Hudson River PCBs Superfund Site
Project Update

Community Advisory Group Meeting

Thursday, May 28, 2020

Virtual Meeting

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Hudson River Project Update

- Floodplain Comprehensive Study
  - General update
  - Old Champlain Canal
- Upper Hudson River
  - Long-term monitoring update
- Lower River
  - Supplemental studies (data and information collection)

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Phase 1 - Baseline Human Health Risk Assessment (BHHRA) Verification Pilot Study Work Plan

- Work plan submitted by GE on November 27, 2019
  - Under review by EPA and NYSDEC
- Important for confirming the statistical approach for risk assessment
- Pilot study - planned
  - Initial focus on two local regions
- Large sampling effort on select properties
- Sampling expected summer 2020

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Short-Term Removal Actions (STRAs)

- STRAs – Temporary actions
- STRA Inspections
  - Total of 66 STRAs (43 cover and 23 signage)
  - Annual inspections underway
    - 2019 STRAs receive multiple inspections during the first year
  - Minor maintenance required on several properties
- STRA Maintenance
  - Maintenance repairs being conducted at five properties

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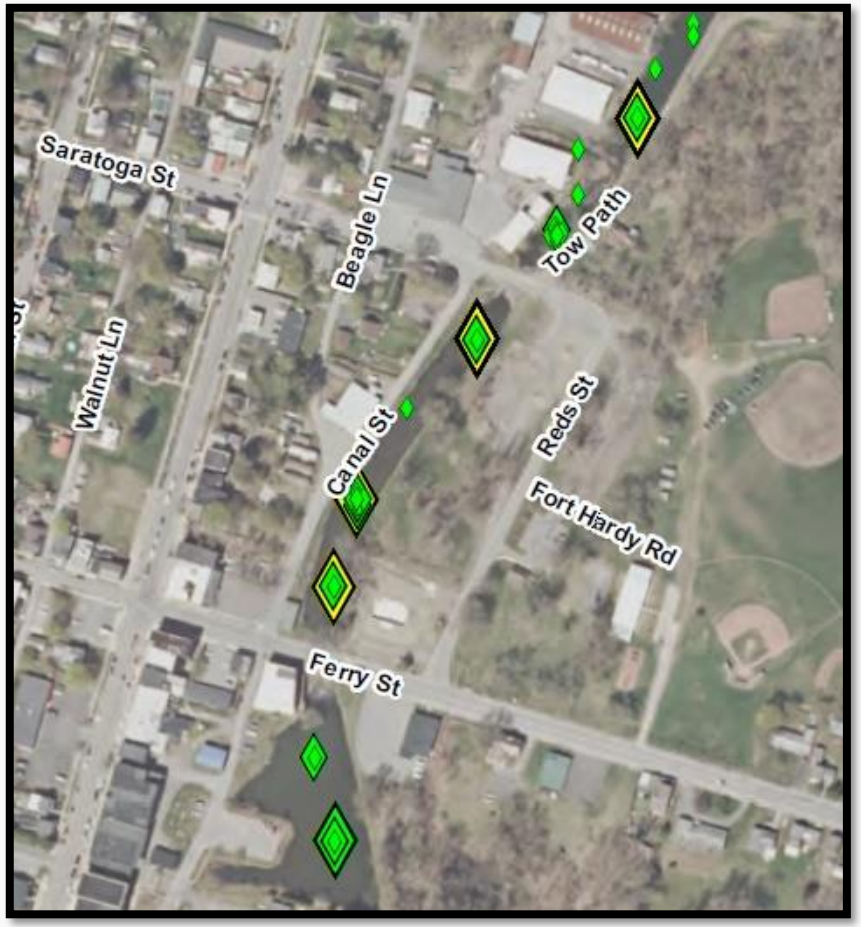
Old Champlain Canal Sampling

