

Hudson River PCBs Site Dispute Resolution on GE's Draft Phase 1 Dredge Area Delineation

Presentation to CAG
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What is Dispute Resolution?

Dispute Resolution

- Agreed-upon process for resolving differences of opinion
- Commonly found in EPA Consent Orders
- Identifies timeframes and EPA decision-makers

August 2003 Consent Order for Remedial Design and Cost Recovery

- GE to notify EPA in writing within 14 days of receipt of EPA notice of disapproval or direction to modify report
- EPA and GE have 14 days (or longer if both agree) to reach agreement
- If no agreement, GE has 7 days to request final decision from EPA

EPA Final Decision

- Regional Administrator – Jane Kenny
 - GE contends would materially expand scope of work or areas to be dredged
- ERRD Director – George Pavlou
 - Other disputes

After EPA's Final Decision

- Consent Order requires GE to proceed in accordance with EPA's final decision
- Schedules adjusted to reflect and be consistent with EPA's final decision

***Dispute on Draft Phase 1 DAD and
Draft Phase 1 TAI***

Timeline

- March 25 - EPA comment letter
- April 15 - GE letter invoking DR on
30 issues
- May 14 - End of formal discussion period
- May 21 - GE letter requesting decision on
12 issues

3 of 12 Issues Resolved thru Further Discussions

- Role of the Interpolator
- Depth of Contamination
- Incomplete Cores

2 of 12 Issues Not Subject to Dispute

- EPA's time limits for GE to submit the revised Phase 1 DAD and Phase 1 TAI
- EPA's time limit for GE to submit the Phase 2 DAD

Final Decision on 7 Issues

- Jane Kenny letter of July 22, 2004
- Final decision on 7 issues & summary of basis for decision
- 9 technical appendices
- Total package is ~ 150 pages

7 Disputes for EPA Final Decision

1. Surface Sediment Criterion
2. Tri+ PCB Correction Factor
3. Use of Uncertainty in Data
4. 50,000 Square Feet
5. Collection of Co-located Cores
6. Further Probing
7. Requirements for Phase 1 Areas in Target Area Identification Report

Surface Sediment

Example: Griffin Island Area

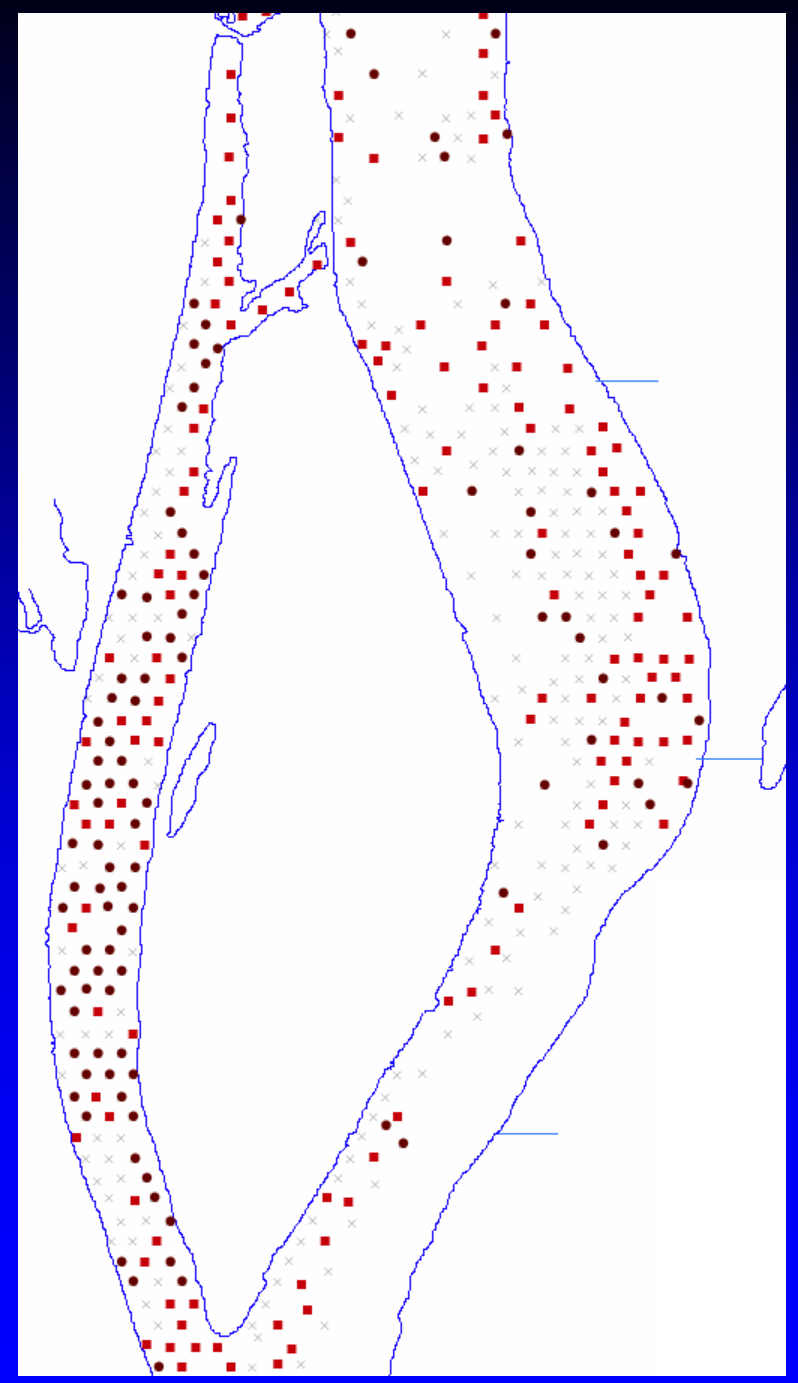
Locations in Exceedance of Removal Criteria
Based On:

