Peconic River Remedy Optimization Plan

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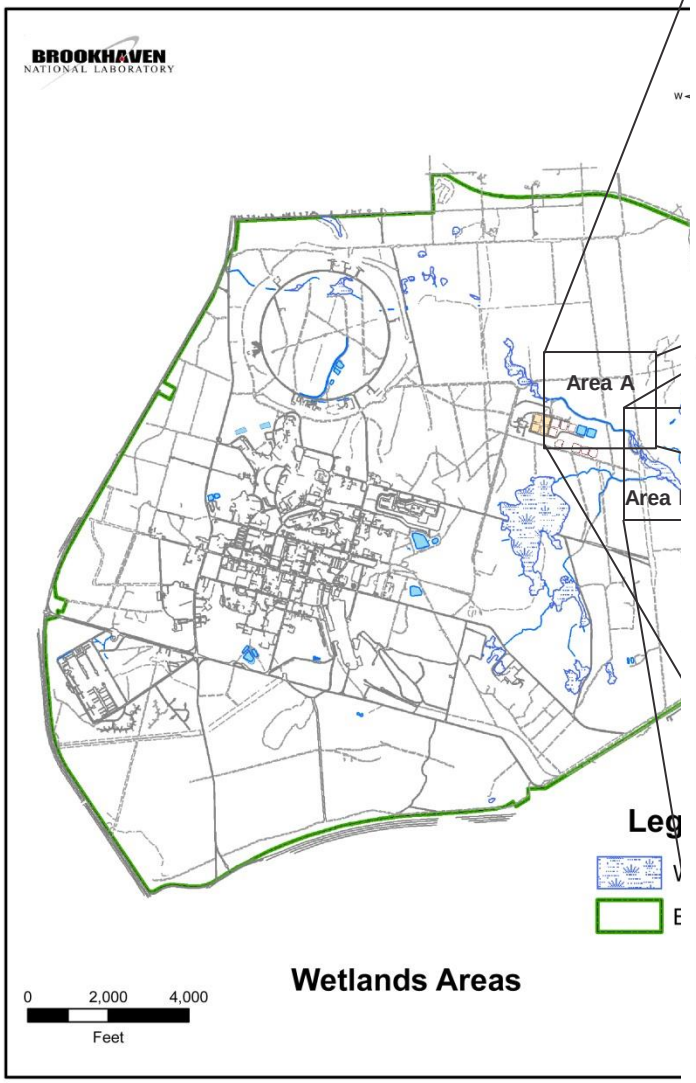
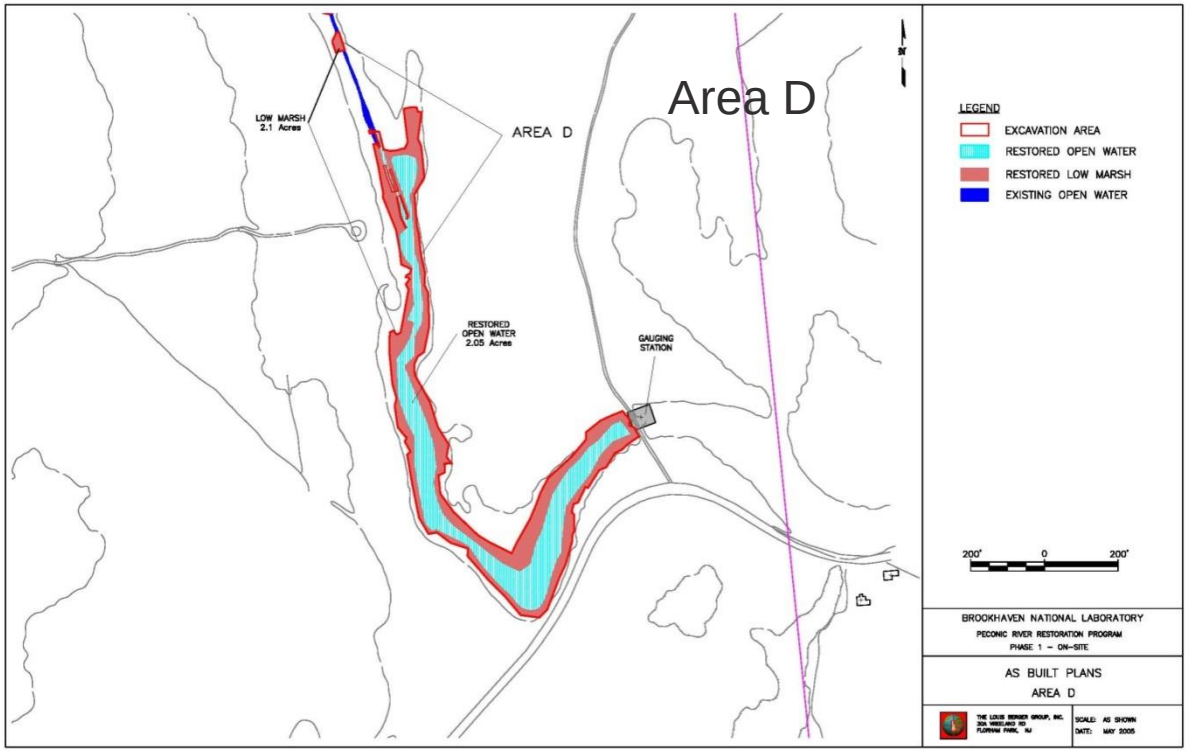
Office of Science
U.S. DEPARTMENT OF ENERGY