- Phased sampling approach
- Data collected October 2019
  - 18 sampling locations
  - Additional PCB sample analysis based on 2019 results
- Deeper sediment characterization (PCBs and other parameters)
  - Required for RI/FS (nature and extent of contamination)
  - Required for short-term maintenance
  - GE continues to assist
  - Ongoing continued close coordination with NYSDEC and Town/Village
- PCB Results:
    - Phase 1 - 11 surface samples (0-2”) all ND
    - Phase 2 - Deeper samples ranged from ND to 9.5 mg/kg
      - Highest concentrations generally deeper in the sediment column



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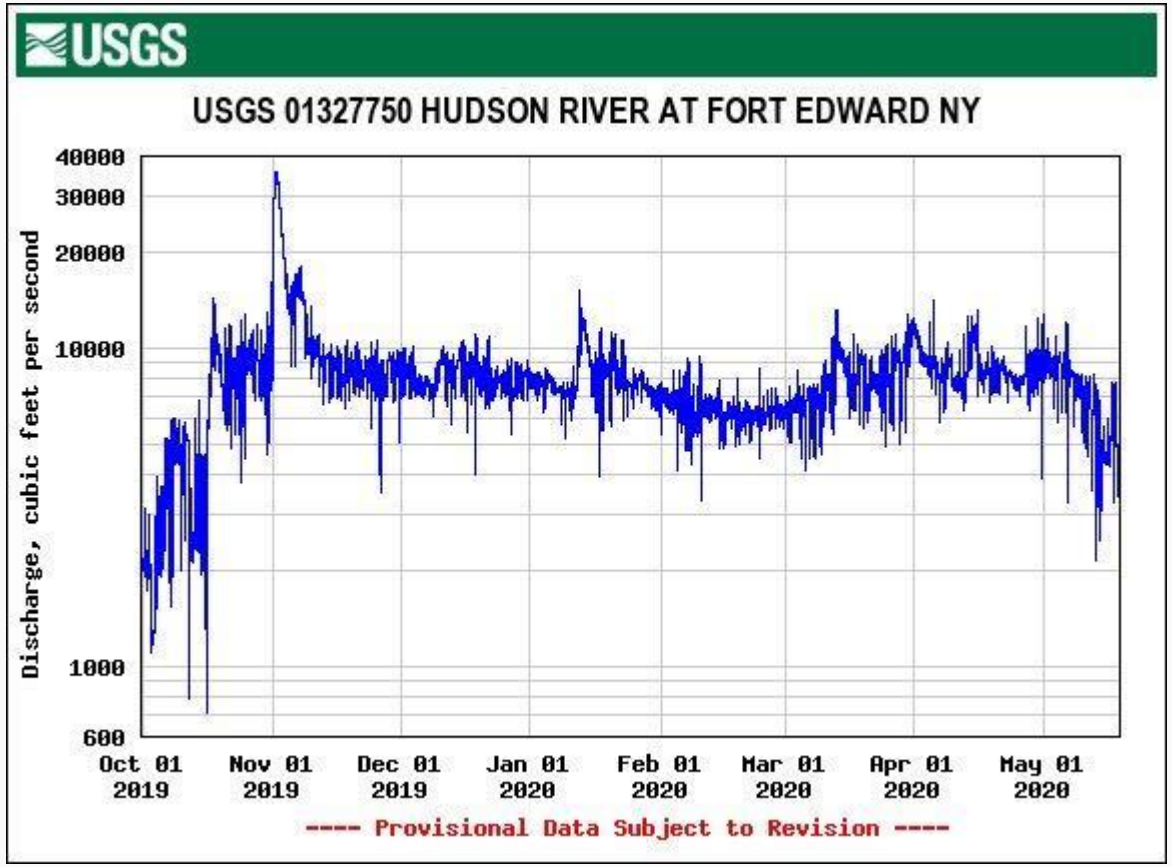
Old Champlain Canal – Ongoing Evaluation

- Material prepared:
  - PCB Results Map – map showing all the results collected to date
  - Water Depth Map – map showing the water depth of all sample locations
  - Water Depth Table – table of the water depths
  - Summary of Exceedances to NYSDEC Part 375 Standards – table summarizing the results compared to the standards
  - Summary of Results compared to NYSDEC Part 375 standards – table with sample results for parameters that exceed the standards
  - Select compared to Technical & Operational Guidance Series (TOGs) Table 2 – table with results for parameters that exceed TOGs Class A sediments
  - Sediment Profile – a graphical representation of the PCB concentrations collected in relationship to water depth.
- GE is also preparing a data summary report

