Sedimentological and Geophysical Survey of the Upper Delaware Estuary

Photo of Contact
C-11B

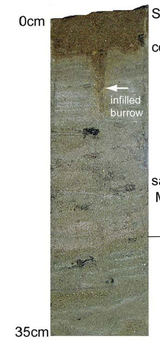

Photo of Contact
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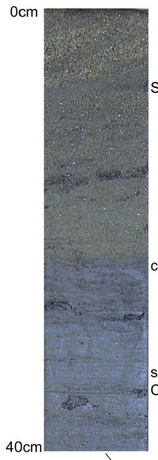


PENNSYLVANIA

DELAWARE

NEW JERSEY

Philadelphia

Camden

Wilmington

Zone 2

Zone 3

Zone 5

TALCONY-PALMYRA BRIDGE

BETSY ROSS BRIDGE

BEN FRANKLIN BRIDGE

WALT WHITMAN BRIDGE

COMM. BARRY BRIDGE

DELAWARE MEMORIAL BRIDGE

BURLINGTON-BRISTOL BRIDGE

Neshaminy Cr.

Byberry Cr.

Pennypack Cr.

Rancocas Creek

Swede Run

Frankford Cr.

Pompeston Cr.

Pennsauken Cre

Schuylkill River

Cooper River

Newton Cr.

Cobbs Cr.

Crum Creek

Darby Creek

Chester Cr.

Ridley Cr.

Woodbury Cr.

Clonmell Cr.

Mantua Cr.

Big Timber Creek

Marcus Hook Cr.

Naaman Cr.

Old Canal (Moss Br.)

Raccoon Creek

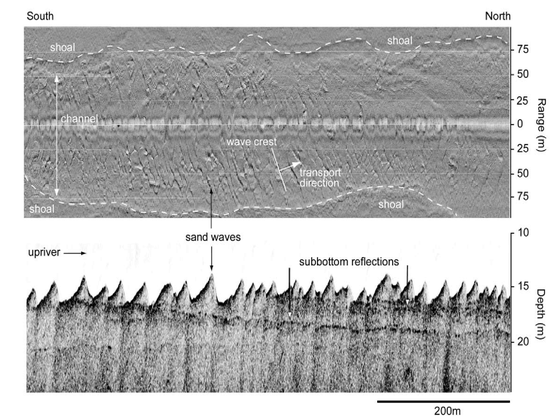
Oldmans Creek

Turkey Run

Christina River

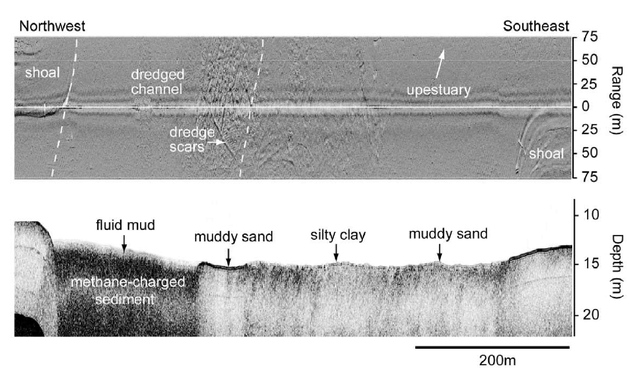
Salem River

Chirp and Side Scan Radar of bottom sediments near Tacony-Palmyra Bridge
Sand Waves indicative of Bedload Transport



34. Sonar Line 103 (partial). Shown are the chirp profile (bottom) and corresponding sidescan image (see Figure 14 for

Chirp and Side Scan Radar of
Bottom Sediments near Marcus Hook, PA
Fluidized Mud, Depositional Area



Sediment Description

Category	Backscatter Intensity and Continuity	Dominant Sediment Type	Bottom Morphology and Bedforms
1) Fine-grained deposition	Very weak to weak, continuous	Mud and fluid mud	Flat, no bedforms
2) Coarse-grained bedload	Moderate to strong, continuous	Moderately well-sorted sand and gravel	Wavy, well-developed fields of ripple and sand
3) Fine-grained reworking	Weak to moderate, discontinuous	Mud	Flat to wavy, sediment furrows
4) Mixed-grained reworking	Moderate to strong, discontinuous	Mixed gravel, sand, and mud	Flat to wavy, sediment ribbons and trails
5) Coarse-grained reworking	Strong, discontinuous	Poorly sorted sand and gravel	Flat to wavy, sediment ribbons
6) Non-deposition	Strong to very weak, discontinuous	Cobble and bedrock	wavy

N

0 5 10
Miles

Legend

- COE Sediment
- DRBC Sediment
- NOAA Sediment
- Bedload
- Fine Deposition
- Non Deposition
- Reworking-Fine
- Reworking-Course/Medium
- River Mile
- Bridges
- DRB Water Quality Zone

Coastal 2003 Sites

- A
- B
- C

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