Agenda

- Peconic River Cleanup
- Extent of contamination - recap
- Optimization Plan
- Path Forward

Extent of cleanup maps





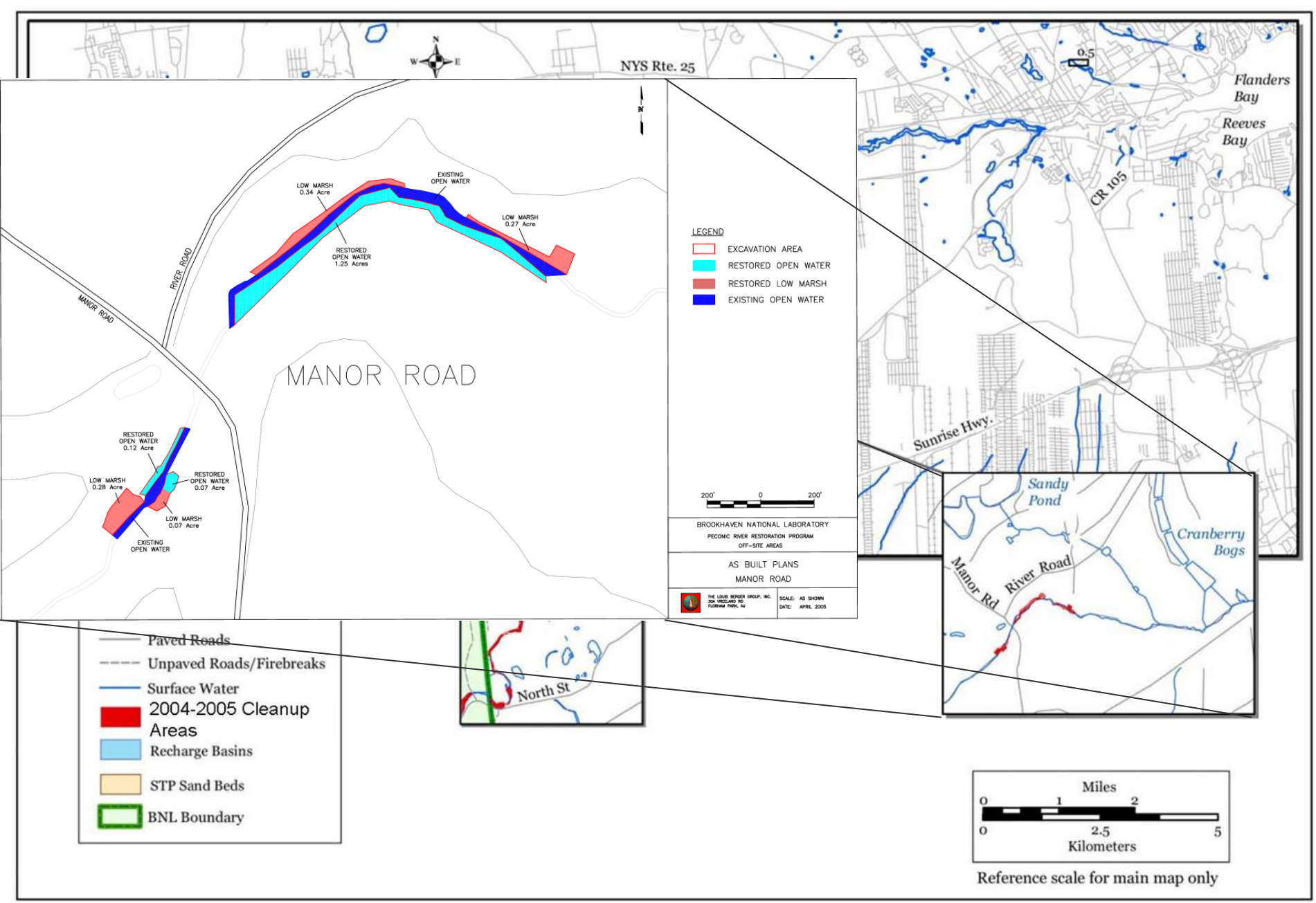
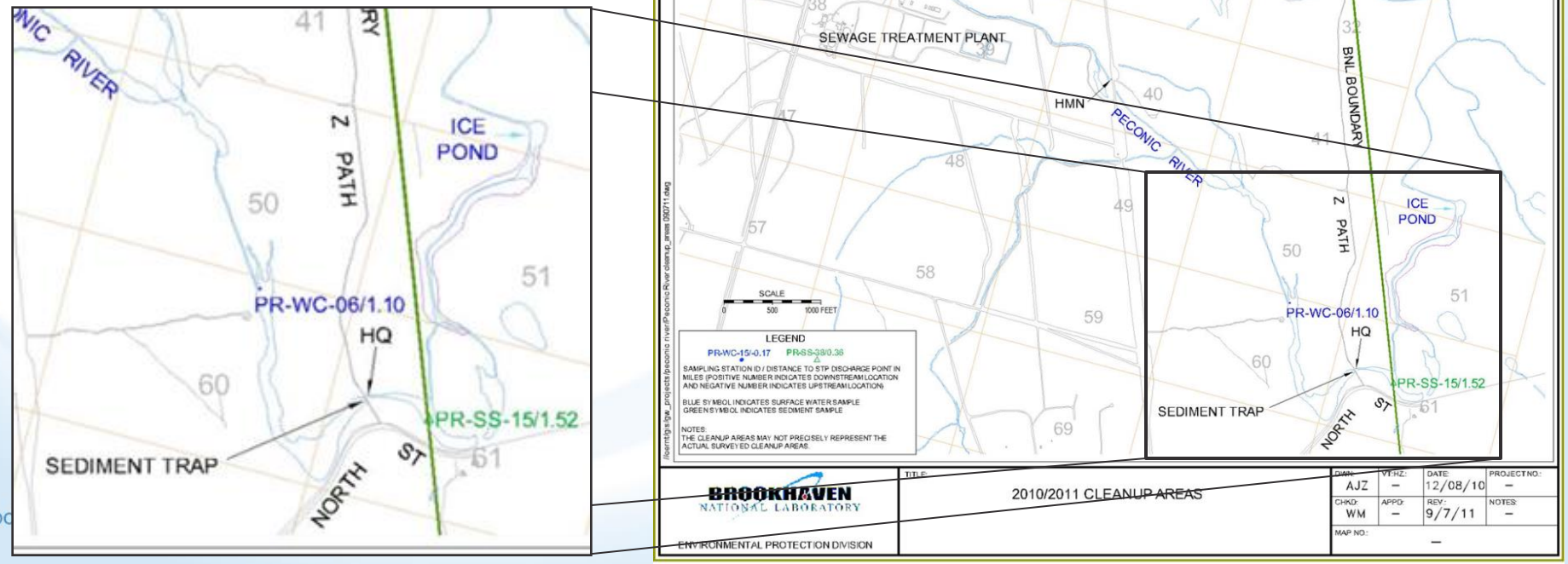


