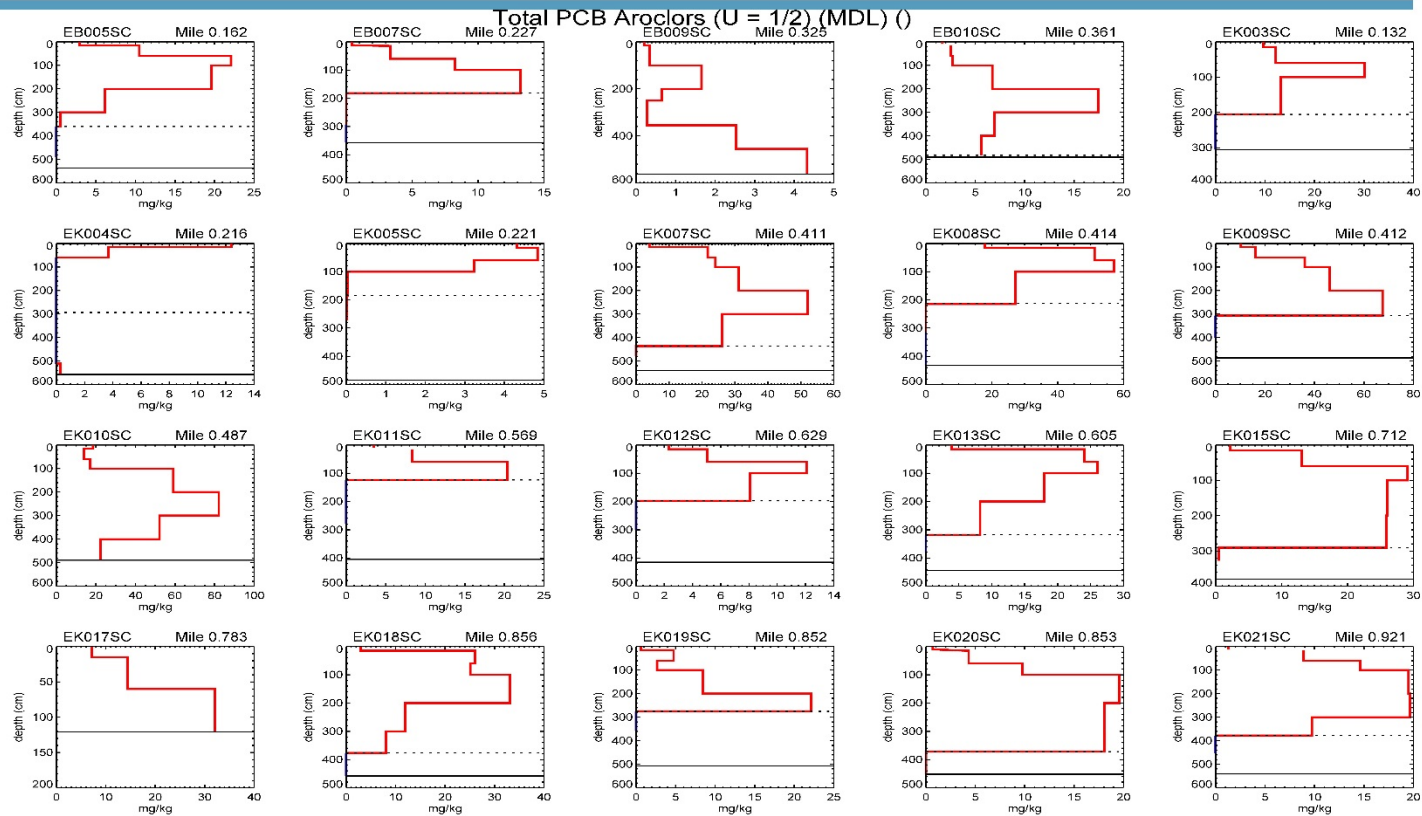


Non-detect included at method detection limit.
"Not submitted for analysis" means the core was not sent for analysis for this particular analyte



TPCB Depth Profile – EB, EK

DRAFT



— Recovery Depth — Detect Sample ■ Test Result Rejected
- - - Depth to Native Sediment — Non-Detect Sample

Figure B5-2136

Subsurface Sediment Data Depth Profiles
Phase 1 RI Data Summary Report - Submittal No. 2
Newtown Creek RI/FS



