



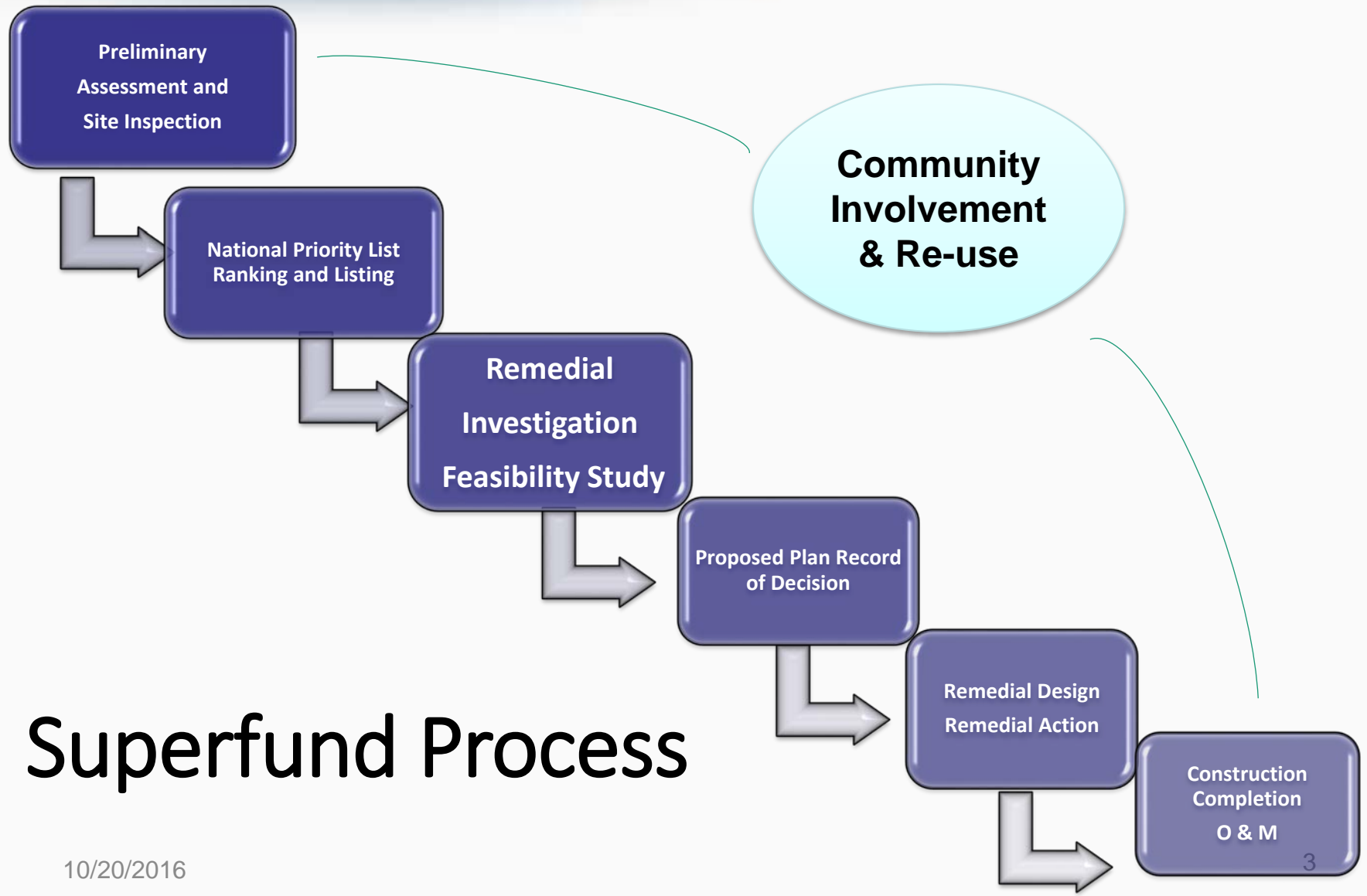
Newtown Creek Superfund Site CAG Meeting October 11, 2017





