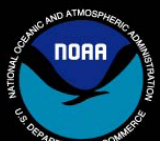
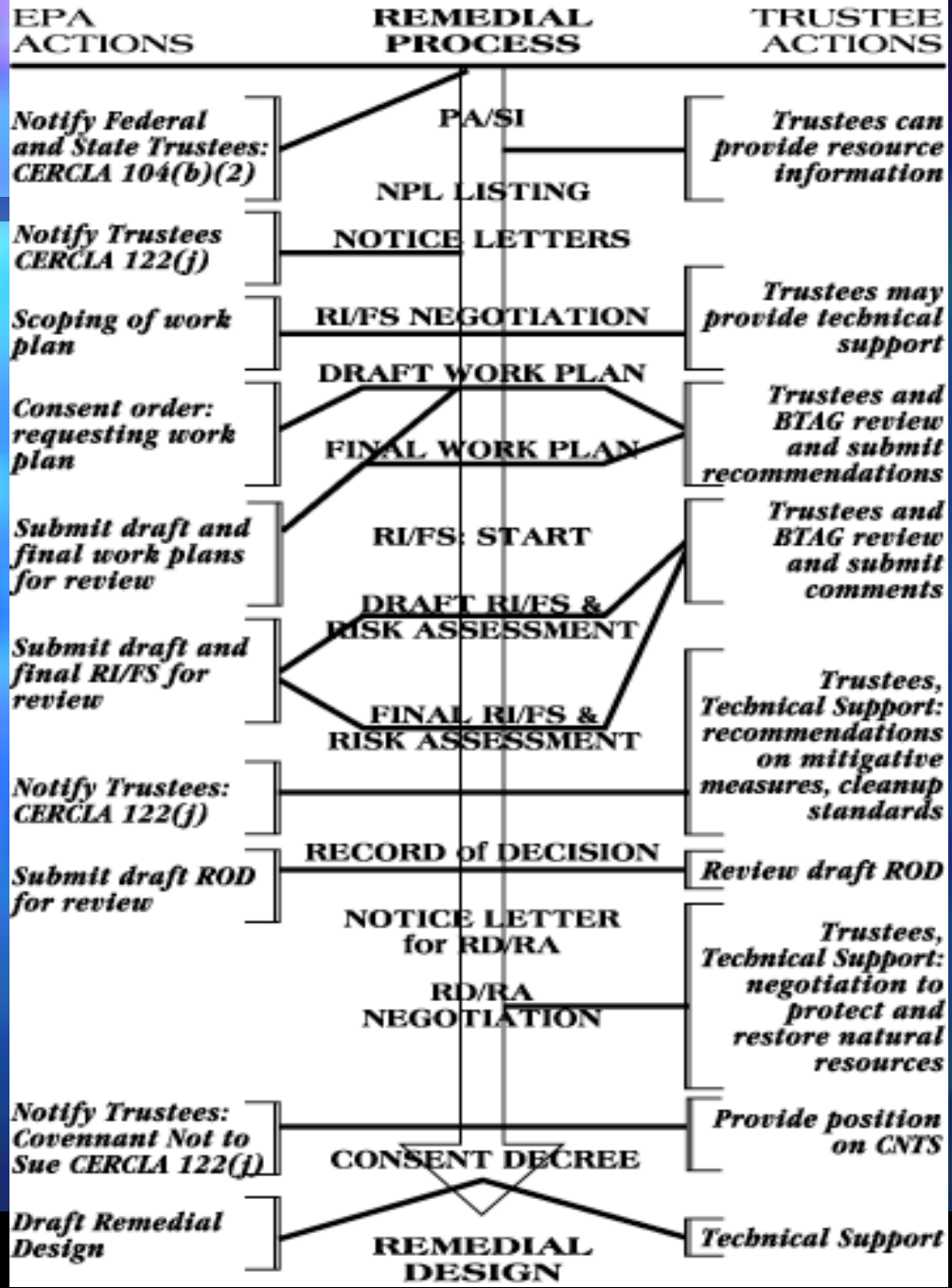


Integrating Sediment Remediation and Tidal Wetland Restoration

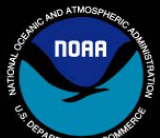
Mid Atlantic Joint Assessment Team Meeting
April 17-18, 2008
John Heinz NWR, Philadelphia, PA