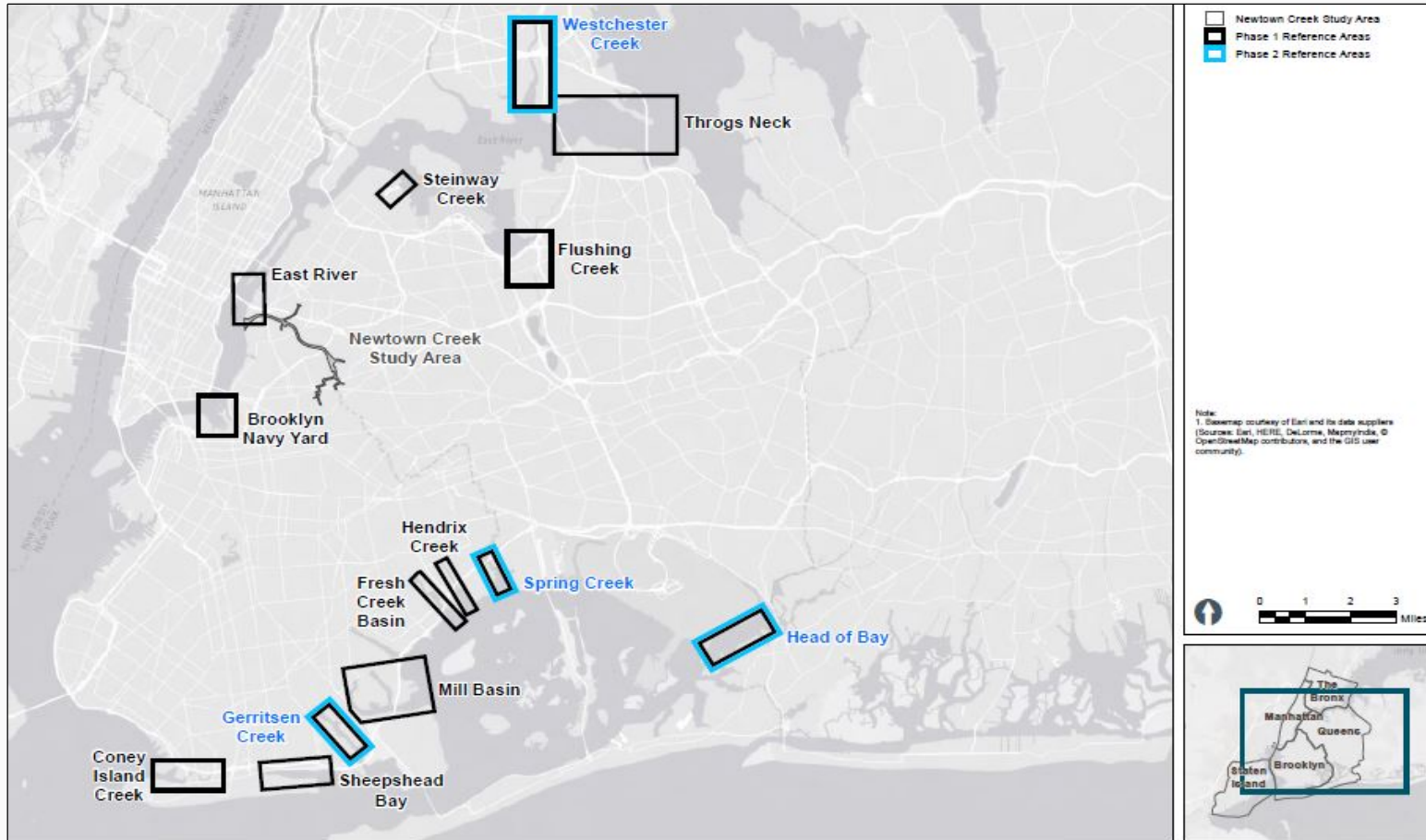
Non-detect included at method detection limit.
"Not submitted for analysis" means the core was not sent for analysis for this particular analyte