- EPA Method for Surface Concentration
- MPA

× Sampled Locations Not in Exceedance of Removal Criteria

Note:
The EPA method for surface concentration is the maximum of any measured concentration falling within the top 12 inches and a calculated LWA for the top 12 inches. For cores with a segment straddling a depth of 12 inches, the 0-12 inch LWA concentration is calculated in accordance with the method described in Appendix A.

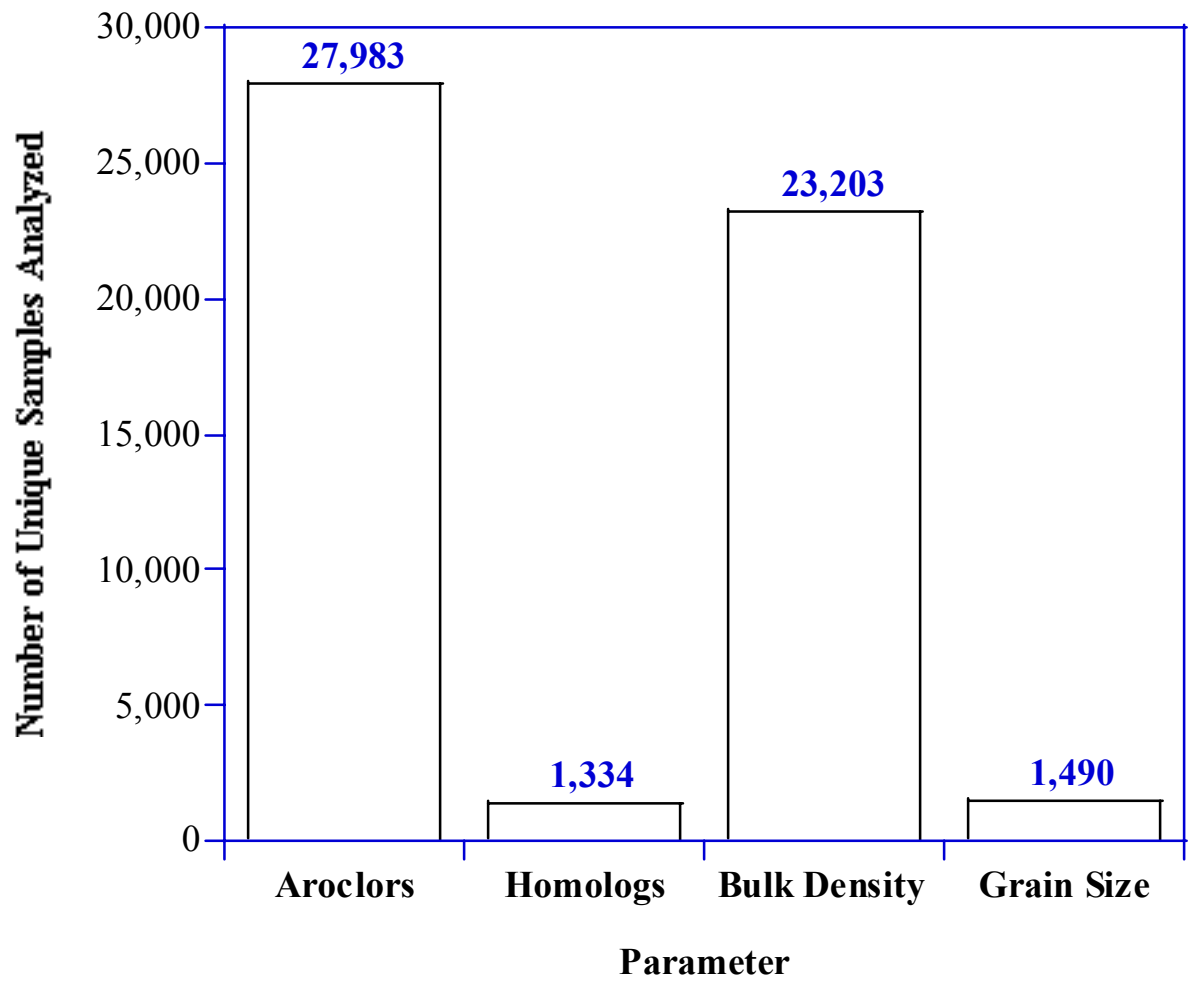
