



Operable Unit V Peconic River FY 2001 Year End Review

A photograph of a marshy area with water, reeds, and trees in the background. The text is overlaid on this image.

**Lloyd Nelson
Project Manager
Brookhaven Area Office**



Project Description & Background

- ◆ This project involves the assessment and cleanup of the Peconic River
- ◆ Keen public interest in Cleanup
 - Proposed Cleanup Plan withdrawn July 2000
 - Opposition to mass excavation and dredging

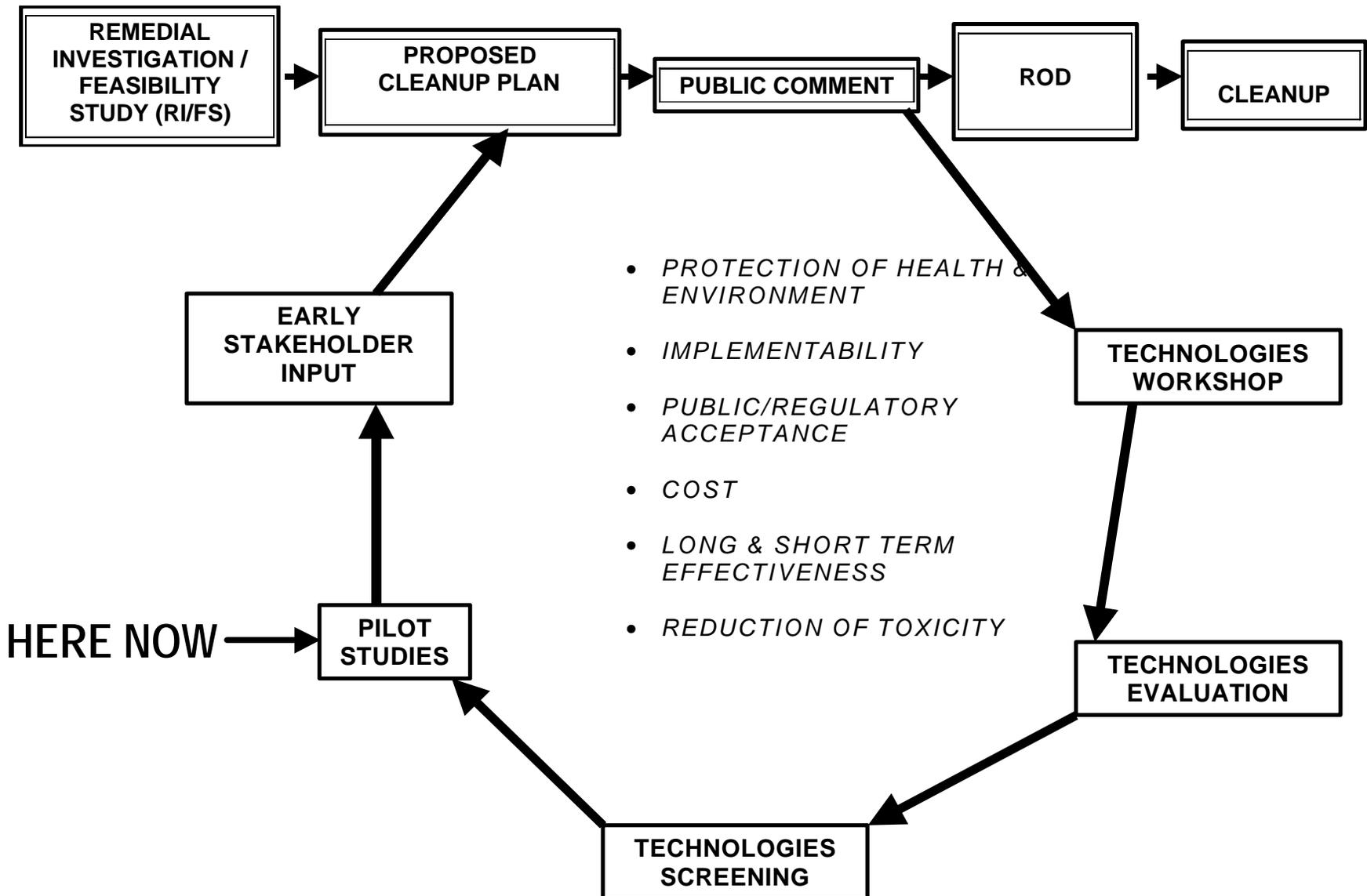


OUV - Peconic River FY 2001 Accomplishments

- ◆ Held Cleanup Technology Workshop (12/00)
 - Further evaluation of alternative sediment cleanup technologies should be conducted
 - Pilot programs also supported by CAC, Suffolk County COC, etc.
 - ▼ Electrochemical
 - ▼ Phytoremediation and phytostabilization
 - ▼ Vacuum/Extraction “Guzzler”
- ◆ Fact Sheets and FS Addendum prepared
- ◆ New Path Forward developed with DOE and stakeholders