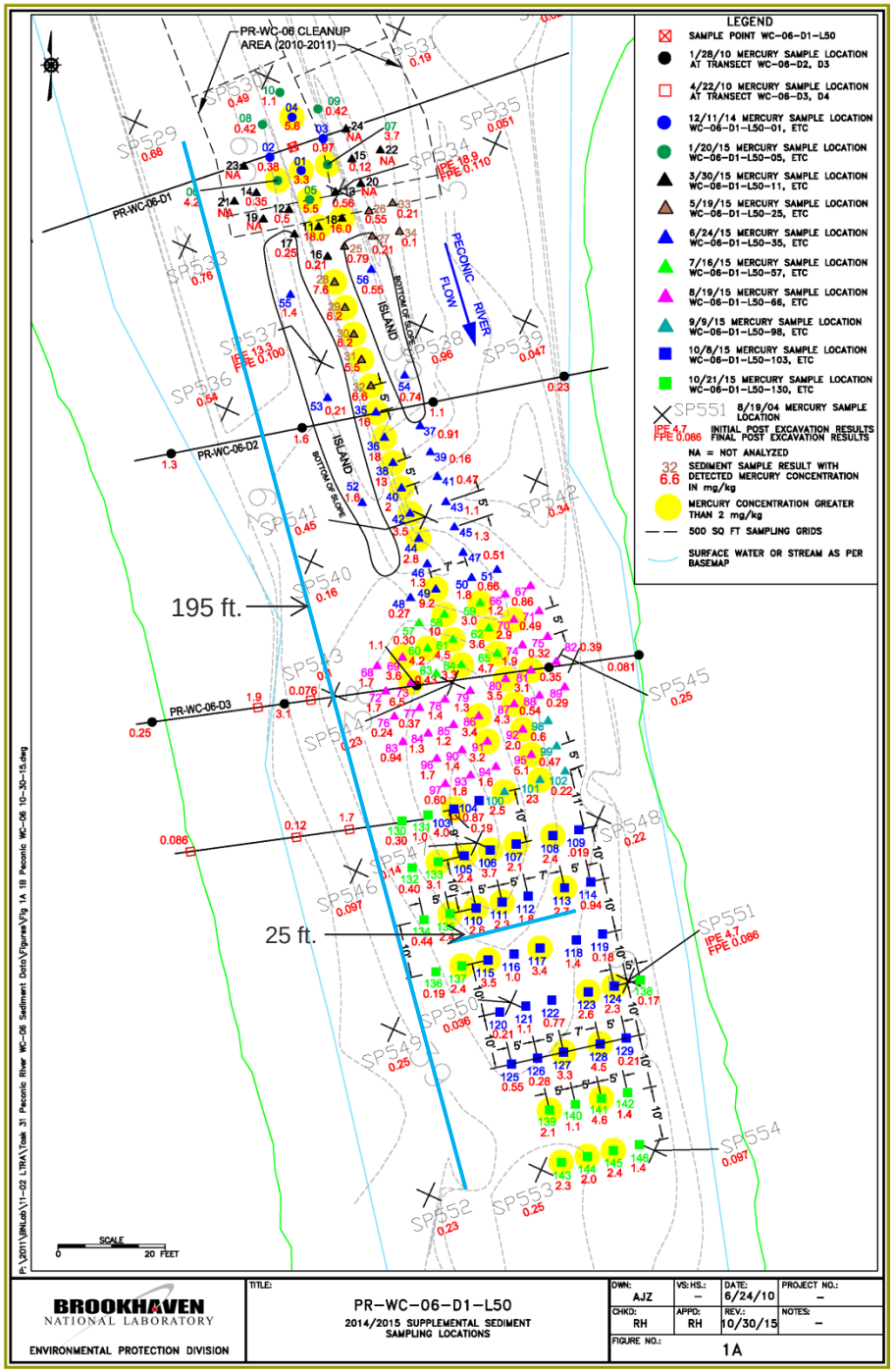
Figure 1-1. The Peconic River. The sections of the river that were remediated are indicated in the two call-out boxes, These two sections are shown in detail in Figures 1-2 and 1-3.

Peconic River Supplemental Cleanup Monitoring

- All three supplemental cleanup areas monitored annually 2011-2015
- June 2014 - PR-WC-06 has elevated mercury, maximum of 7.4 mg/kg



PR-WC-06 Area Pictures



Extent of Contamination

- In November 2014 the regulators agreed with a plan to collect four samples (five feet upstream, five feet downstream, five feet to the left, and five feet to the right of the original sample) to delineate the area
  - Maximum detection was 5.6 mg/kg, and average of 2.6 mg/kg
- This process continued through October 2015 with 140 samples collected
  - Maximum mercury detection of 23 mg/kg, average of 2.7 mg/kg
- Maximum area of sampling –
  - 200 ft. x 35 ft