Depositional Sampling Program – Flood Mud

- High flow event in late October triggered a flood mud sampling event in fall 2019
  - Sampling based on flow (typically spring sampling event)
  - 8 scrape samples and 10 sediment trap samples collected
  - Sample results ranged from not detected to 3.2 ppm
- Spring 2020 sampling
  - Sediment traps were inspected and cleaned in March 2020
  - No flood mud sampling this year – due to flow



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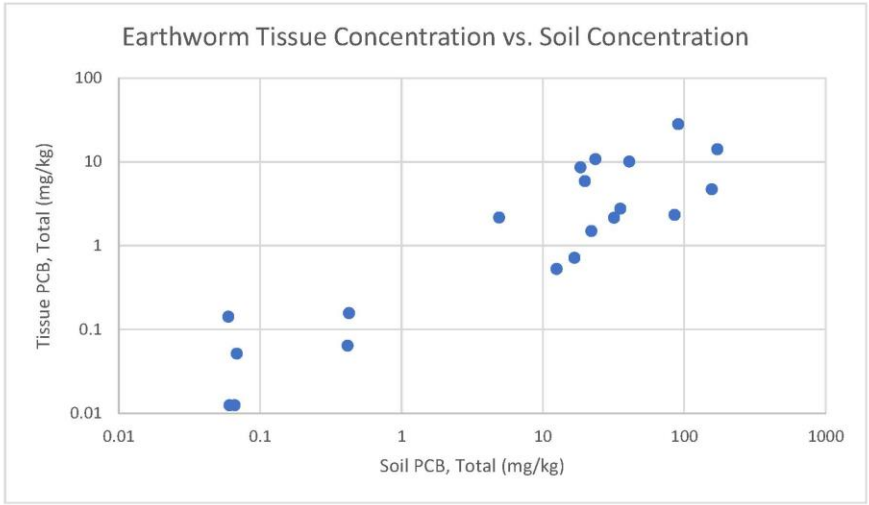
Earthworm and Soil Sampling

- 2019 sampling effort
  - Samples collected between September 30 and October 4, 2019.
- Necessary for ecological risk assessment
  - Provided initial information
- 20 locations sampled
  - Co-located earth worm and soil samples
  - Targeted a range of concentrations in floodplain
  - Earthworm tissue ranged from ND to 28.3 mg/kg
  - Soil concentration ranged from ND to 171 mg/kg



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Floodplain - Next Steps

- Complete review of Phase 1 Baseline Human Health Risk Assessment (BHHRA) Verification Pilot Study Work Plan
- Conduct verification sampling for Phase 1 BHHRA in summer 2020
  - Evaluate statistical approach based on sampling results
- Complete review of Screening Level Analysis (SLA) and Screening Level Ecological Risk Assessment (SLERA) documents prepared by GE
- Prepare Pathway Analysis Report (PAR)
- Additional soil and ecological sampling
- Collect floodplain depositional samples following high flows