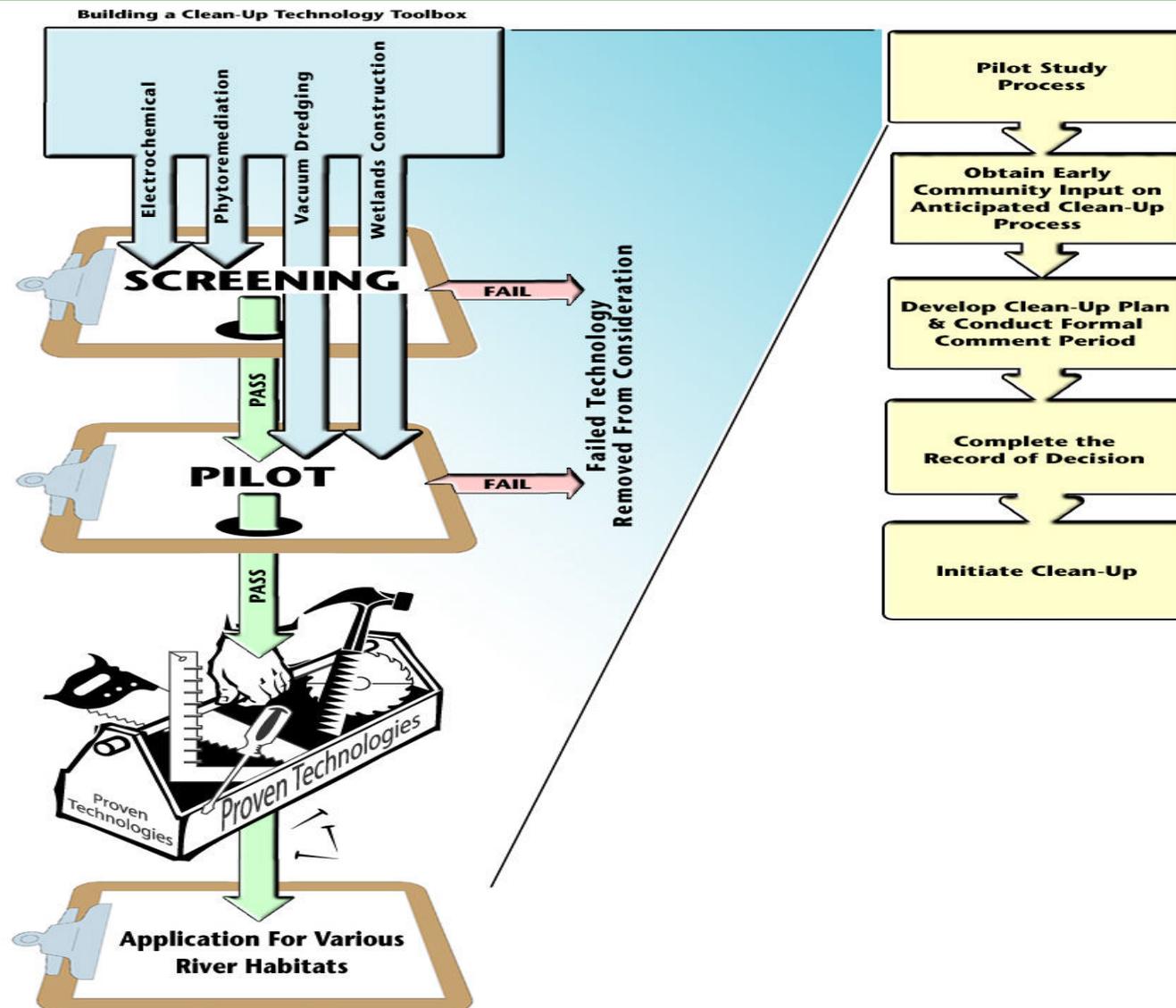


OU V - Peconic River CERCLA Process





OU V - Peconic River Path Forward





OUV – Peconic River Decision Path Forward

- ◆ Summer 01 – Plan developed with DOE and regulators
- ◆ Sept 01- Collected additional data to fill gaps
- ◆ Oct 01 – Outreach Conducted Roundtables, BER, CAC, ATSDR, etc.
- ◆ Nov 01 – New Schedule Agreed upon w/ EPA/State
- ◆ Nov 01 - Pilot study work plans developed
- ◆ Dec 01 – Meet with EPA/State/County
 - Present New Data
 - Risk Assessment Approach
 - Preliminary Cleanup Goal Development



OUV – Peconic River Decision Path Forward (cont.)

- ◆ Dec 01 – Form Peconic River Working Group
- ◆ Winter/Spring 02 – Conduct Pilot Studies
- ◆ Spring 02 – Issue Risk Assessment & PRG Report
- ◆ Spring 02 – Issue Pilot Study Reports
- ◆ Aug 02 – Draft FS & Proposed Plan to EPA and State (IAG milestone)
- ◆ Fall 02 – Public comment
- ◆ Jan 03 – Draft ROD to EPA and State (IAG milestone)



Cleanup Goal Decision Process





Cleanup Goal Decision Process

- ◆ Start with Cleanup Objectives:
