Examples of Shallow Draft Dredging Activities in the New York District

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Currituck commands double sunset at Shrewsbury River

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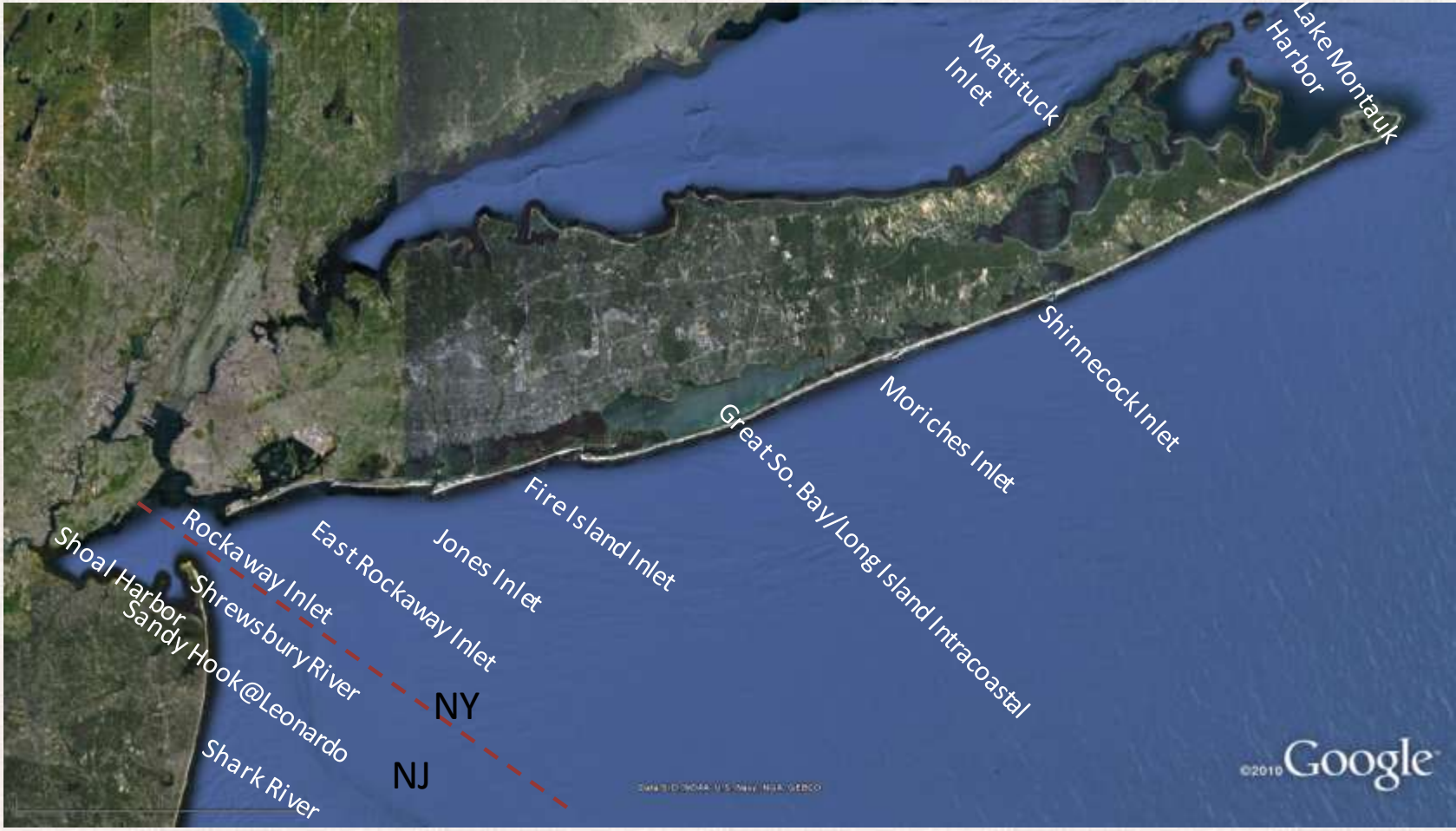
LONG ISLAND AND NEW JERSEY
Var. Coastal Projects in NEW YORK DISTRICT