Introduction

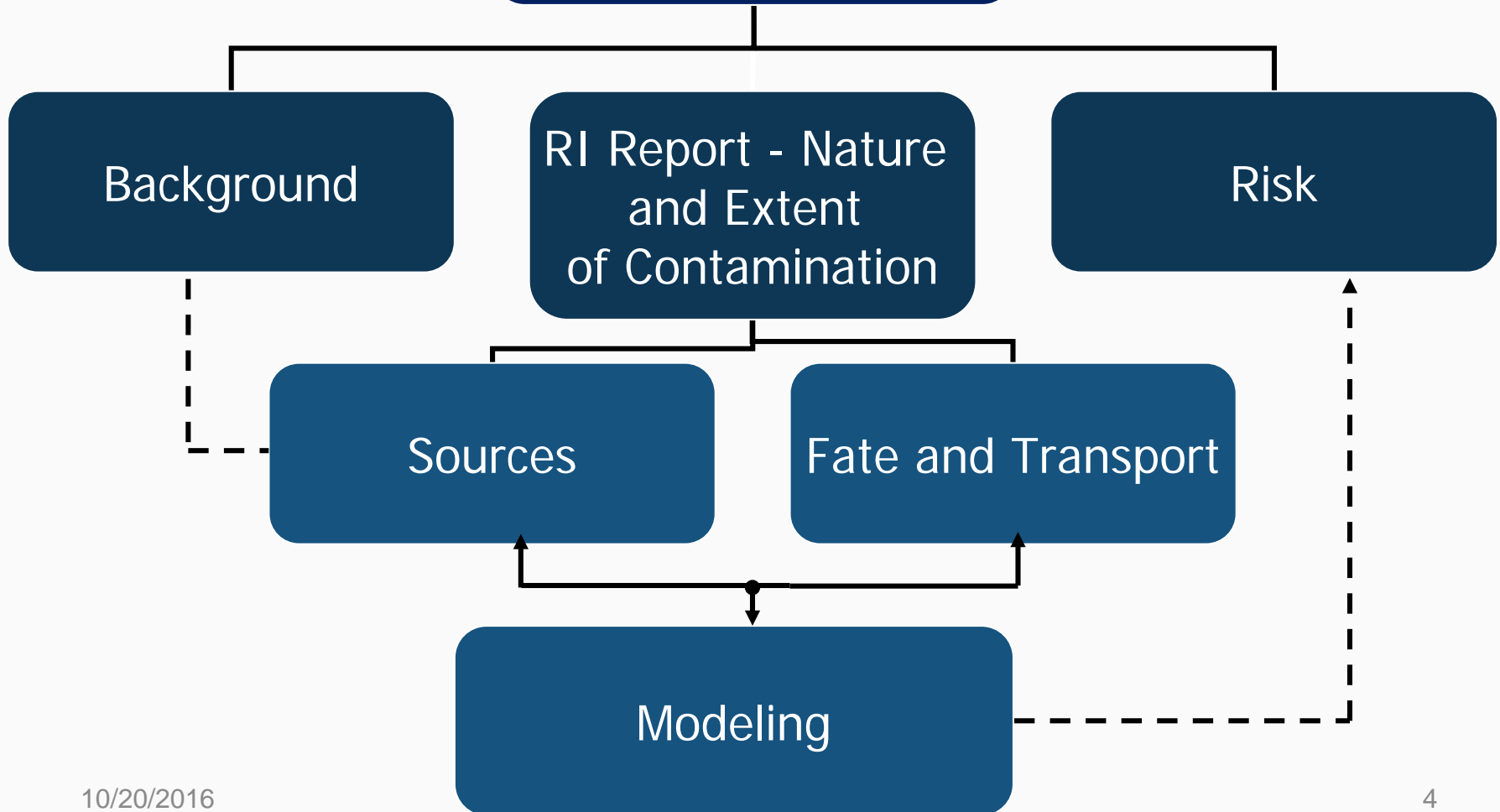
- Purpose of the Remedial Investigation (RI) and its place in the CERCLA Process
- Overview of the RI Report
- RI Report review process
- Key sections of the RI Report
- Path forward
- Questions/Discussion