250 0 250 500 Feet



Tri+ Correction

- Sediment samples analyzed for PCB Aroclors by Method 8082
- Subset of samples analyzed for PCB homologs by Method 680
- Paired data used to develop equation that converts Aroclor data to Tri+ PCBs

Number of Samples Analyzed



Tri+ Correction – cont'd

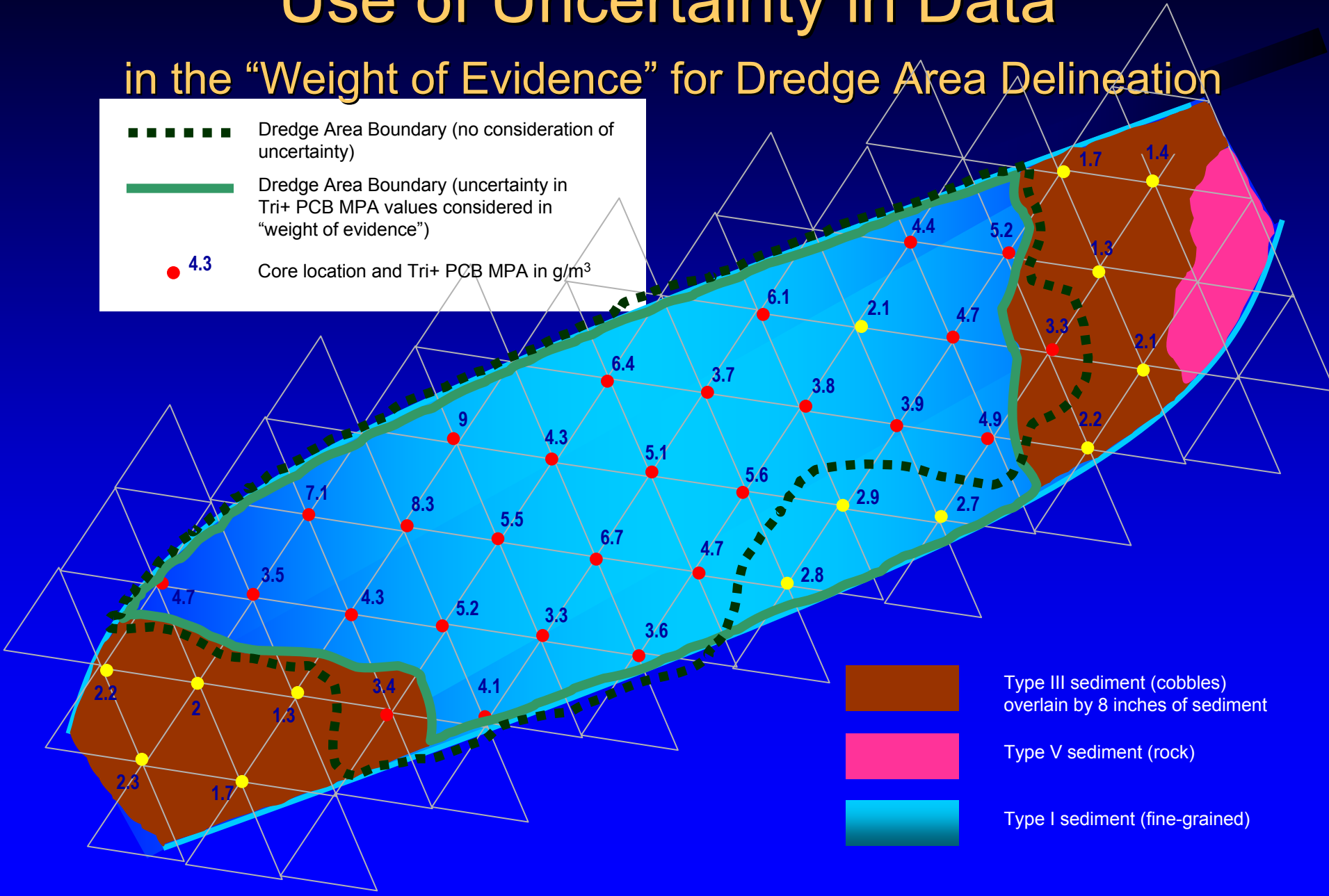
- M680 data low compared to M8082 data
- Equation also must account for relative low bias
- EPA equation is