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Projects Utilizing CURRITUCK
NEW YORK DISTRICT

- SHARK RIVER, NJ
- SHREWSBURY RIVER, NJ

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SHARK RIVER, NEW JERSEY

VOLUME:	25,000 CY
DEPTH:	18 ft. entrance channel/12 ft depth between jetties (150' wide at entr)
SEDIMENT TYPE:	sand
LAST DREDGED: DREDGING CYCLE:	2011 Annual
EQUIPMENT:	Hopper CURRITUCK
MATERIAL PLACEMENT LOCATION:	Near-shore north of Inlet
ENVIRONMENTAL WINDOWS:	1 January - 30 September but NJ permits dredging in Spring
COORDINATION/ CONSTRUCTION CHALLENGES:	Pump-out capability allows for preferred (RSM) sand placement on beach w/greater efficiency with larger bin size.

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SHREWSBURY RIVER, NEW JERSEY

VOLUME:	55,000 CY total
DEPTH:	12 ft entr; 6' No., 9' So. (300" w ide entr; 150' N&S)
SEDIMENT TYPE:	Sand
LAST DREDGED: DREDGING CYCLE:	2009-2011 10 Years
EQUIPMENT:	Cutter-head/Hopper Dredge CURRITUCK
MATERIAL PLACEMENT LOCATION:	Beach/Intertidal
ENVIRONMENTAL ND WINDOWS:	1 January - 30 September
COORDINATION/ CONSTRUCTION CHALLENGES:	Pump-out capability w ould enable significantly improved RSM for sand placement. Approx. 60,000 CYS of silt further inland. Turnaround challenges.

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Projects with potential for use of Government Dredge w/Pump Out

- SHARK RIVER, NJ
- SHREWSBURY RIVER, NJ
- SHOAL HARBOR / COMPTON CREEK, NJ
- SANDY HOOK AT LEONARDO, NJ
- MATTITUCK HARBOR, NY
- MORICHES INLET, NY
- SHINNECOCK INLET, NY
- FIRE ISLAND INLET , NY
- JONES INLET, NY
- EAST ROCKAWAY INLET, NY
- BROWNS CREEK, NY
- LONG ISLAND INTRACOASTAL, NY
- GREAT SOUTH BAY, NY
- LAKE MONTAUK HARBOR, NY

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Lake Montauk Harbor, New York

VOLUME:	12,000 CY
DEPTH:	12 ft (150' w ide)
SEDIMENT TYPE:	Sand
LAST DREDGED: DREDGING CYCLE:	2011 4/5 Years
EQUIPMENT	Pipeline Dredge
MATERIAL PLACEMENT LOCATION:	Beach
ENVIRONMENTAL ND WINDOWS:	15 January - 30 September
COORDINA TION/ CONSTRUCTION CHALLENGES:	Cutterhead pipeline running across the inlet can cause problems for vessels using the channel. Winter w eather conditions at Montauk can be fierce. Pump-out preferred for greater efficiency and improved RSM

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Long Island Intracoastal Waterway, New York

VOLUME:	25,000 CY
DEPTH:	6 ft (100' wide)
SEDIMENT TYPE:	Sand
LAST DREDGED: DREDGING CYCLE:	2011 5 years
EQUIPMENT:	Small cutterhead
MATERIAL PLACEMENT LOCATION:	Upland at Cupsogue Beach or East Inlet Is.
ENVIRONMENTAL WINDOWS:	15 January - 30 September
COORDINATION/ CONSTRUCTION CHALLENGES:	Gov't dredge w/pump-out could provide cost savings. May not be faster depending on placement locations. Maneuverability/turn-around challenges.

