

SNELL



CURRITUCK



**WILMINGTON DISTRICT
DREDGE FLEET**

MERRITT



MURDEN





Shallow Draft Dredge Currituck

Home Port: Wilmington, North Carolina

This vessel works in the shallow-draft ocean bar channels along the Atlantic coast. However, in addition to removing dredged material from the channel, the CURRITUCK can transport the material to the downdrift beach and deposit it in the surf zone to nourish sand-starved beaches.

Type: Seagoing, special purpose dredge, steel construction, full diesel, with twin outboard propulsion units.

Built: Barbour Boat Works, New Bern, North Carolina, 1974.

Converted to Dredge: US Army Engineer Yard, Eagle Island, North Carolina, 1977.

Vessel Characteristics and Specifications:

Gross Tonnage	484 tons
Displacement, Light	175 long tons
Displacement, Loaded	615 long tons
Length, Overall	150'-0"
Beam, Molded	30'-7"
Draft, Light	4'-3"
Draft, Loaded	8'-0"
Hopper Capacity	315 cubic yards

Propulsion Equipment:

Engines- 2 - CAT 3406E, 450 HP @ 1800 RPM
Outboard Propelling Units- Holland Rotorpropeller, (HRP)
Model HRP 350 Deck unit

Speed, Loaded Approx: 7 knots

Speed, Light: 8.5 knots

Bunker Capacity: 3200 gal diesel fuel

Potable Water Capacity: 400 gal





Shallow Draft Dredge Murden

Home Port: Wilmington, North Carolina

Entered into service in 2012, this vessel works in the shallow-draft ocean bar channels along the Atlantic and Gulf Coast. The Murden is capable of working in waters as shallow as 6.5 feet. The split hull configuration and shallow draft allows for deposit of the material in the surf zone to nourish sand-starved beaches.

Type: Seagoing, special purpose dredge, steel hull, aluminum house construction, diesel propulsion with twin outboard propulsion units and bow thrusters.

Construction shipyard: Conrad Shipyard, Morgan City, LA

Vessel Characteristics and Specifications:

Gross Tonnage	551 tons (est.)
Displacement, Light	400 tons, (est.)
Displacement, Loaded	TBD
Length, Overall	156'-0"
Beam, Molded	35'-0"
Draft, Light	Bow 3'-10", stern 5'-10"
Draft, Loaded	9'-10"
Hopper Capacity	512 cubic yards

Propulsion Equipment:

Engines- 2 – Cummins QS19M Main Engines, 760 HP@2100 RPM
Outboard Propelling Units-2- ZF/ HRP Z drives, model 4100
Bow Thruster -2-WESMAR, 100 HP

Speed, Loaded Approx:7.5

Speed, Light: 9.0 kts

Bunker Capacity: 14,500 gal diesel fuel

Potable Water Capacity: 1000 gal



FY15 RSM-EWN IPR

SAJ, USACE Hopper Dredge Murden and Nearshore Placement Monica Chasten and (NAP) and Jason Engle (SAJ)