$$\text{Tri+ PCB (ppm)} = 0.03 \times A1221 + 1.16 \times (A1242 + A1254)$$

Use of Uncertainty in Data

in the "Weight of Evidence" for Dredge Area Delineation

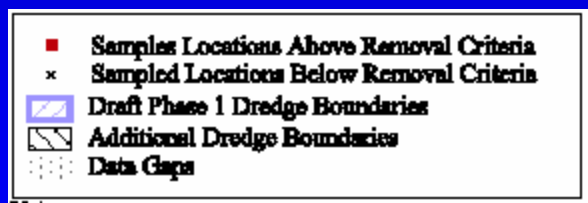
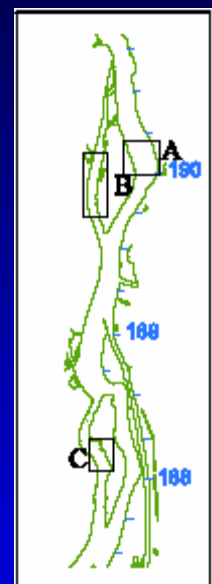
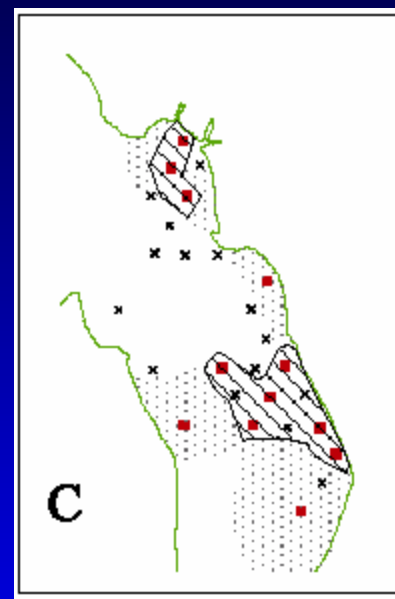
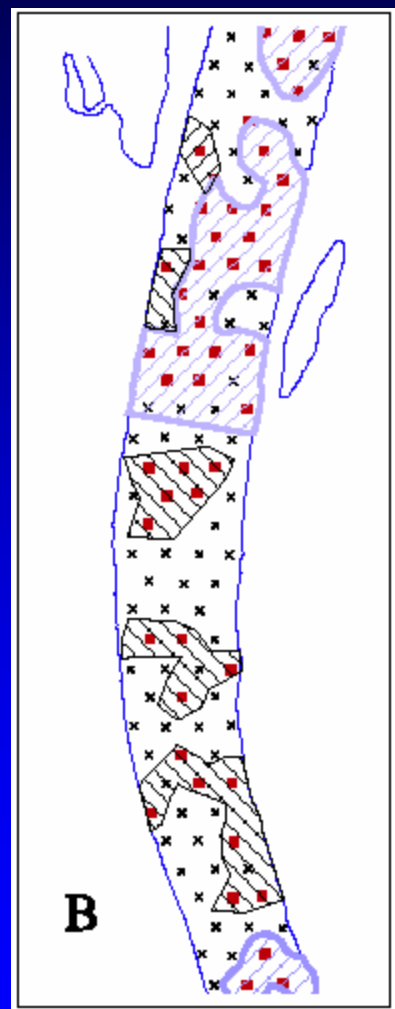
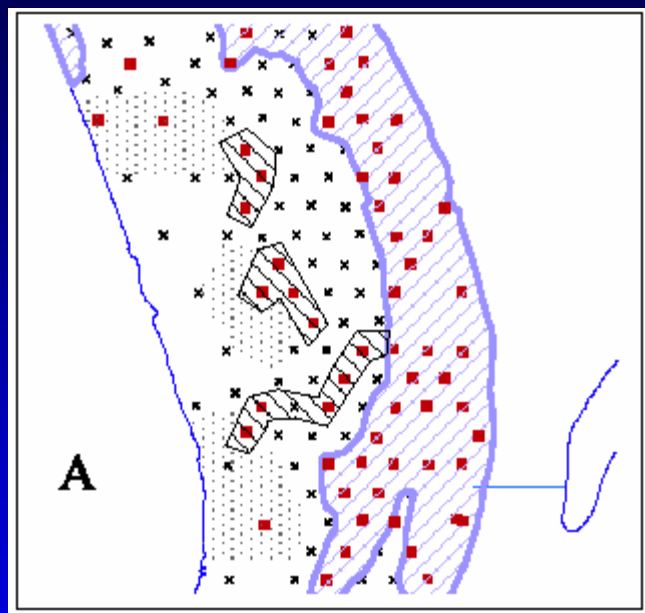
- - - - - Dredge Area Boundary (no consideration of uncertainty)
- Dredge Area Boundary (uncertainty in Tri+ PCB MPA values considered in "weight of evidence")
- 4.3 Core location and Tri+ PCB MPA in g/m^3