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Shinnecock Inlet, New York

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VOLUME:	500,000 CY
DEPTH:	10 ft (200' wide)
SEDIMENT TYPE:	Sand
LAST DREDGED: DREDGING CYCLE:	2010 5 years
EQUIPMENT:	Cutterhead Dredge
MATERIAL PLACEMENT LOCATION:	Tiana Beach
ENVIRONMENTAL ND WINDOWS:	15 January– 30 September
COORDINATION/ CONSTRUCTION CHALLENGES:	Pumping distance 1.5 miles consistent with RSM principles. Could require full dredging window. Back-shoaling a concern for long dredge periods.

Jones Inlet, New York

VOLUME:	600,000 CY
DEPTH:	12 ft (250' wide)
SEDIMENT TYPE:	Sand
LAST DREDGED: DREDGING CYCLE:	2008 5-10 years
EQUIPMENT:	Hydraulic Cutter-head Dredge
MATERIAL PLACEMENT LOCATION:	Beach
ENVIRONMENTAL WINDOWS:	1 April – 30 September
COORDINATION/ CONSTRUCTION CHALLENGES:	Point Lookout placement site complies with federal standard but is not RSM recommended location. Who pays for the incremental distance west? **Revisit FEDERAL STANDARD.** May need to dredge using private contractor to prepare for future access by govt dredge

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Great South Bay & Patchogue River Reach, New York

VOLUME:	120,000 CY/60,000 CY
DEPTH:	10 ft/8 ft (200' wide)
SEDIMENT TYPE:	Sand in GSB Silt in Patchogue
LAST DREDGED: DREDGING CYCLE:	1992 GSB/2007 Patchogue 10-12 years
EQUIPMENT:	Hopper Pipeline/Cutterhead
MATERIAL PLACEMENT LOCATION:	Marsh Creation/Beach
ENVIRONMENTAL ND WINDOWS:	16 December – 15 September
COORDINATION/ CONSTRUCTION CHALLENGES:	Placement locations still an issue for NYSDEC. Maneuverability issues. Near-shore placement NOT permitted by NYS. Pump-out required.

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Browns Creek, New York

VOLUME:	36,000
DEPTH:	6 feet (100' wide)
SEDIMENT TYPE:	Silt
LAST DREDGED: DREDGING CYCLE:	2004 10 years
EQUIPMENT:	Hydraulic
MATERIAL PLACEMENT LOCATION:	Project Adjacent Disposal Facility
ENVIRONMENTAL WINDOWS:	1 June – 30 September
COORDINATION/ CONSTRUCTION CHALLENGES:	Status of prior cycle material in adjacent placement location / available volume capacity for next cycle? Maneuverability of dredge in channel. Some recreational vessels extend into channel.

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Fire Island to Jones Inlet, New York

VOLUME:	1,000,000 CYS per cycle 1,700,0000 CYS in channel and depo basin
DEPTH:	14 feet (250' wide)
SEDIMENT TYPE:	sand
LAST DREDGED: DREDGING CYCLE:	2008 2 years
EQUIPMENT:	Cutterhead
MATERIAL PLACEMENT LOCATION:	Gilgo Beach 4.5 miles west of Inlet
ENVIRONMENTAL ND WINDOWS:	1 Apr-30 Sep
COORDINATION/ CONSTRUCTION CHALLENGES:	Would need to dredge an initial cycle using private contractor to prepare for future access by govt dredge. Daily production rate and allowable window are constraints for private contractor and gov't dredge. Back-shoaling. Maneuverability in channel.

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Moriches Inlet, New York

VOLUME:	250,000 CYS
DEPTH:	10 feet (200' wide)
SEDIMENT TYPE:	Sand
LAST DREDGED: DREDGING CYCLE:	2009 by Suffolk County DPW 5 years
EQUIPMENT:	Cutterhead
MATERIAL PLACEMENT LOCATION:	Smith Point Beach, west of Inlet
ENVIRONMENTAL WINDOWS:	15 January– 30 September
COORDINATION/ CONSTRUCTION CHALLENGES:	Production rate of gov't dredge a constraint considering short allowable workwindow and back-shoaling; otherwise, significant cost savings. Maneuverability in channel.