 - Protect Human Health
 - ▼ Contaminated Groundwater
 - ▼ Contaminated Sediment
 - ▼ Contaminated Fish
 - Protect the Ecology:
 - ▼ Benthic Invertebrates
 - ▼ Wildlife due to Bioaccumulation in Fish
- ◆ Develop Preliminary Remediation Goals (PRGs) based on Cleanup Objectives and Risk Assessment Scenario's



Cleanup Goal Decision Process

- ◆ Develop alternatives based on PRGs, risk levels and technologies:
 - Institutional Controls and Monitoring for low risks
 - Active Cleanup for high risks (e.g. Vacuum Guzzler)
 - Risk can be Managed
- ◆ Evaluate against CERCLA Criteria in FS and Proposed Cleanup Plan
- ◆ Then Negotiate!
 - No set process
 - Complicated by off-site contamination in County Parkland & potential Natural Resource Damages



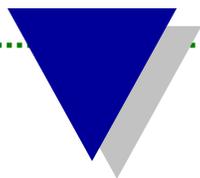


OUV - Peconic River Issues

- ◆ Reaching agreement with internal and external stakeholders:
 - Risk Assessment
 - Cleanup Goals
 - Proposed Cleanup Plan
 - ROD
- ◆ FY 2003 funding proposed in President's Budget Delays BNL cleanup program