- Type III sediment (cobble) overlain by 8 inches of sediment
- Type V sediment (rock)
- Type I sediment (fine-grained)

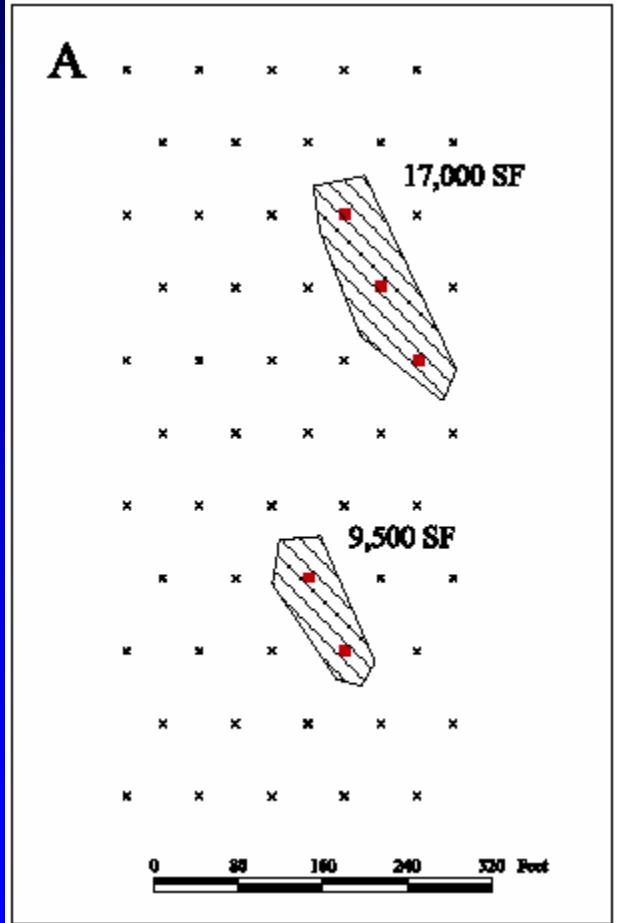
50,000 Square Feet