Reference Areas

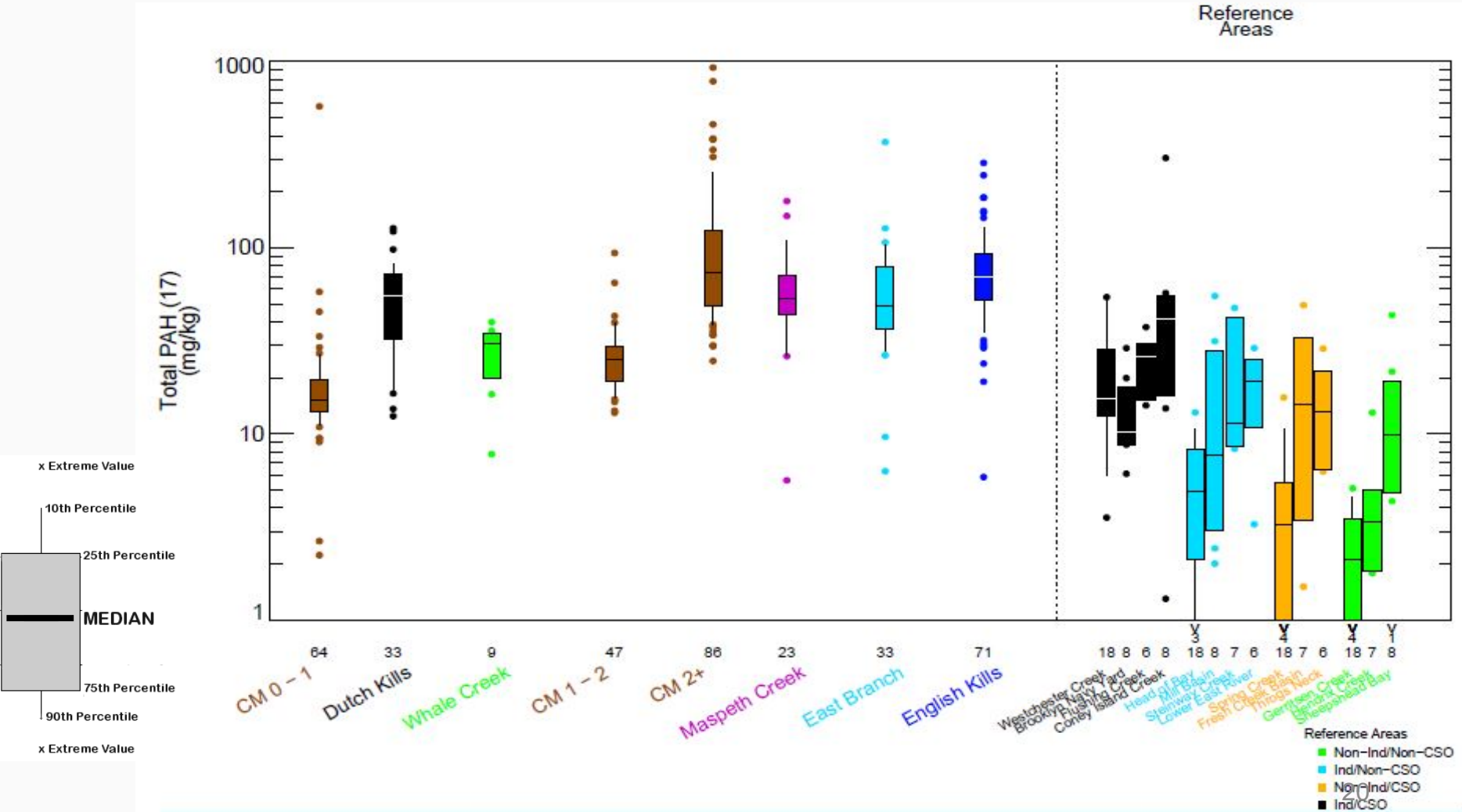
- How do these concentrations compare to reference sites?
- Comparisons of total PAH and total PCB concentrations in sediments from the Draft RI Report are shown in the following slides
- EPA is in the process of reviewing and evaluating reference area data to determine appropriate background concentrations