Superfund Process



Remedial Investigation





Purpose of the RI Report

- Defines the nature and extent of contamination in site media
 - Reports and evaluates data collected during the RI
 - Includes a conceptual site model integrating RI data
- Includes human health and ecological risk assessments
- Identifies gaps in the RI data
- Provides a basis for development of remedial alternatives in the Feasibility Study
- Supports the EPA Record of Decision



Review of the RI Report and Models

- RI Report was prepared by the Consultant for the NCG under EPA oversight
- As the lead agency, EPA is the primary reviewer of the RI Report
- Other agency reviewers included: NOAA, USFWS, and NYSDEC
- As a Respondent to the AOC, NYCDEP provided comments to EPA
- EPA reviewed comments provided by other agencies and NYCDEP and combined appropriate comments with EPA's comments



EPA Review of the RI Report/Models

- Over 1,300 technical comments (RI Report and models) submitted to the Newtown Creek Group to address
- Draft RI Report will change substantially based on EPA comments
- RI models will also be revised based on EPA comments



Draft RI Report Sections

- Section 1-Introduction: Establishes basis for RI report and describes the structure of the report
- Section 2-Program Summary: Summarizes field work performed and data collected to support the RI/FS
- Section 3-Environmental Setting: Describes the site history and physical characteristics of the site
- Section 4-Nature and Extent of Contamination: Describes the nature and distribution of site-related contaminants in site media
- Section 5-Sources: Defines historical and ongoing sources of contamination to Newtown Creek



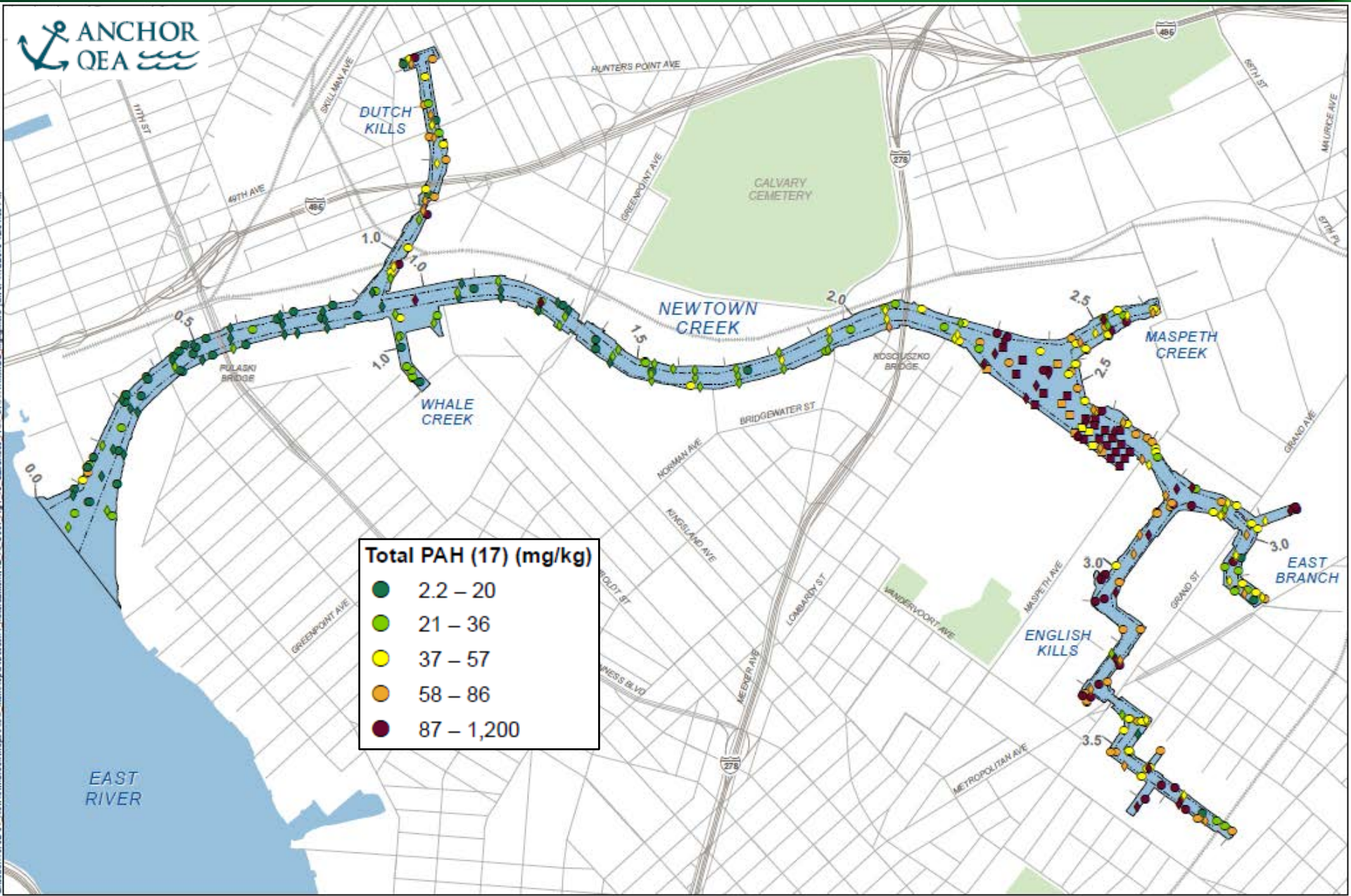
Draft RI Report Sections (cont'd)

