PROJECT OVERVIEW REPORT

1. Center Identifying Number
253-RU2311

2. Project Title
Evaluation of Erosion Potential of Estuarine Sediments in NY/NJ Harbor Using an Advanced Ex-Situ Erosion Testing Method

3. Principal Investigator
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5. Project Description
Over 55 million cubic yards of sediment will be removed to create the new channels in the Port of NY/NJ. These new channels must be maintained through periodic dredging to remove accumulated silt. Managers need to predict the amount of sedimentation that will occur in order to plan for the expense. Understanding and predicting sediment transport has gone from curious scientific trivia to critical economic parameter. The 2008 Regional Sediment Management Plan developed by the Harbor Estuary Program calls for active sediment remediation to improve the ecosystem and to reduce costs of transportation infrastructure maintenance. This action plan will require that those contaminated sediments that are most mobile, or have the greatest potential to be mobilized are identified. In addition, remedial measures need to be identified that are appropriate for reduction of the risks posed by these sediments. Developing a realistic framework for hydrodynamic (sediment transport) models are critical for addressing some of the pressing current and future issues.

6. Dates and Budget
Start date: 4/01/2010
End date: 8/31/2011
Total Dollars: $250,000

7. Keywords
Port, sediment remediation, dredging, contamination, remediation, sediment transport