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Upper Hudson River

Long-Term Monitoring

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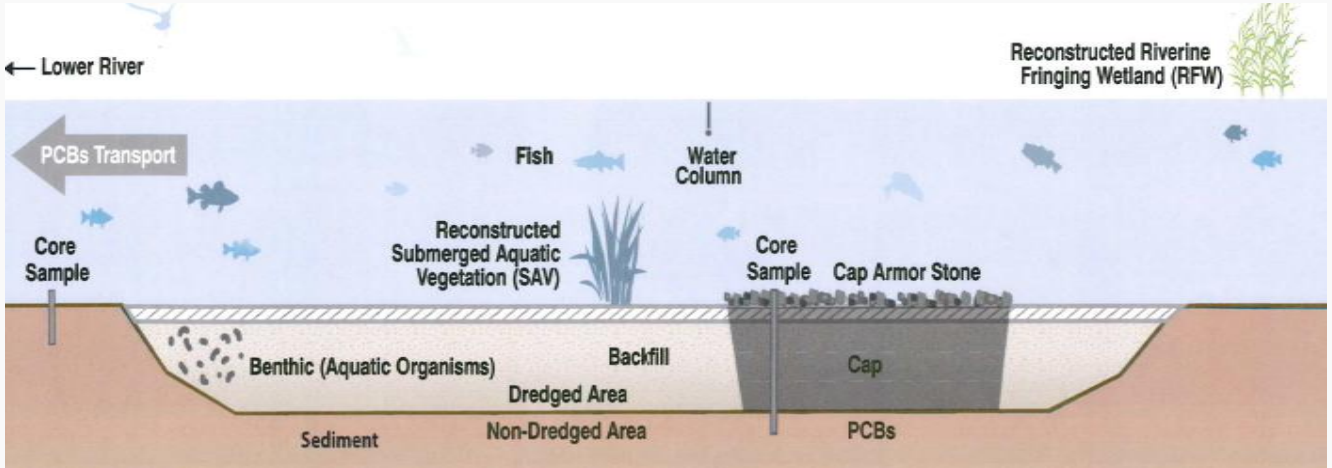
Long-Term Monitoring Activities

Upper Hudson River remedy – dredging and natural recovery (with extensive monitoring)

- Monitoring of river continues
- Long-term monitoring scopes being reviewed and discussed – finalize in 2020