- Section 6-Fate and Transport: Describes the chemical characteristics of contaminants and how they move within the physical environment of the site (e.g., transport of groundwater contaminants to surface water)
- Section 7-Risk Assessment: Summarizes the findings of the human health and ecological risk assessments
- Section 8- CSM: Integrates data on sources, physical environment, contaminant distribution, and fate and transport into a comprehensive picture of site contamination
- Section 9-Conclusions: Identifies key conclusions based on the evaluation of data in previous sections of the RI Report
- Tables, Figures, and Appendices: Data, information, and calculations that support the CSM and conclusions of the report

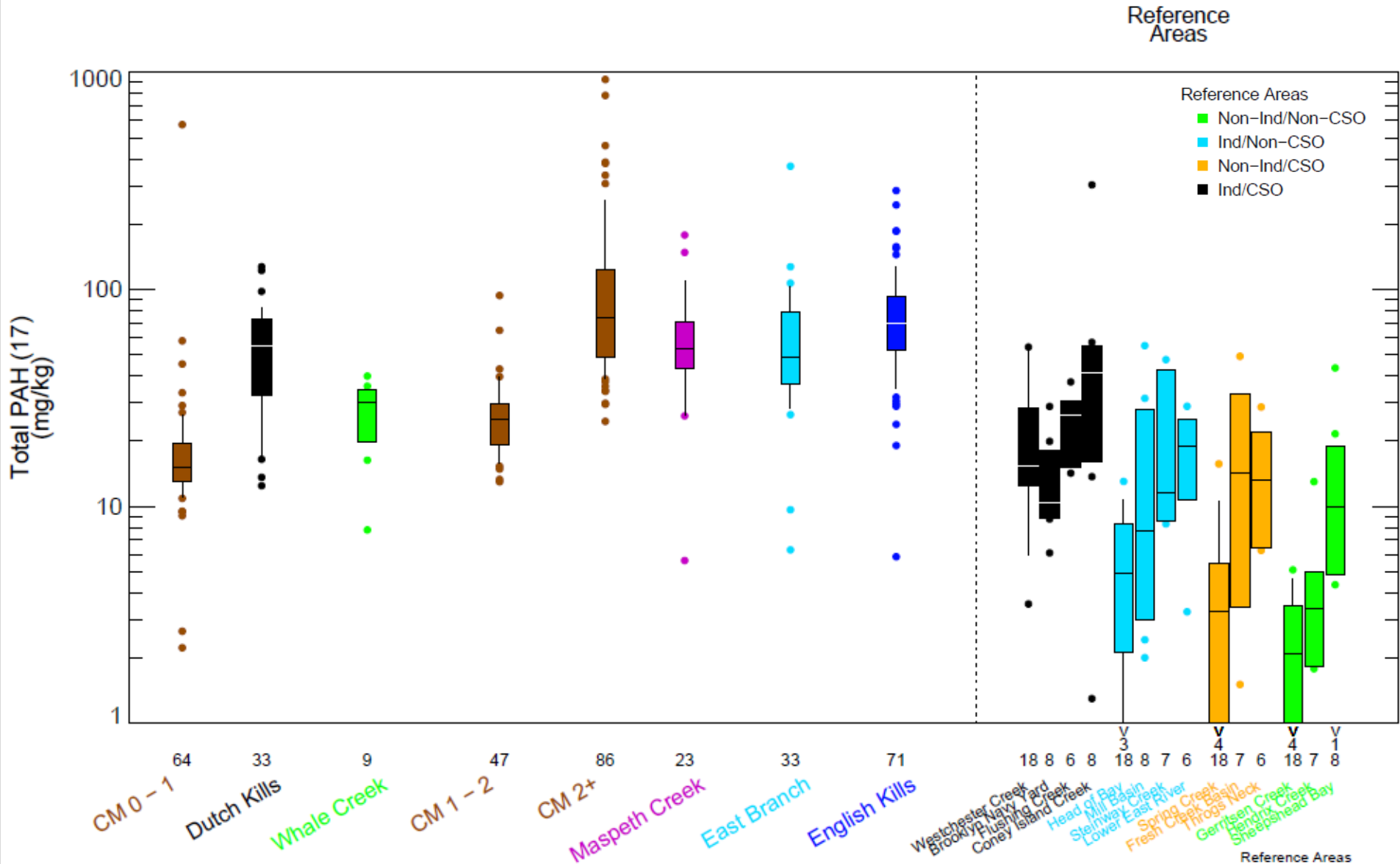


RI Report Section 4 - Data Evaluation Examples

- Section 4 - Nature and extent of contamination
- Example 1: Total polycyclic aromatic hydrocarbons (PAHs) in surface sediment
- Example 2: Total polychlorinated biphenyls (PCBs) in surface sediment



Plan view - Total PAHs in surface sediment



Box Plots - Total PAHs in surface sediment



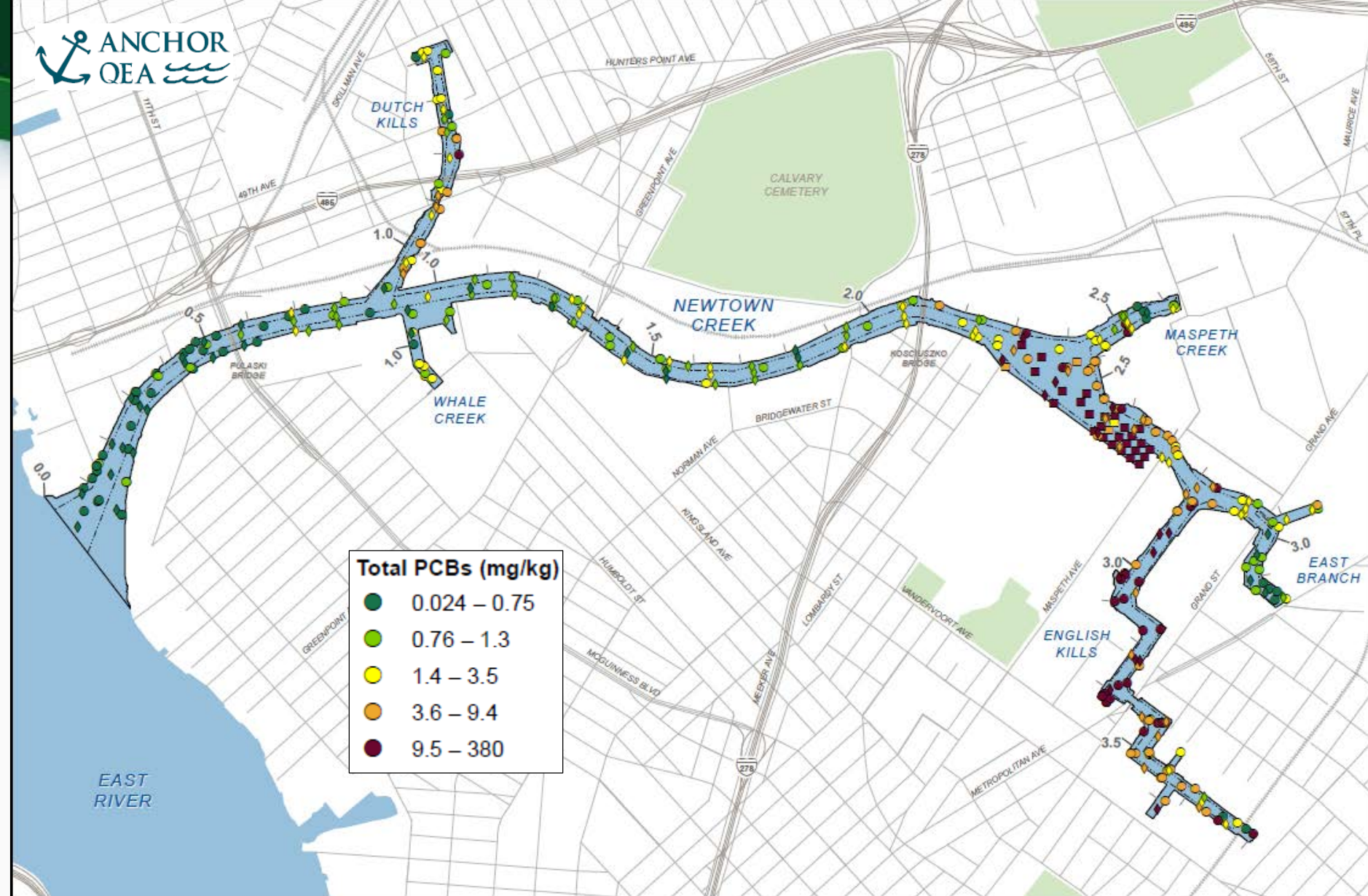
Summary of nature and extent of contamination for total PAHs

