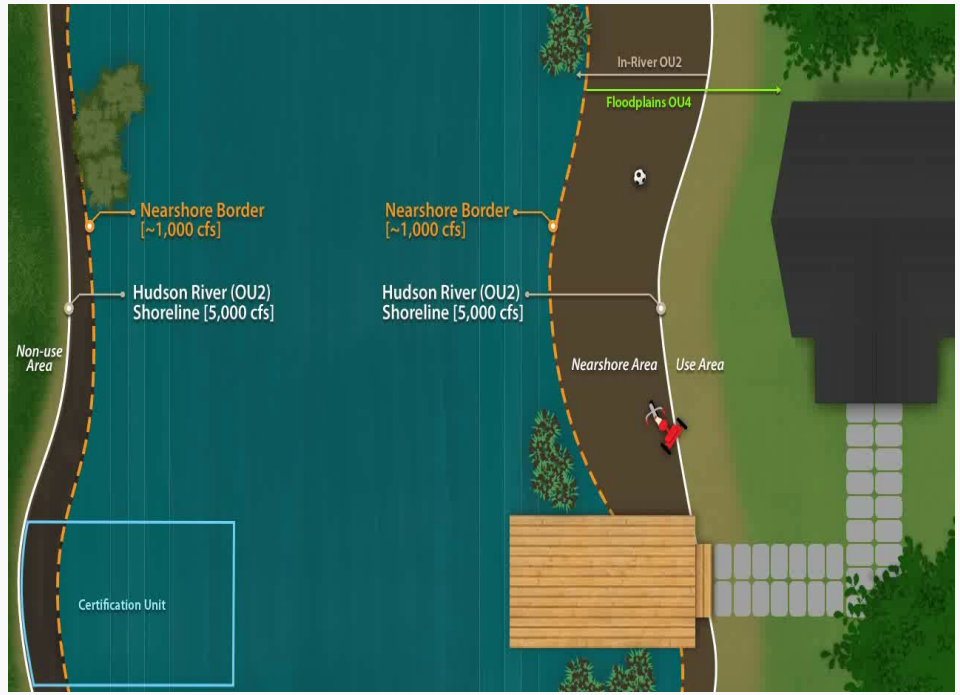
Floodplain Update

Status of Ongoing Work and Old Champlain Canal Overview

Floodplain Comprehensive Study

- The comprehensive study is being done under an agreement with GE
- Risk assessments and sampling ongoing
  - Multiple rounds of soil sampling in past years and more this year
    - Focus on better understanding contaminant distribution
    - Follow-up special study sampling – high frequency of sampling on a group of properties
  - Flood mud samples collected to assess impacts from flood events
    - Sampling is initiated after high flow events
    - Samples were collected from 9 locations in May 2023
    - Total PCB concentrations are typically low (less than 1 ppm)



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Risk Assessments

- Risk assessment work is ongoing
  - PCB concentrations decrease farther down river and away from the shore
  - Initial screening level assessments underway (both Human Health and Ecological)
    - GE is responding to EPA comments on human health assessment
  - Initial ecological field efforts are being conducted; past work included earthworm sampling
    - Field work to support future Remedial Investigation/Feasibility Study (RI/FS) activities

Ecological Risk Assessment – Field Effort

- Two field efforts conducted in 2023 to help develop future sampling plans
- Terrestrial (land) invertebrate sampling
  - Purpose – test various methods of collecting invertebrates and gain a better understanding of the likely distribution, presence and mass of invertebrates
- Catbird survey (observation of nesting areas)
  - Purpose – develop logistics for potential full scale program including search techniques for nesting behavior specific to Hudson River

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Impacted Areas Used by People

- Areas used by people – EPA in coordination with NYSDEC/ NYSDOH continue to identify these areas and any changes in use
- Schuylerville use areas identified by a local resident (CAG member)
  - Separate detailed presentation
- Additional use area sampling was conducted in 2023
  - 116 samples collected on 10 properties
  - PCB concentrations varied widely
    - The elevated PCB areas are being immediately addressed
    - Short-Term Actions planned and designed by GE for review by EPA in close consultation with NYSDEC/NYSDOH
    - All work is on a property by property, area by area basis in close coordination with property owners