- Continued close coordination with NYSDEC and NYSDOH regarding scopes of work and work plans for water, sediment and fish monitoring
- Monitoring includes
  - Water Column – weekly/monthly
  - Sediment – every 5 years (last 2016 – next 2021)
  - Fish – annual
    - Spring sport fish
    - Fall small fish
  - Caps – next survey 2023



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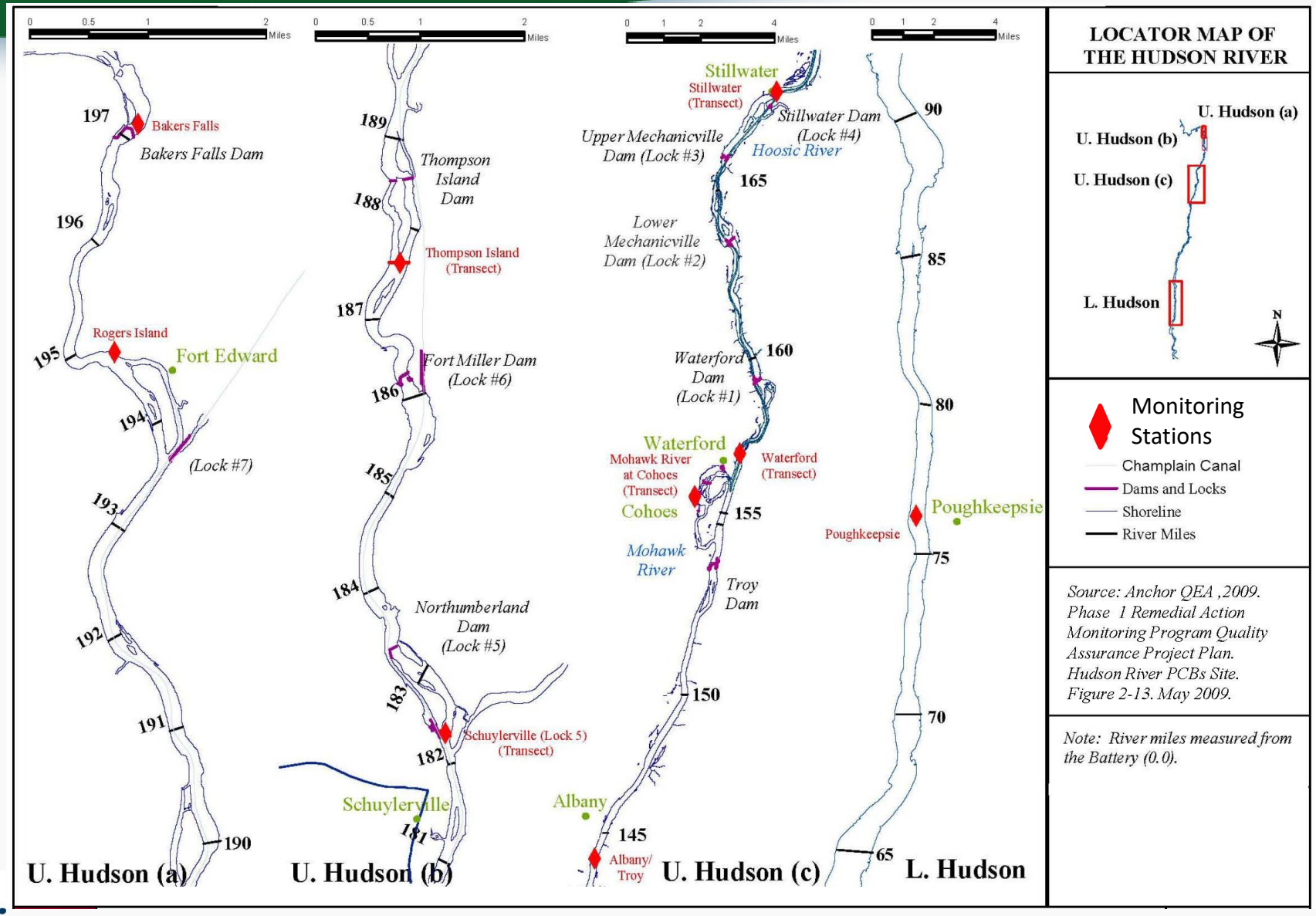
Water Column Monitoring Stations