- Main Stem - Creek mouth to 1 mile: Total PAH concentrations are the lowest in the study area
- Main Stem - from 1 to 2 miles: Total PAH concentrations generally increase moving upstream
- Main Stem - 2+ miles (turning basin): Total PAH concentrations are at the highest levels in the main stem of the creek
- English Kills Tributary – Total PAH levels are elevated throughout the tributary

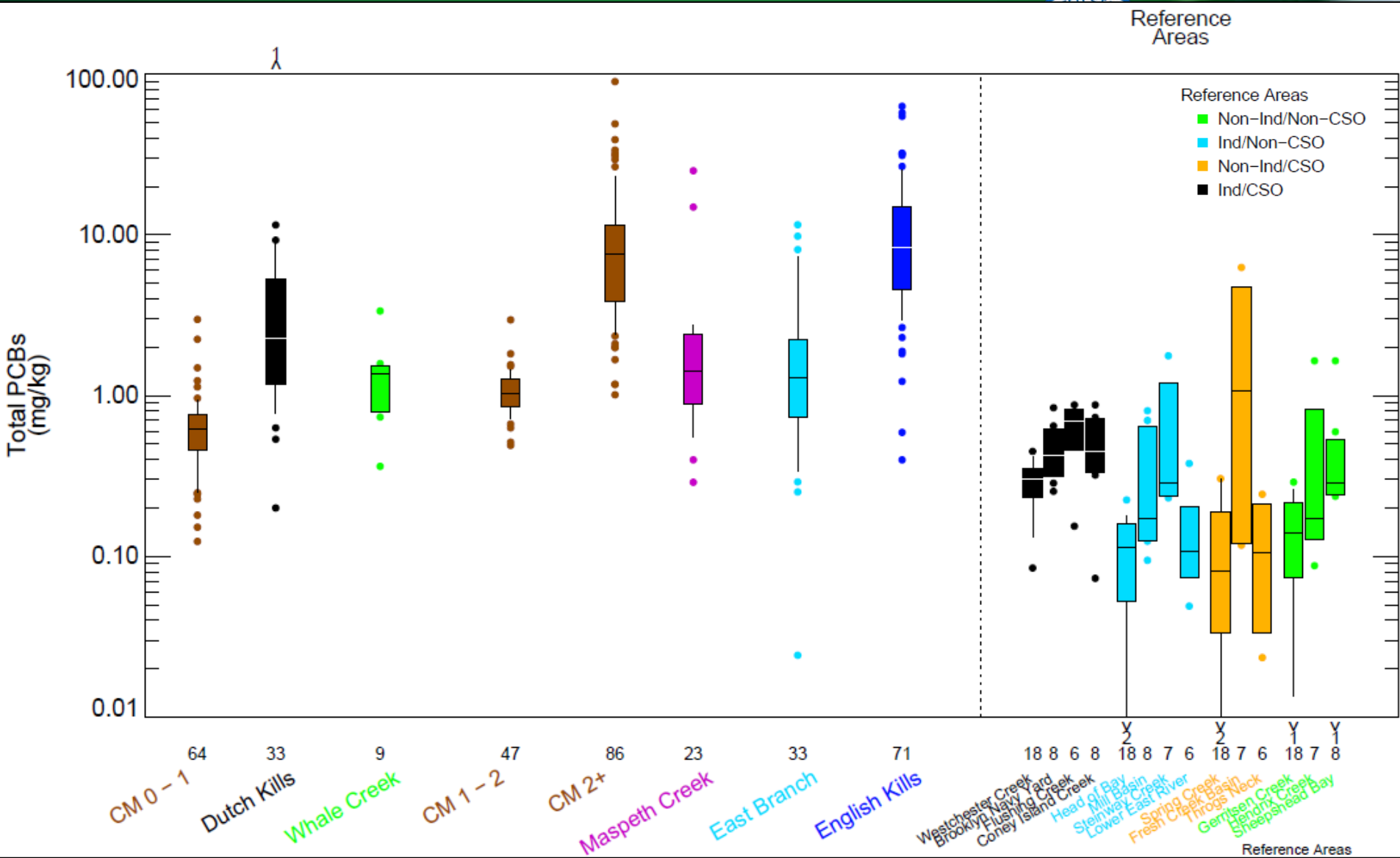


Summary of nature and extent of contamination for Total PAHs

- East Branch Tributary – Total PAH levels are lower than those in the adjacent part of the creek
- Maspeth Creek Tributary – Total PAH levels are similar to those measured in the adjacent part of the creek
- Dutch Kills Tributary – Total PAH levels increase in the upstream direction
- Whale Creek Tributary – Total PAH levels are slightly elevated relative to levels observed in the main stem of the creek



Plan view – Total PCBs in surface sediment



Box Plots - Total PCBs in surface sediment



Summary of nature and extent of contamination for Total PCBs

- Main Stem - Creek mouth to 1 mile: Total PCB concentrations are the lowest in the study area
- Main Stem - From 1 to 2 miles: Total PCBs are somewhat higher than CM 0 to 1 mile
- Main Stem - 2+ miles (turning basin): Total PCB concentrations are at the highest levels in the main stem of the creek
- English Kills Tributary – Total PCBs in the lower half-mile of the tributary are among the highest in the study area



Summary of nature and extent of contamination for Total PCBs

- East Branch Tributary – Total PCB levels are lower than those in the adjacent part of the creek
- Maspeth Creek Tributary – Total PCB levels are lower than those measured in the adjacent part of the creek
- Dutch Kills Tributary – Total PCB levels are higher than levels in the CM 0 – CM 2, but lower than in the turning basin and English kills
- Whale Creek Tributary – Total PCB levels are slightly higher relative to levels observed in the nearby main stem of the creek



Path Forward

- Discussion of EPA's comments on the Draft RI Report with Anchor QEA to clarify and discuss disagreements (initial discussions October through December 2017)
- Revised Draft RI Report (Spring 2018)
- Because of feedback loops between the Feasibility Study and ongoing modeling, the RI Report will not be approved until after the FS is submitted
- Future CAG Meetings-Opportunities to focus on specific RI sections and/or models
- Provide suggestions for future RI Report presentations to the CAG Steering Committee.



Questions/Discussions

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