Advantages

- Early integration of assessment into remedial process
 - Cost-effective data gathering
 - Advice on NRD liability associated with various remedial options
- Potential for integration of restoration and remediation on-site
 - Economies of scale/cost-effectiveness



noaa

Challenges

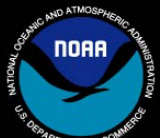
- Perception of slowing down the remedial process – “The ROD has not even been developed and this will take forever!”
- Individual and Agency Responsibilities – “That’s not my job!”
- Perception of added complexity – “This is too confusing – the clean up is hard enough!”



noaa

Challenges continued:

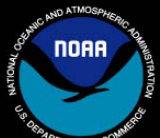
- Perception of Process: “I’ll deal with that when the time comes.”
- Willingness to address NRDA: “I’m not sure if there will be an NRDA here and I’m hoping there won’t.”



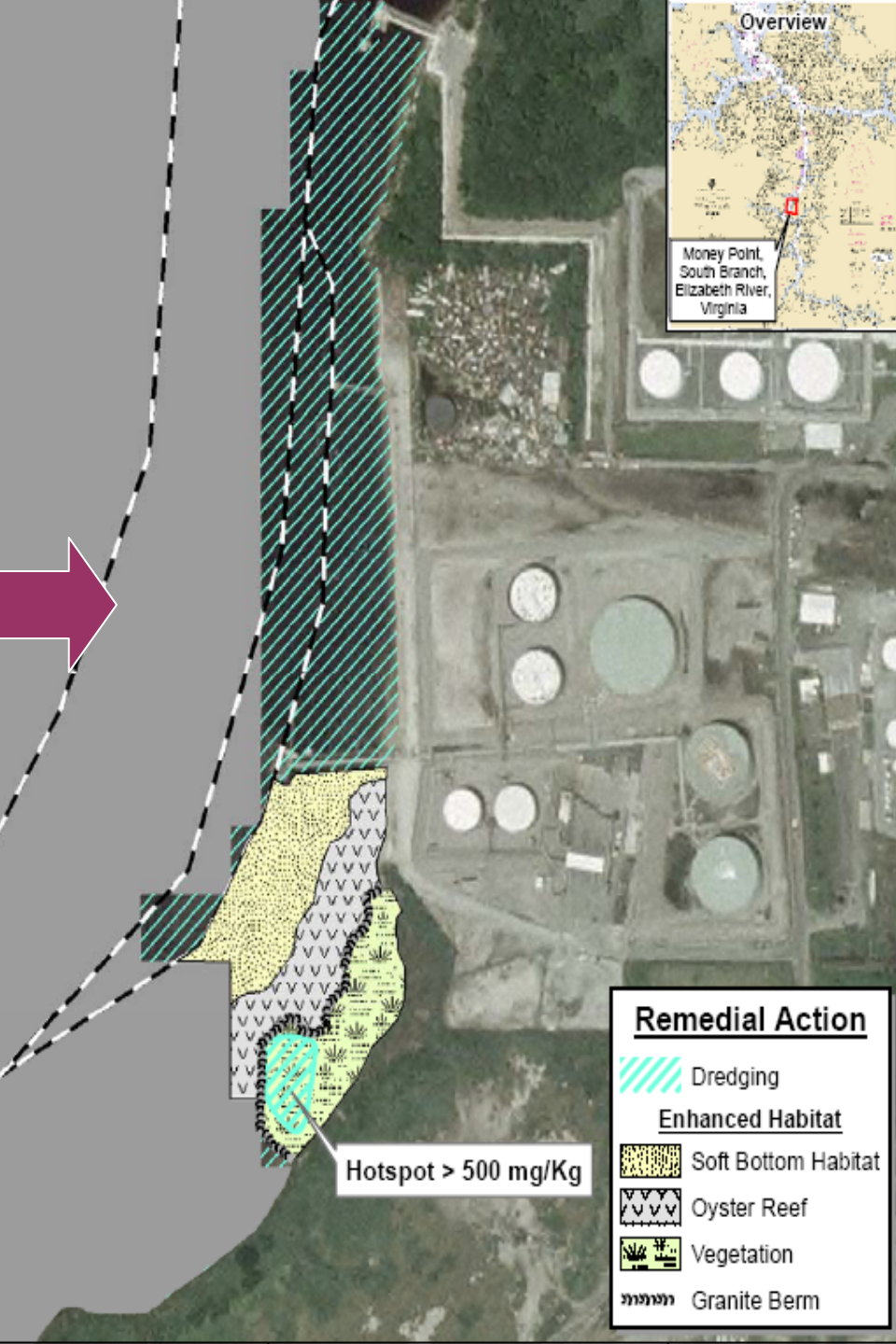
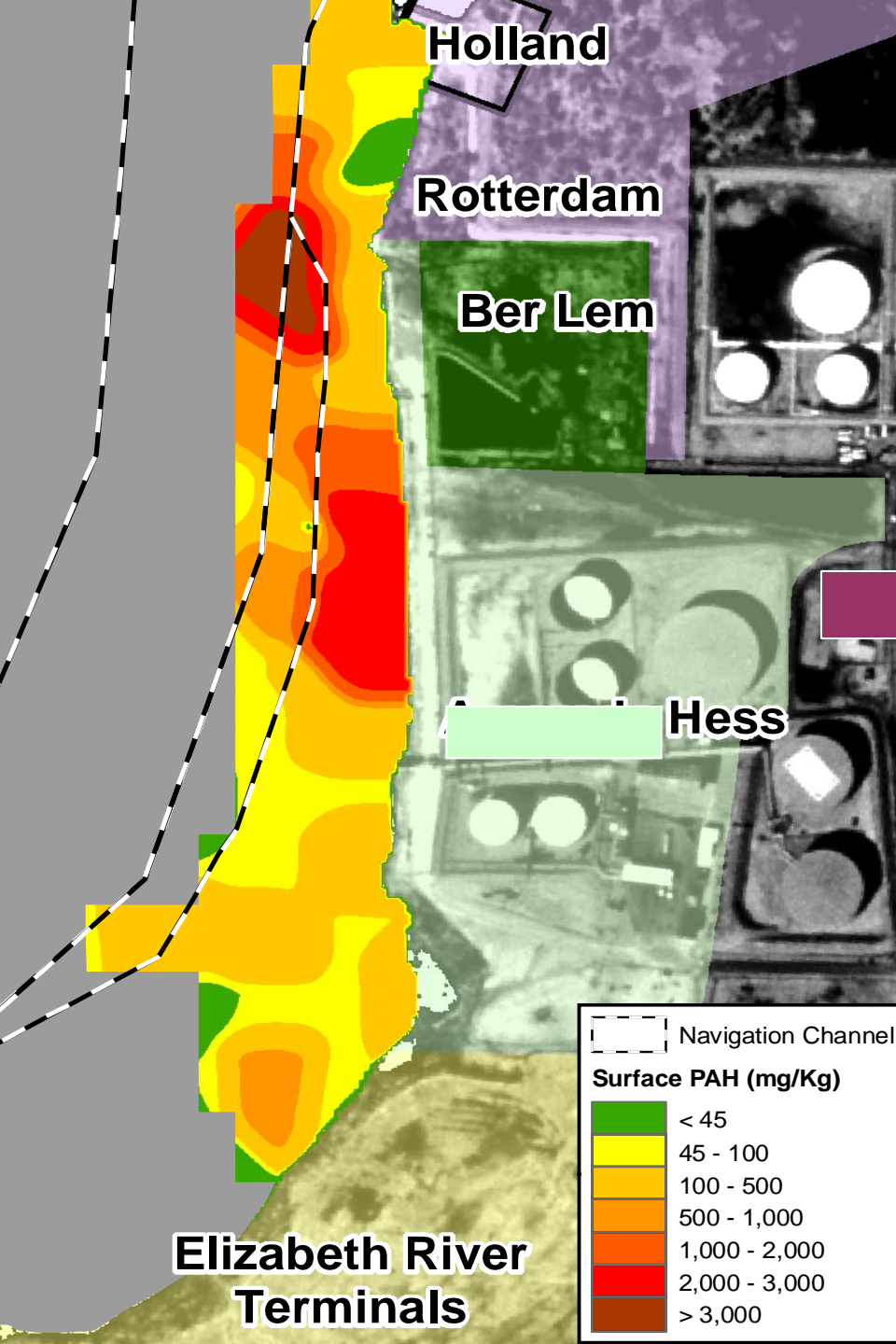
noaa