Areas That Should Be Included in the DAD

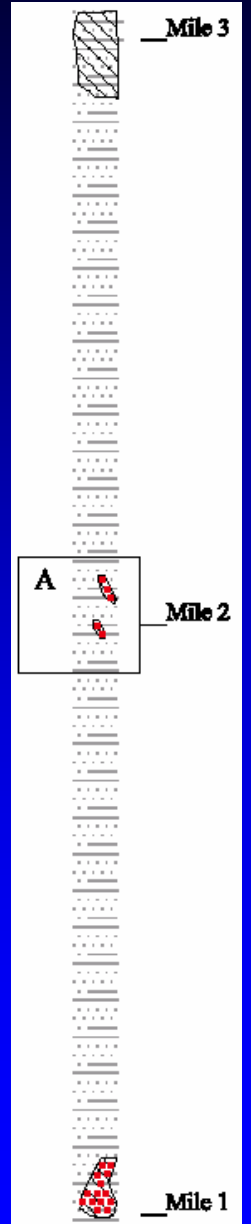


50,000 Square Feet

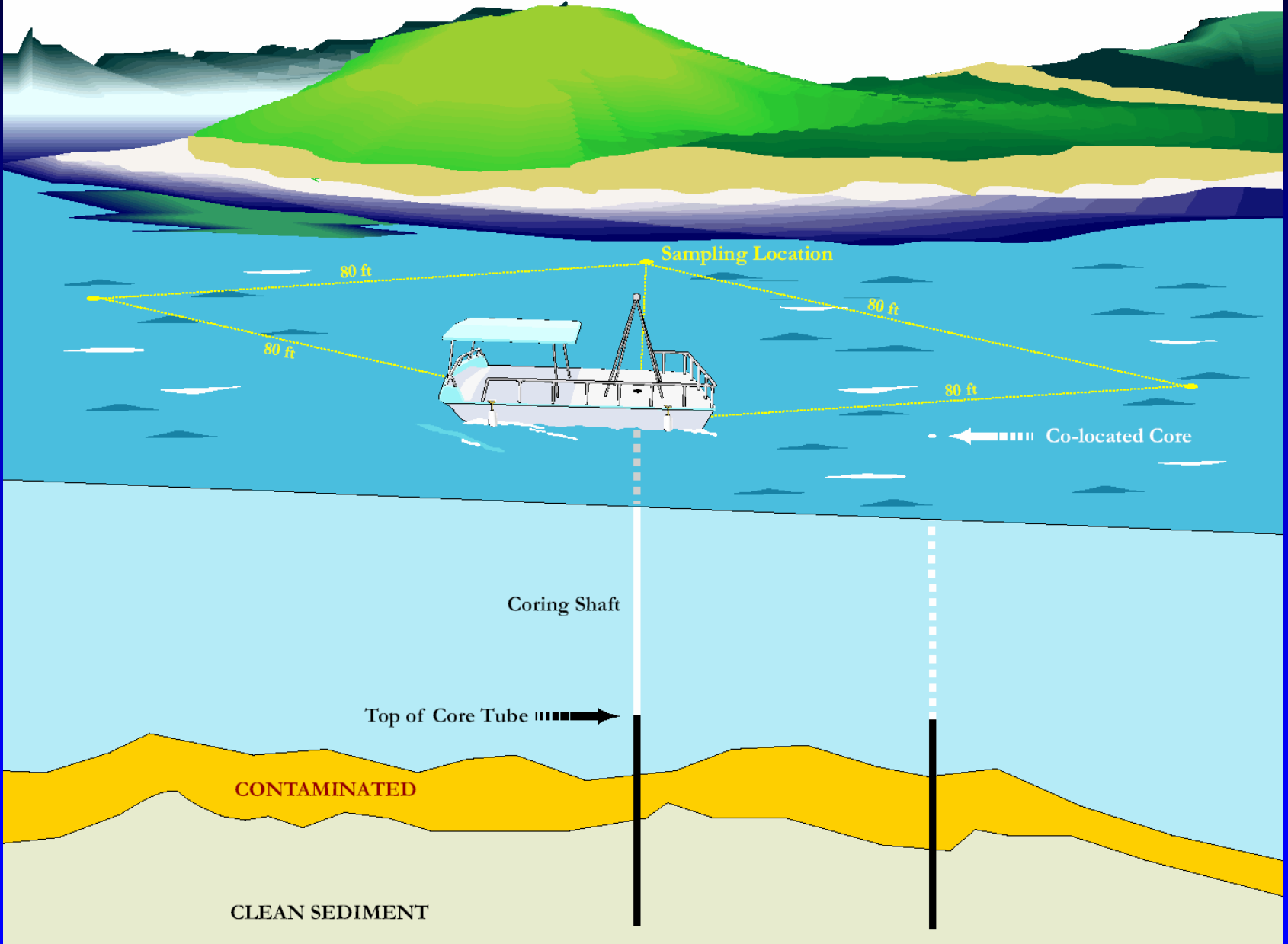
Areas That Should Not Be Included in the DAD