Source: Anchor QEA ,2009. Phase 1 Remedial Action Monitoring Program Quality Assurance Project Plan. Hudson River PCBs Site. Figure 2-13. May 2009.

Note: River miles measured from the Battery (0.0).

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Water Column Monitoring

- Routine and High Flow Monitoring

Routine Water Column Sampling

- Upper Hudson River
  - Monthly – Bakers Falls, Rogers Island
  - Weekly – Thompson Island, Schuylerville, Waterford
- Lower Hudson River
  - Monthly – Albany and Poughkeepsie

High Flow Events Sampling

- Samples collected when River has high flows (15,000 cubic feet per second at Fort Edward or 22,500 at Waterford)
- Samples collected at Waterford and Schuylerville
- Last events were October and November of 2019
- No high flow events yet in 2020

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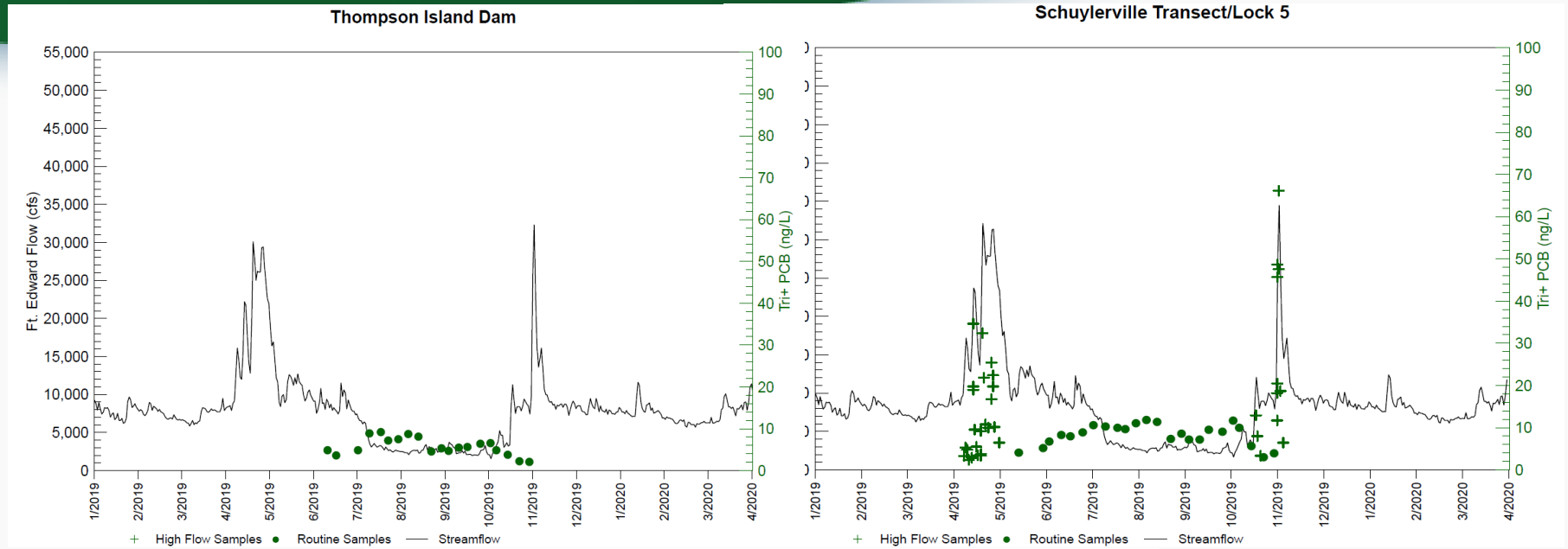
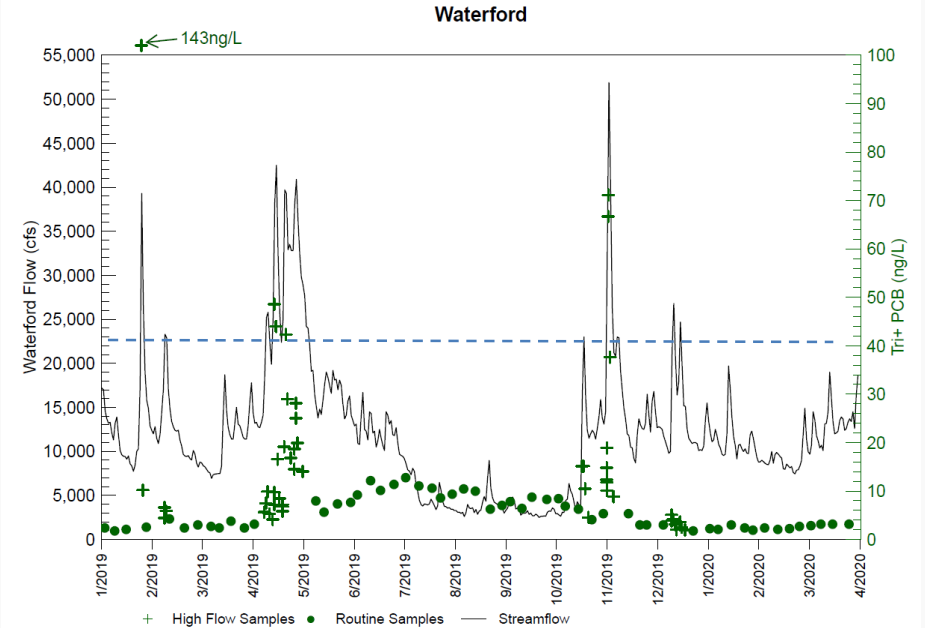
Water Column Concentrations and Flows