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Mattituck Inlet, New York

VOLUME:	14,000 CY
DEPTH:	7 feet (100' wide)
SEDIMENT TYPE:	Gravel/Sand
LAST DREDGED: DREDGING CYCLE:	2004 12 years
EQUIPMENT:	Cutterhead
MATERIAL PLACEMENT LOCATION:	Beach east of east jetty
ENVIRONMENTAL ND WINDOWS:	1 February – 15 September
COORDINATION/ CONSTRUCTION CHALLENGES:	Gov't dredge could perform work more economically. Section 111 Study at HQ for review. Continue coordination necessary to optimize RSM benefits. Maneuverability in channel.

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East Rockaway Inlet, New York

VOLUME:	200,000 CYS
DEPTH:	14 feet(150' wide)
SEDIMENT TYPE:	Sand
LAST DREDGED: DREDGING CYCLE:	2010 annually
EQUIPMENT:	Cutterhead or hopper-w/pump-out
MATERIAL PLACEMENT LOCATION:	West of inlet at 26/36 streets along Rockaway Beach shoreline
ENVIRONMENTAL WINDOWS:	15 Sep-1 Apr (or 31 May) depending on placement of pipeline and booster
COORDINATION/ CONSTRUCTION CHALLENGES:	RSM Study ongoing to determine optimal placement location. If further west of current site, the sponsor NYC Parks may not always have funds or prefer that placement location? **NEW FEDERAL STANDARD DISCUSSION.**

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Sandy Hook at Leonardo, New Jersey

VOLUME:	30,000– 90,000 CYS
DEPTH:	8 feet (150' wide)
SEDIMENT TYPE:	Sand and Silt
LAST DREDGED: DREDGING CYCLE:	1991 10-15 years
EQUIPMENT:	Hopper/hopper with pump-out
MATERIAL PLACEMENT LOCATION:	East or west of the timber jetty; Possible upland disposal required.
ENVIRONMENTAL WINDOWS:	15 November – 31 May
COORDINATION/ CONSTRUCTION CHALLENGES:	Pump-out preferred for greater efficiency and improved RSM. Sediment Quality Issue: SILT pockets complicate the dredging and/or placement. Maneuverability at shoals.

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Shoal Harbor/Compton Creek, New Jersey

VOLUME:	218,000 CY/21,000 CY
DEPTH:	12 feet/8 feet (150' wide)
SEDIMENT TYPE:	Sand/Silt
LAST DREDGED: DREDGING CYCLE:	1998 > 10 years
EQUIPMENT:	Hopper with pump-out
MATERIAL PLACEMENT LOCATION:	Adjacent Upland Disposal
ENVIRONMENTAL ND WINDOWS:	1 November – 31 May
COORDINATION/ CONSTRUCTION CHALLENGES:	5000 feet pump-out capability required for inland disposal location for majority of DM. Possible beach placement for sandy sediments. Maneuverability issue.

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DISCUSSION POINTS

❖**TIME AND MONEY ……**

❖SOME PROJECTS MAY NEED TO BE CLEARED FIRST BY PRIVATE CONTRACTOR, REQUIRING MANY MILLIONS OF $$$ UP FRONT.

OR

❖SOME PROJECTS MAY REQUIRE FULL ENVIR WINDOW PERIOD, SOMETIMES UP TO 3+ MONTHS; SCHEDULING CHANGES COULD POSE PROBLEMS

❖HQ COMMITS TO FULLY FUND CURRITUCK/MURDEN FOR ONE YEAR TRIAL PROGRAM &/or

❖COMMITMENT TO PROJECTS' BEING FUNDED ANNUALLY

❖PUSH-BACK BY INDUSTRY

❖COORDINATED DETAILED SPECIFICATIONS

- PUMP-OUT DISTANCE
- MURDEN DAILY RATE
- ABILITY TO ACCOMPLISH FULL SCOPE OF WORK

❖SOME RSM COORDINATION UNDER SPS/CSPI SUPERSEDED/ FEWER COST SAVINGS TO CAPITAL PROJECTS BY COMBINING MOB

❖MANEUVERABILITY IN CHANNEL – BACKING OUT????

❖REVISITING THE FEDERAL STANDARD

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