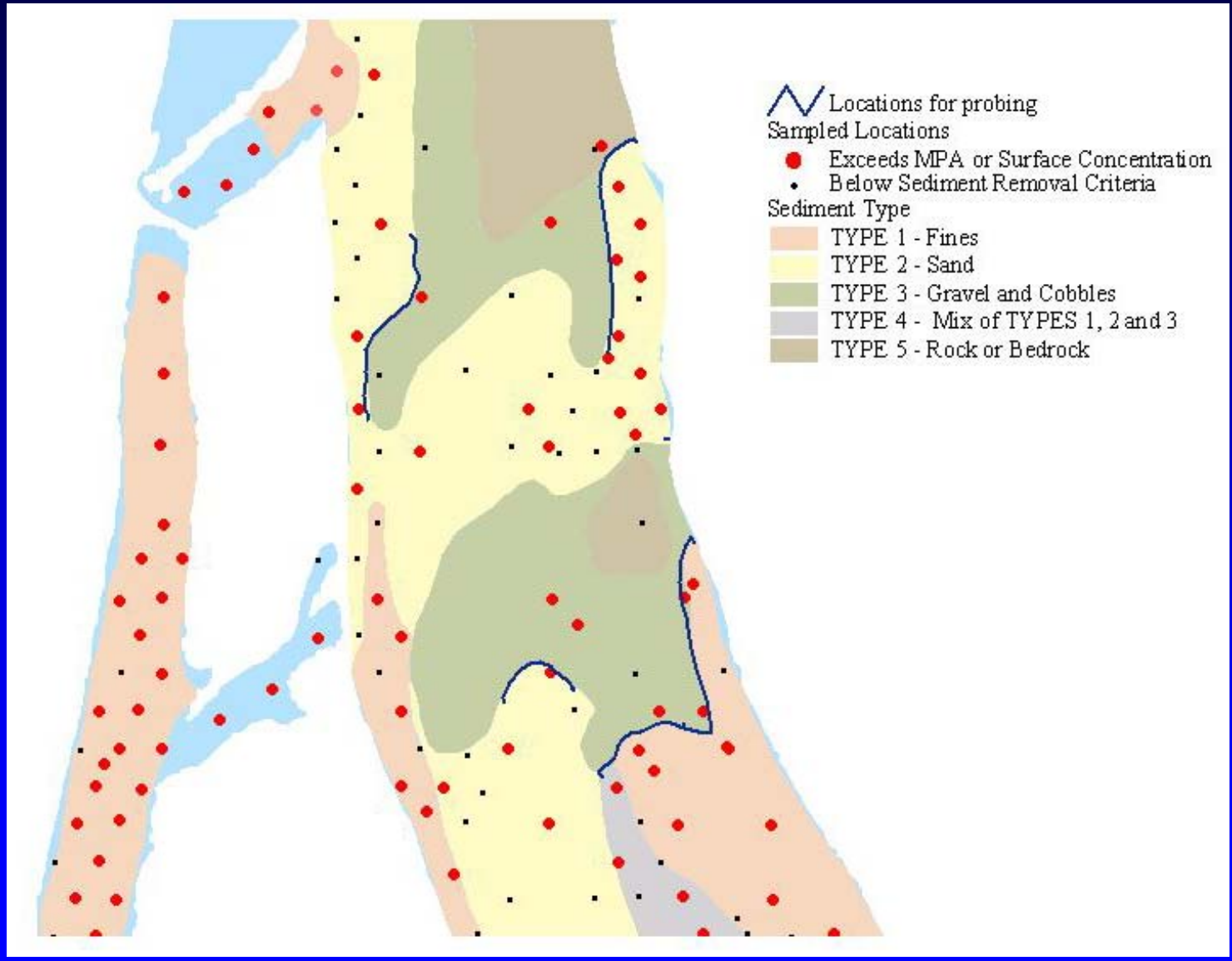
- Sampled Locations Above Removal Criteria
- × Sampled Locations Below Removal Criteria
- ▨ Potential Dredge Boundaries