Chicago Operations Office



Background Slides

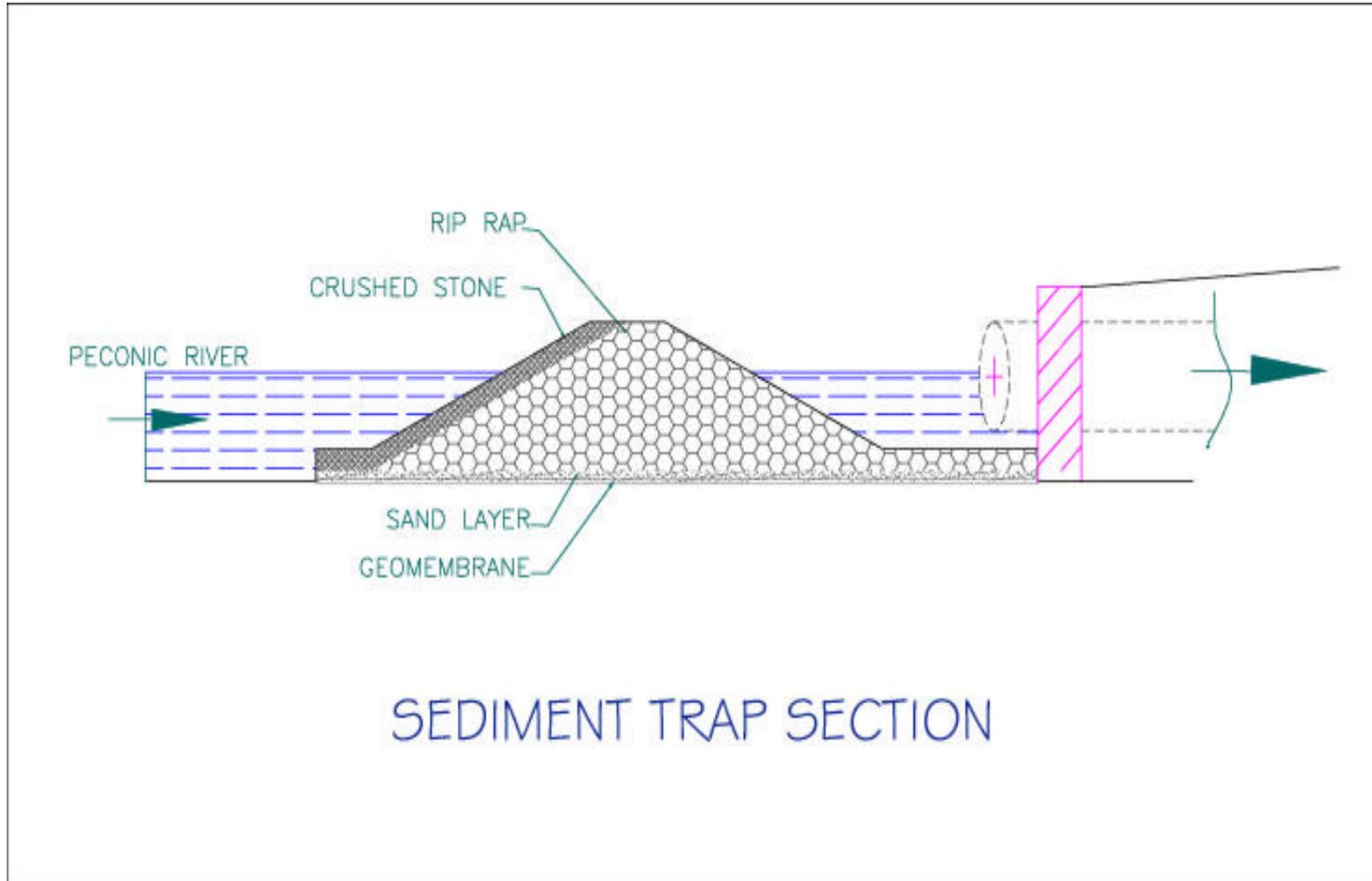


OU V - Peconic River Pilot Study Process

Remedial Alternative	Pilot, Test Demo Cost	Approximate Area (A)	Pilot, Test Demo Cost/ft. ²
Vacuum Guzzling	\$236,000	0.4	\$14
Electrochemical	\$620,000	0.04	\$360
Phytoremediation	Not yet successful for all Peconic contaminants		
Sediment Removal and Wetland Re-construction	\$336,443	1	\$8