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Floodplain Short-Term Actions

- Areas regularly used by people are prioritized for sampling
- Sampling associated with community projects are also prioritized
- Immediate action taken to address areas with elevated PCBs
  - Short-Term Actions implemented on 72 areas (49 grass or gravel covers, 4 natural covers, 19 warning signs)
  - Covers – topsoil, grass, or gravel covers (fabric under covers as marker layer)
  - Signage – along long trails and less frequently used areas
    - Signage is regularly checked to confirm it remains in-place

Soil cover at Saratoga Boat Launch

Floodplain Short-Term Actions (con't)

- Annual inspection of Short-Term Actions were conducted in summer of 2023
- Short-Term Action maintenance completed this fall
- Installation of Short-Term Actions completed in 2023
  - Three new Short-Term Actions
  - Expansion of an existing Short-Term Action
- Installation of Short-Term Action planned for 2024
  - After additional sampling and discussion with owner
- Short-Term Actions will continue to be completed as new areas are identified and sampled

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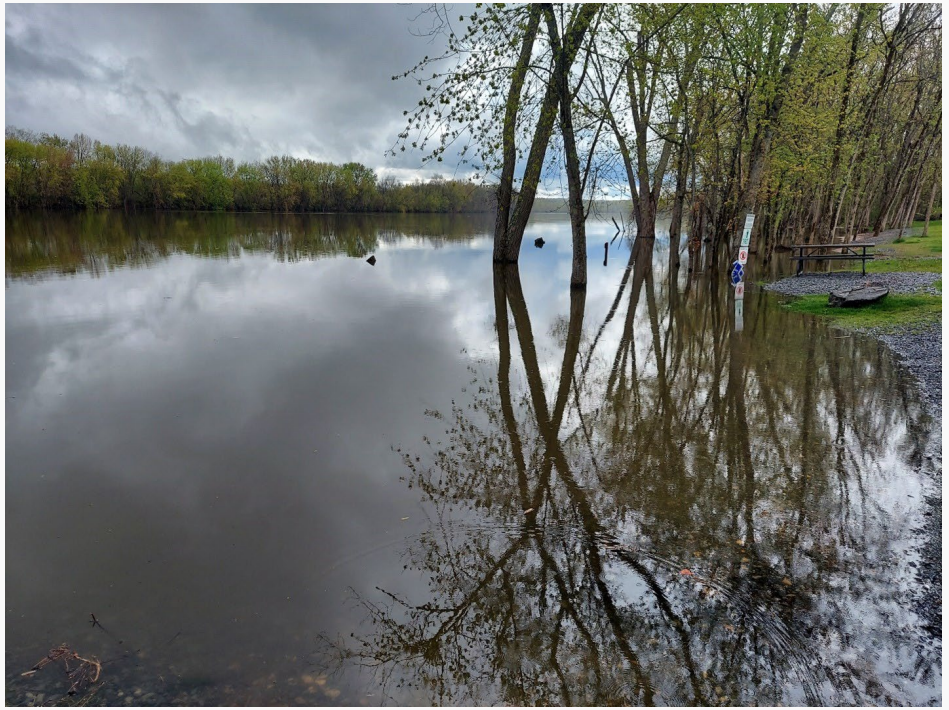
Flood Mud - Background

Purpose: *Sample sediments deposited in the Upper Hudson River floodplain during seasonal high-flow events and analyze it for the presence of PCBs. During high-flow events, sediment from the river bottom, potentially contaminated with PCBs, becomes suspended in the flow and redeposited elsewhere in the river system, including the floodplain*