Reference Area Locations



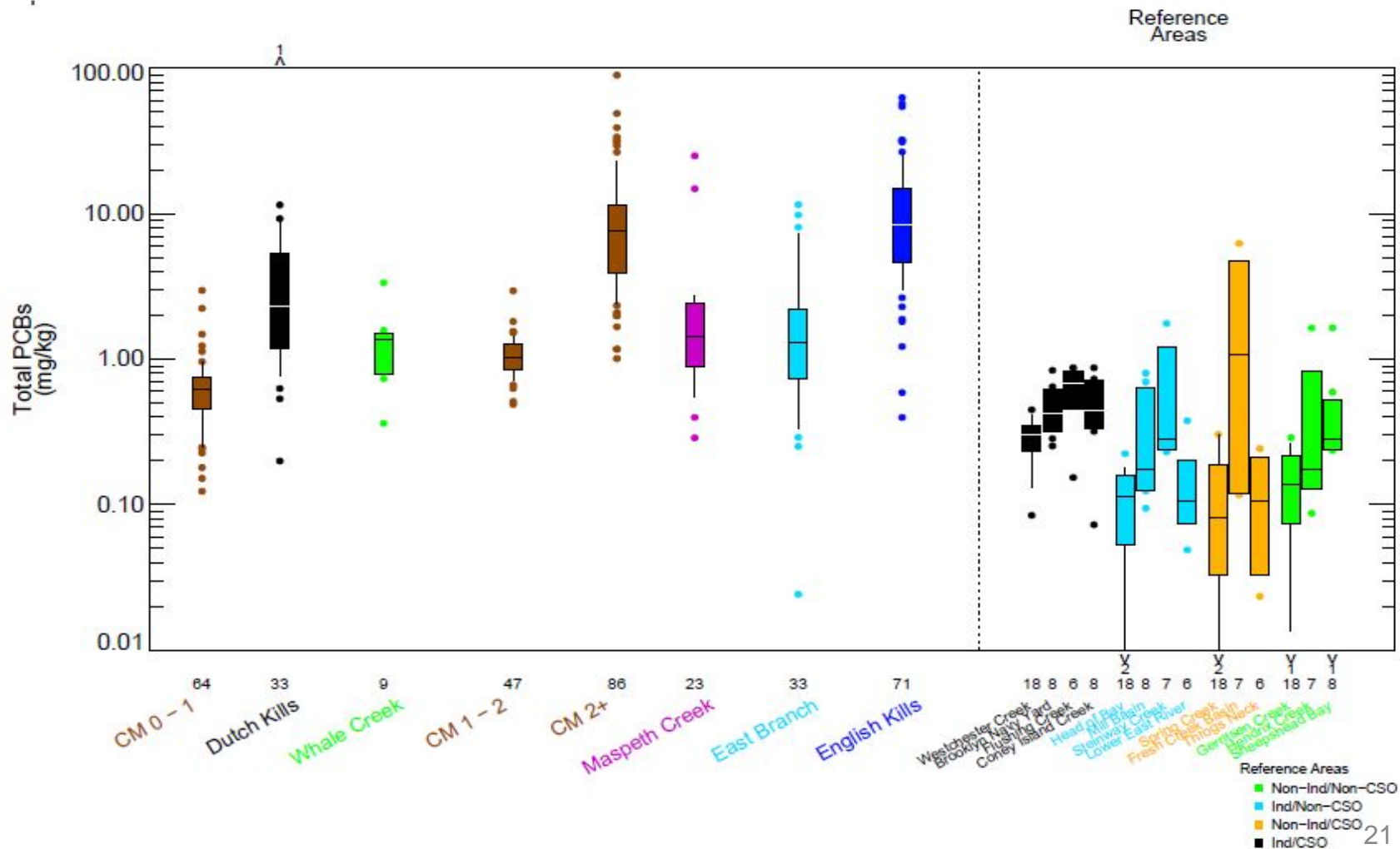


Sediment TPAHs vs. Reference Areas





Sediment TPCBs vs. Reference Areas





PRP Update

Performing Respondents:

- BP America, Inc.
- The Brooklyn Union Gas Company d/b/a National Grid
- The City of New York
- ExxonMobil Oil Corporation
- Phelps Dodge Refining Corporation (now Part of Freeport McMoRan, Inc.)
- Texaco, Inc. (now part of Chevron Corporation)

Recently Named:

- Consolidated Edison Company of New York
- National Railroad Passenger Corporation (AMTRAK)
- American Premier Underwriters, Inc.
- Connell Limited Partnership
- The Long Island Railroad Company
- Motiva Enterprises, LLC
- Shell Oil Company
- Simsmetal East LLC (subsidiary of Sims Metal Management, Inc.)



Questions??????

Region 2 serving the people of New Jersey,
New York, Puerto Rico and the U.S. Virgin Islands