High Flow Event at Waterford

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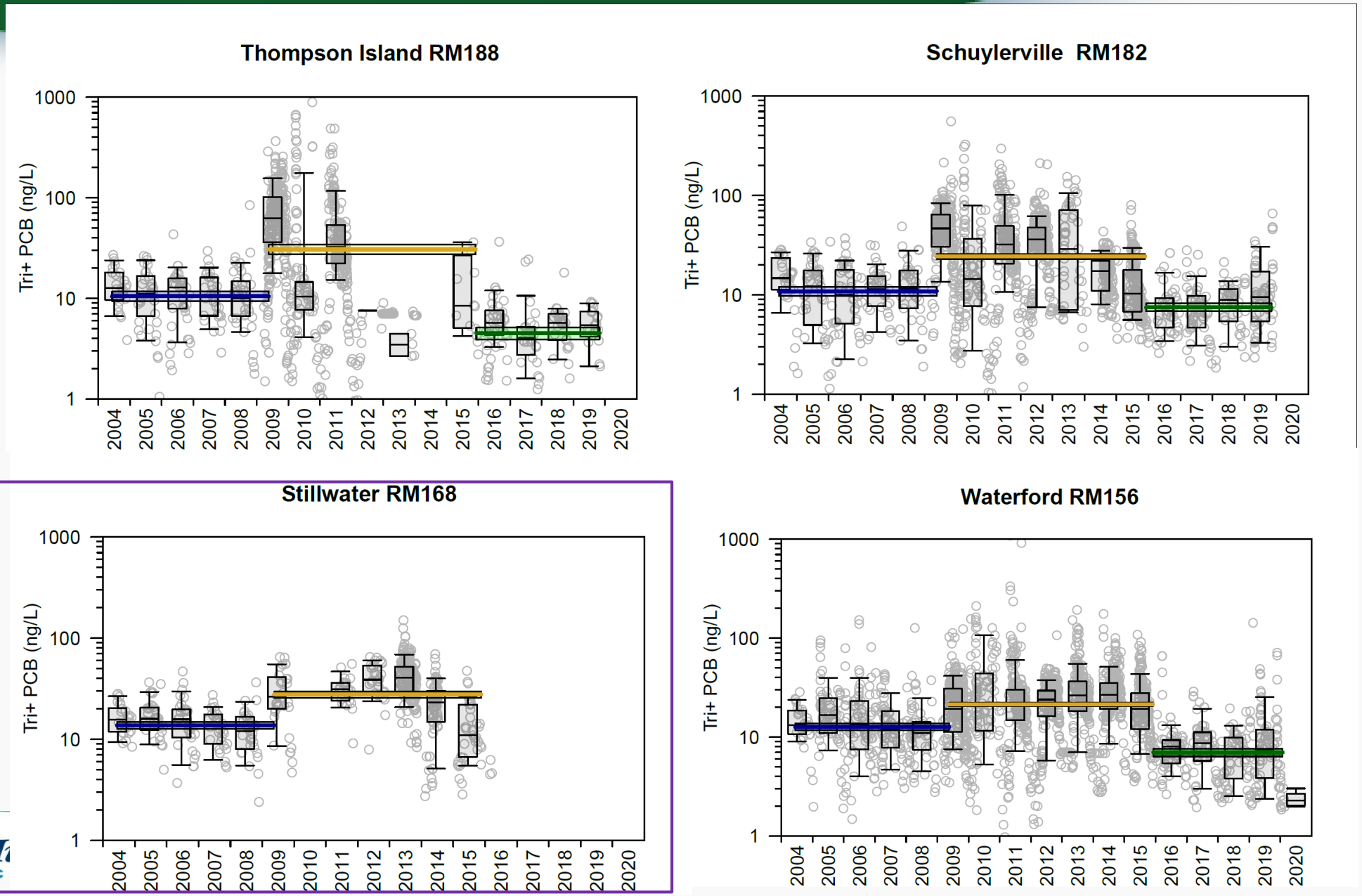
Water Column Concentration Declines Continue



Other Activities

- Property transfer (wharf, access road, support facility)
  - Property transfer in progress
- Waterline
  - Transfer to municipalities in progress
  - Continued coordination with Waterford, Halfmoon and Troy

EPA needs to end its interest in remedial action properties

Lower Hudson River

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Lower Hudson River (LHR)
Data and Information Collection

- Continue to collect LHR fish and water data
- Continuing to collect, review and summarize existing data/information/studies
  - Coordinating and exchanging information with Hudson River Foundation, USACE, NYSDEC and others
  - Downloading and gathering data and reports (including project archives and literature searches)
  - Coordinating with USACE regarding navigational dredging-related data and permit information
  - Met with NYSDEC regarding data and State sites along the river
  - Continued close coordination with NYSDEC
- Ongoing development of GIS database of existing/historical chemical and physical data
- Incorporate information into system understanding document
- Developing initial scopes of work
- Internal EPA discussion and coordination

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Questions

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