- EPA expanded on NYSDEC flood mud program in 2010
  - DEC flood mud collection dates back to about 2008
- Check for flood mud after high flow events
  - Flows >15,000 cubic feet per second (cfs) at Fort Edward
  - Not every high flow event meets the requirements for sampling



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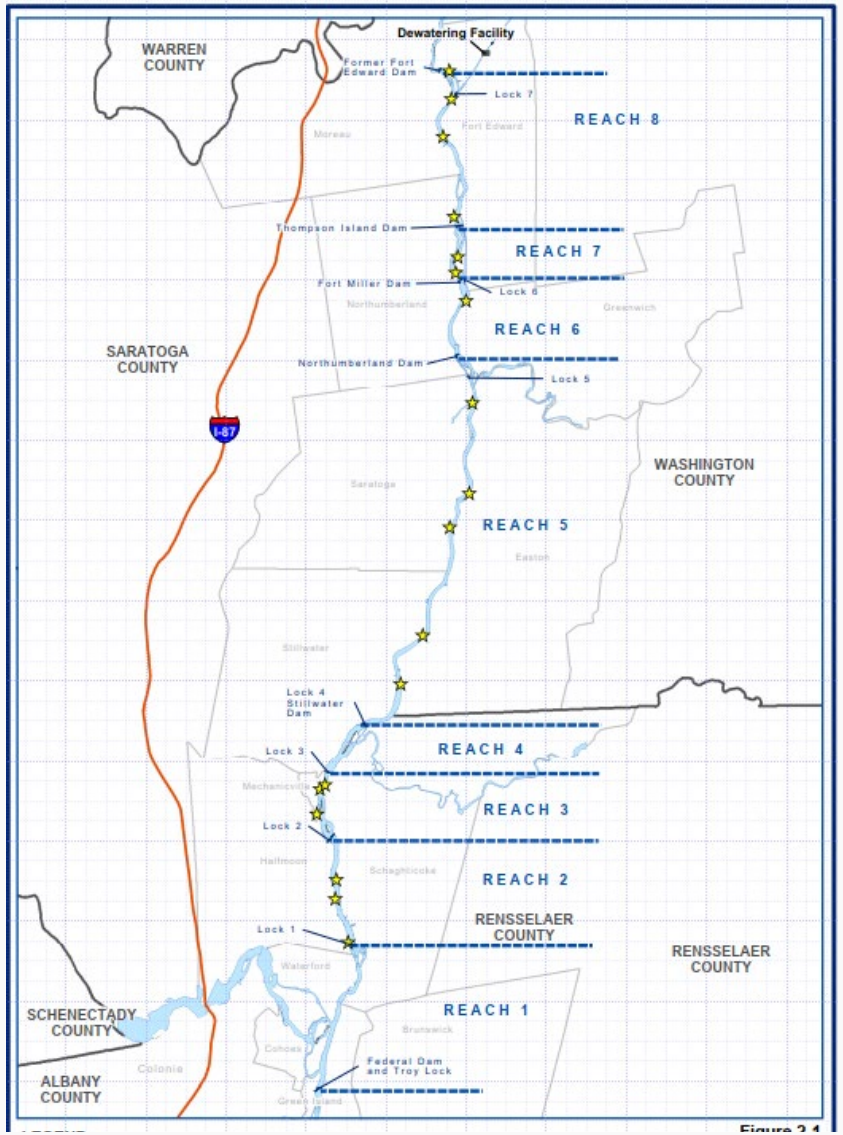
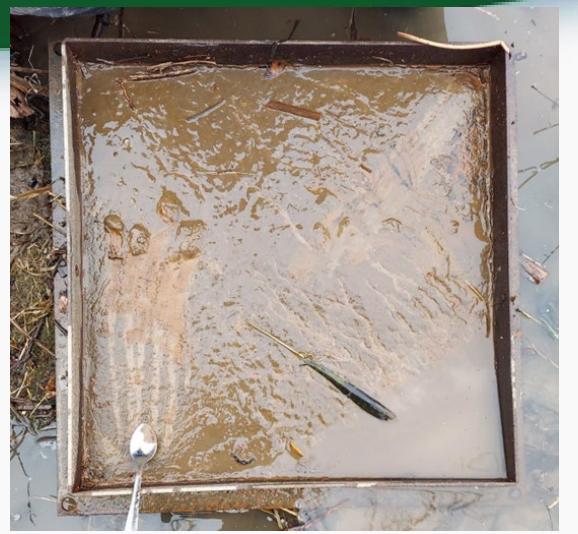
Flood Mud - Sample Summary