General Project Examples

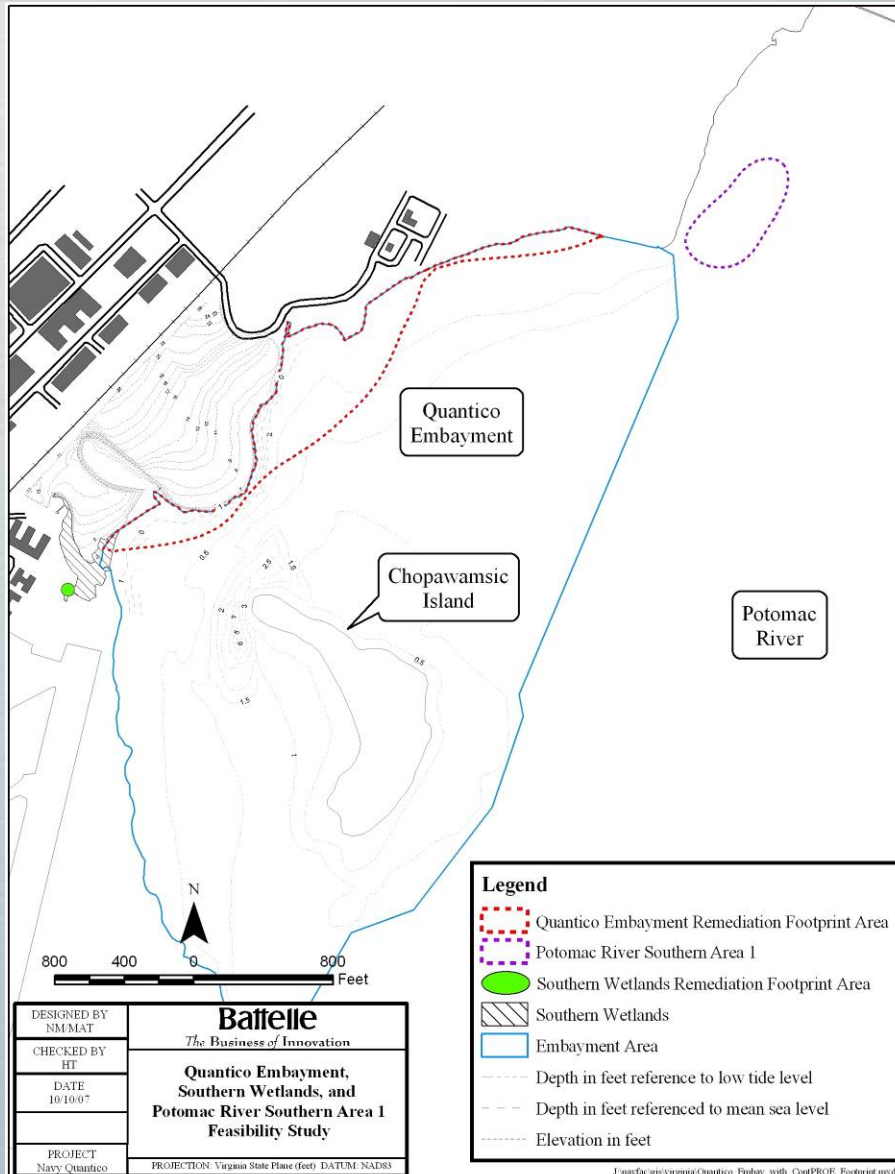
- Shoreline remediation, stabilization, and fringe tidal wetland restoration
- Sediment excavation, channel restoration, invasive species management



noaa



Remediation Areas and Proposed Actions



Site 96 -
Excavate/dredge 0.1
acre area (~160 CY);
return to grade

Site 99 - 15.2 acre
Habitat Enhancement
Cap (HEC);
excavate/dredge in STP
storm culvert area
(~140 CY); construct
wetlands

Site 101 - Monitored
Natural Recovery (MNR)
of 5 acres in Potomac
River



Issues for Discussion:

- Residual contaminant levels and ability to eliminate or reduce exposure
- Habitat Conversions
- Design and Permitting
- Monitoring/Maintenance

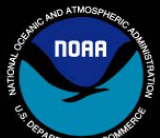


noaa



Items for Discussion

- Enhancement versus creation
 - What are the ecological services being restored and how do you scale them?
- Residual contamination and potential sources
- Excavation and backfilling requirements
- Expertise and Technical Guidelines
- Monitoring/Maintenance



noaa