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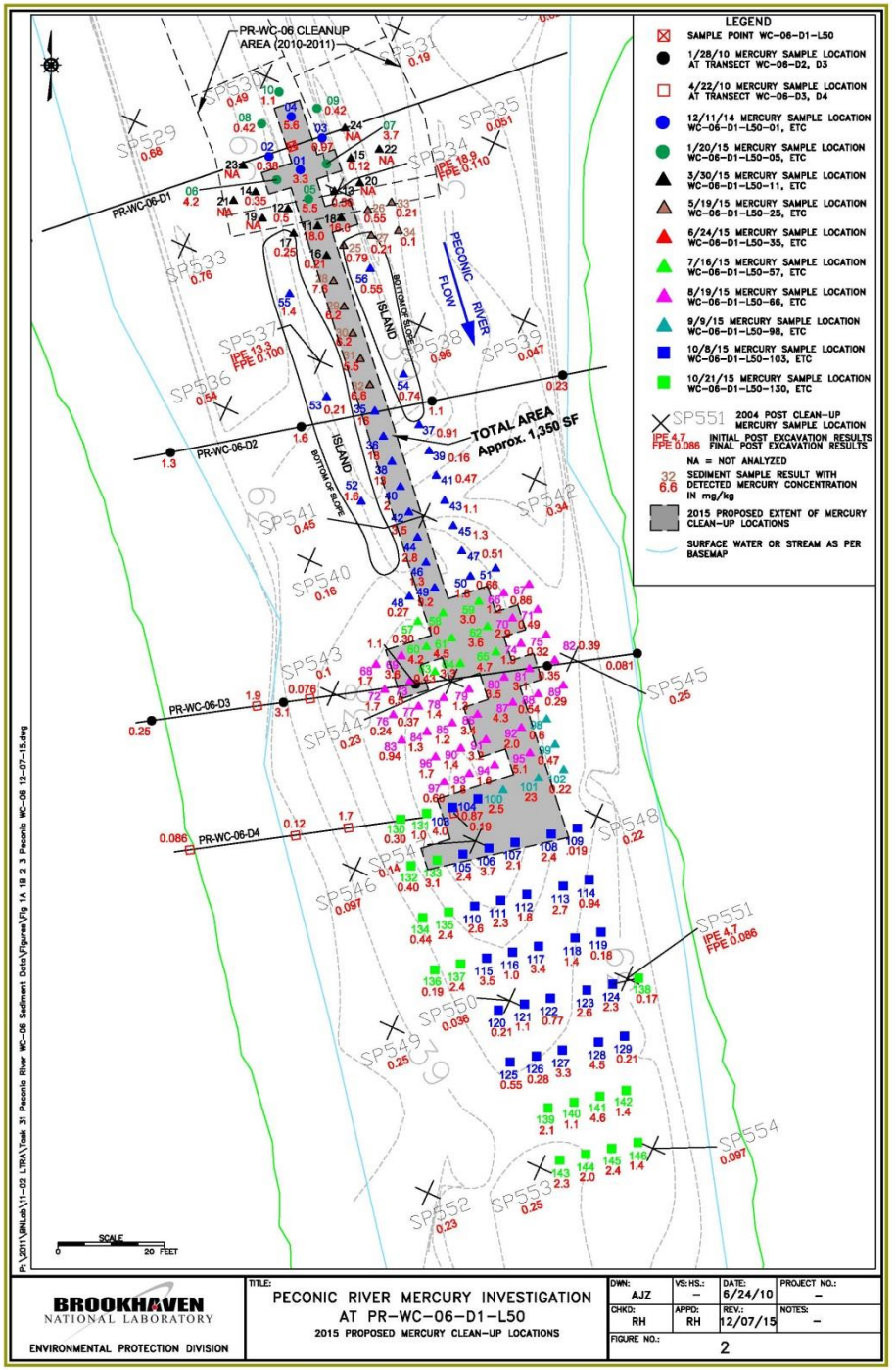
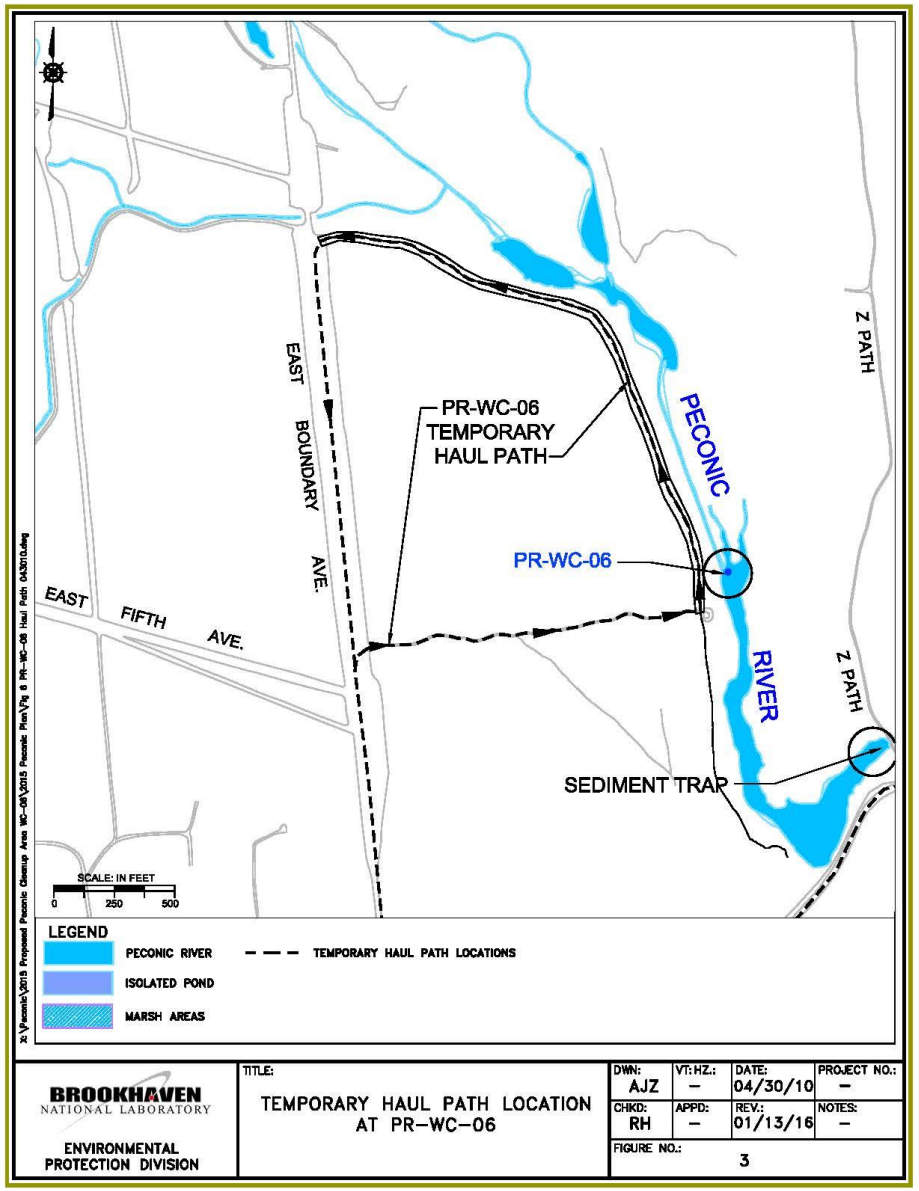
Optimization Plan

- Proposing cleanup of the higher mercury concentrations (avg. of 5.7 mg/kg) is an area of approximately 1,350 square feet
- Goals are similar to the 2004 and 2011 remediation
  - Average of 1.0 mg/kg, nothing over 2.0 mg/kg in cleanup area
- Cleanup approach
  - Conventional excavation
  - Depth of excavation would be to the sediment/sand interface (approximately 6 to 18 inches)
  - Roughly 50 cubic yards of material to be excavated



Optimization Plan

- Material is excavated
- Transported by dump truck on existing roads to drying beds
- Dried
- Loaded on to trucks
- Carted to approved disposal facility
- Collect confirmation samples every 100 square feet to ensure concentrations are less than 2.0 mg/kg
- Smooth and contour riverbed
- Allow vegetation to recover naturally



Optimization Plan – Path Forward

- Optimization plan submitted to regulators – Feb. 2016
- Address regulator feedback – conference call 3/8/16
- CAC Presentation – tonight
- Address CAC feedback
- Apply for equivalency permits
- Determine appropriate waste disposal facility
- Conduct cleanup – preferably under dry conditions
- Completion Report

Questions?