- Total of 26 locations targeted for sampling during each event
  - Unique events can trigger additional sampling (e.g. GE and EPA collected extensive flood mud after the large 2011 flood)
- Sample locations selected based on:
  - Spatial distribution of sampling locations
  - Previous sampling locations
  - Property access
  - Probability of deposition
- Two types of samples
  - Scrape samples – taken off of hard surfaces (e.g. NYSDEC boat launch, Lock 5 kayak launch)
  - Device samples – specially designed devices to collect flood mud



Flood Mud Sampling



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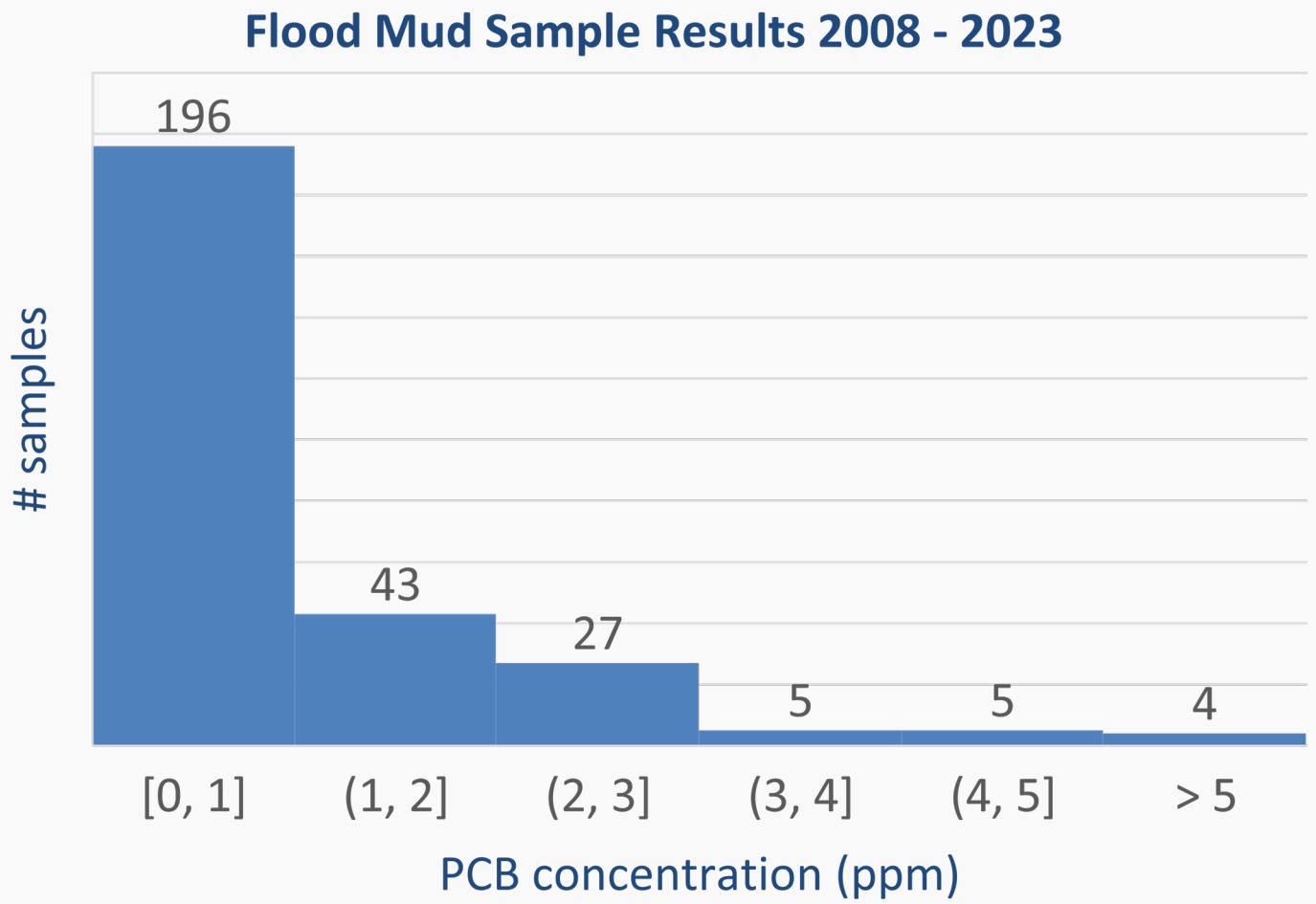
Flood Mud - Results