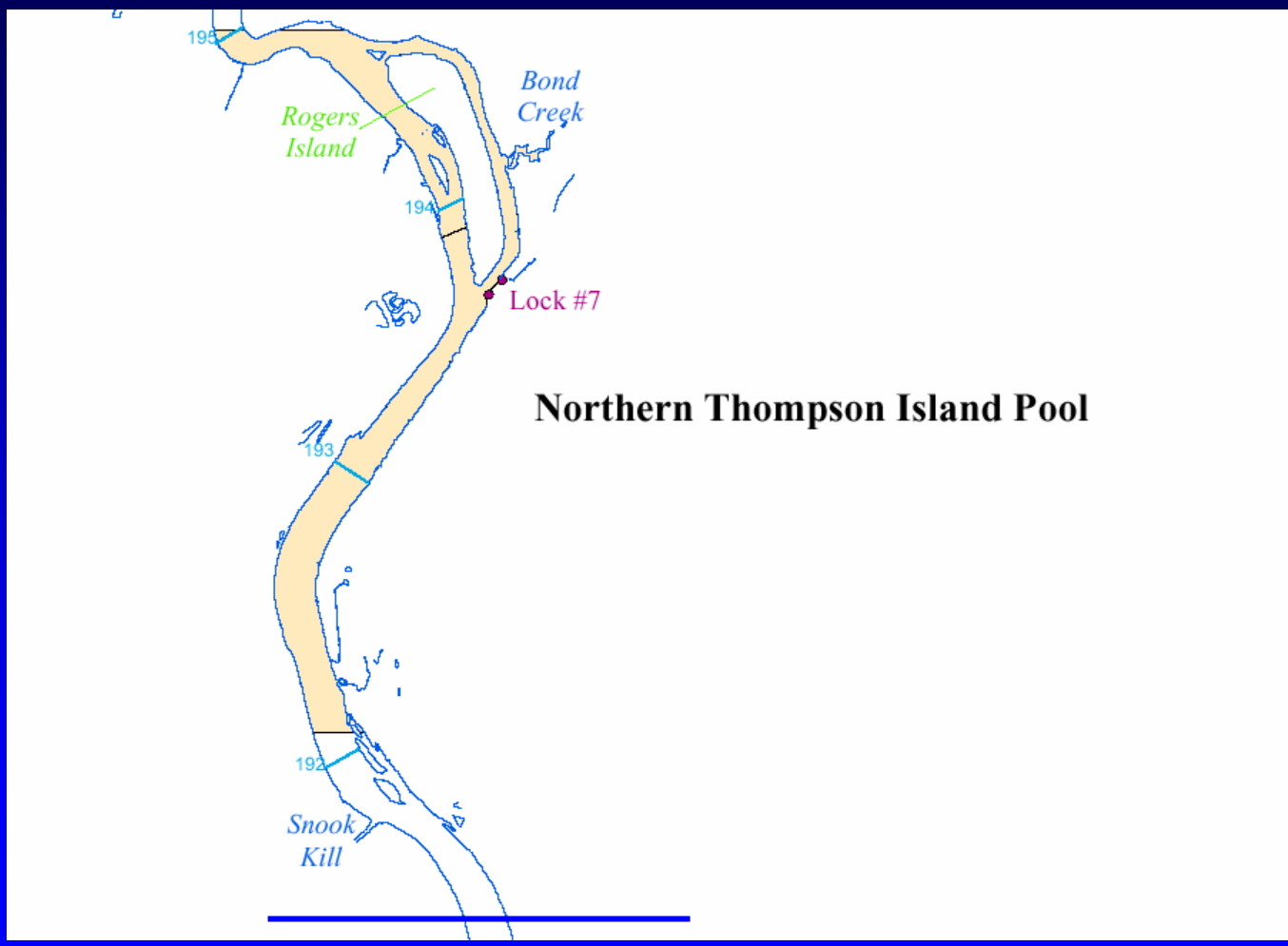
Co-located Cores



Further Probing



Target Area Identification Report



Target Area Identification Report



Target Area Identification Report