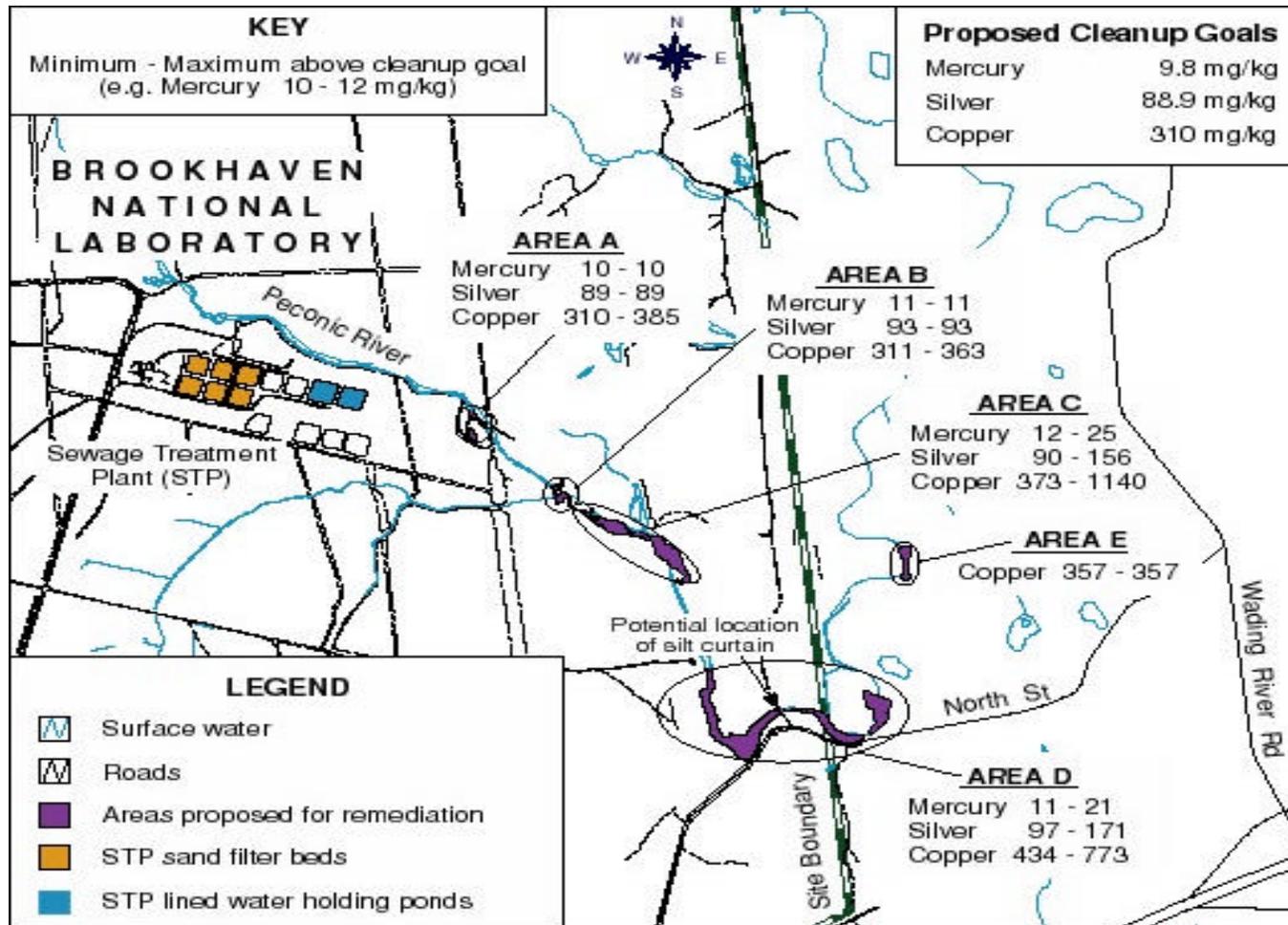


Sediment Trap





OUV – Peconic River Last Plan and Data





OU V - Peconic River

Pilot Area A – Vacuum Guzzler





OU V - Peconic River

Pilot Area B - Electrochemical





OU V - Peconic River

Pilot Area C - Phytoremediation





OU V - Peconic River Pilot Area D Wetland Reconstruction