- Flood mud samples have been collected from 19 high flow events
  - 280 samples collected (188 scrapes, 92 devices)
- Most results (>99%) less than 5ppm



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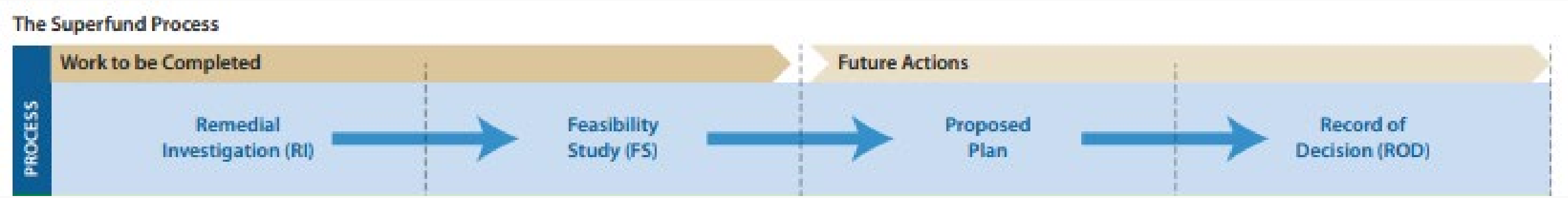
Flood Mud Next Steps

- EPA evaluating program to determine if any modifications/improvements are needed
- Continue to sample as needed following high flow events
- Results will be further evaluated in the RI/FS

Floodplain – Next Steps

- Continue coordination with municipalities and NYSDEC/NYSDOH
- Continue field reconnaissance to identify new use areas/changes in use
- Continue screening level risk assessments
- Installation of new Short-Term Actions and continued inspection and maintenance of existing Short-Term Actions
- 2024 soil sampling and data evaluation
- Flood mud sampling after high flow events



Old Champlain Canal - Overview

- Town of Saratoga and the Village of Schuylerville have long-term recreational and development plans for the area of Old Champlain Canal and Fort Hardy Park
- EPA coordinated sediment sampling program with NYSDEC and NYSDOH
- Sampling of the Canal was conducted between 2012 and 2021
  - Total of 43 locations and 68 samples analyzed from the canal
  - Additional analytical results conducted to support municipalities' plans
  - PCB results were generally low
  - Other contaminants were also detected
- Data Summary Report prepared by GE (with oversight by EPA)
  - Includes all data collected in canal to date
  - Provided to municipalities in 2022
- Sample results will be included in the floodplain comprehensive study - RI/FS
- EPA and NYSDEC continue to be available to the municipalities regarding their future plans


ARCADIS

General Electric Company

Schenectady, New York

DATA SUMMARY REPORT – 2021 OLD CHAMPLAIN CANAL SEDIMENT SAMPLING – SCHUYLERVILLE AREA

Upper Hudson River Floodplain

August 22, 2022

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