Advantages

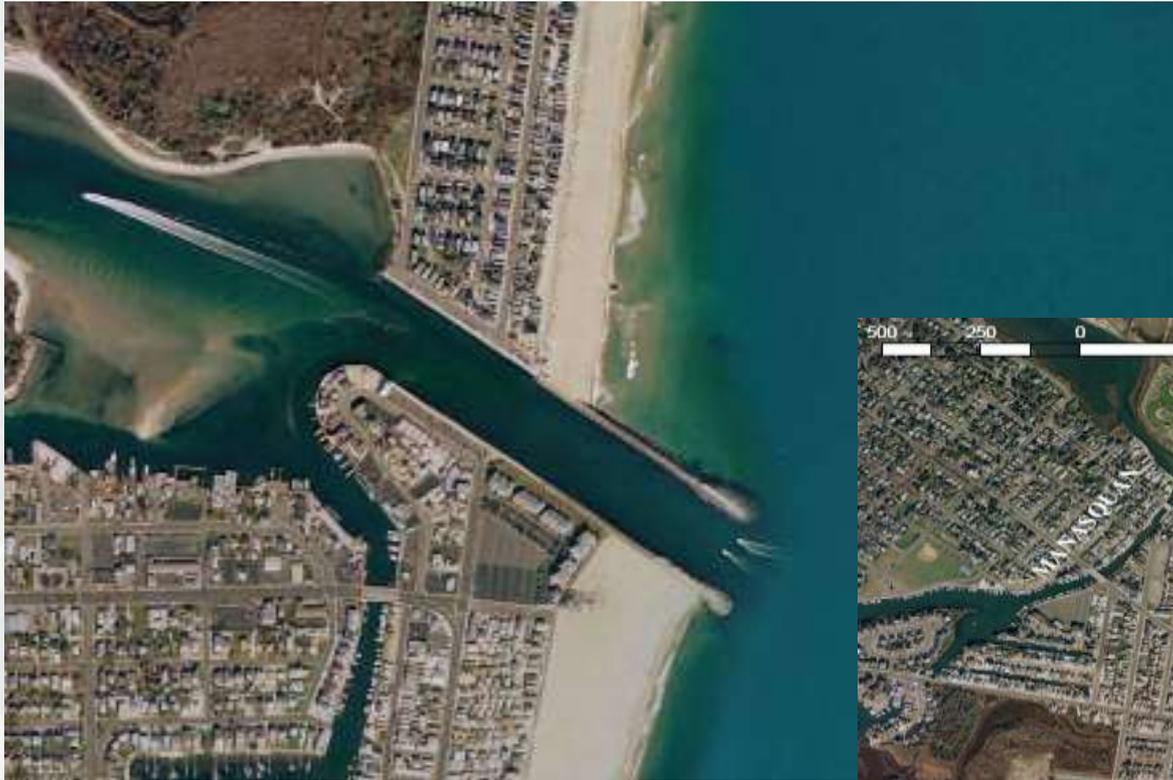
- Cost effective for small dredging jobs
- No plans and specs needed

Limitations

- Dredge depth not adequate for deep draft
- Production rate is modest
- No pump-out



Manasquan Inlet, NJ



Currituck Used
Semi-Annually



Barnegat Inlet, NJ

Currituck or Murden Used Semi-annually



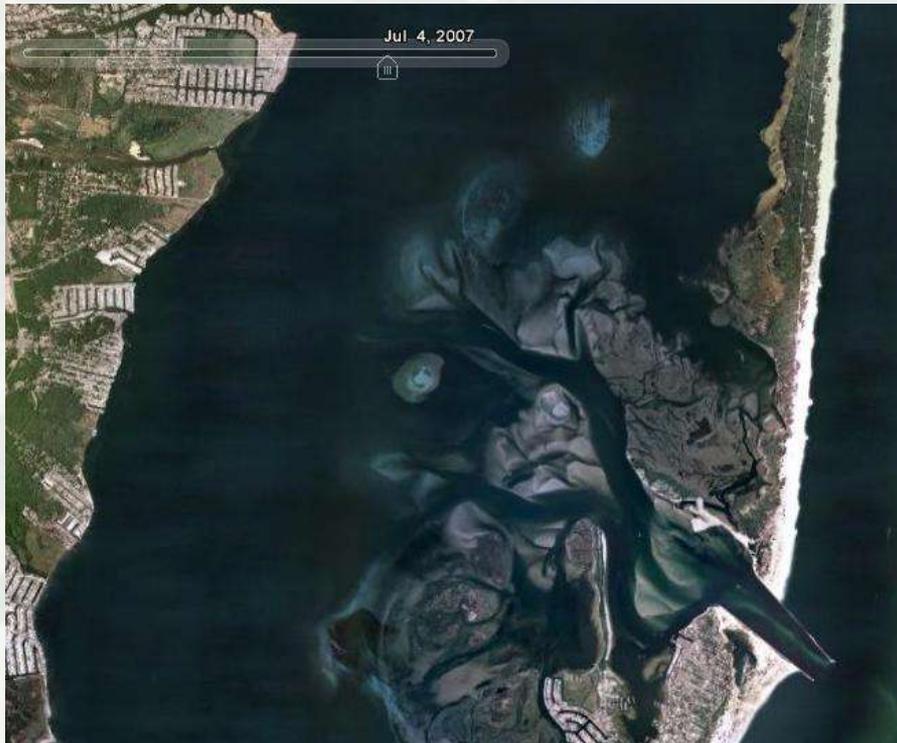
Cold Spring Inlet, NJ

Currituck or Murden Used Semi-Annually

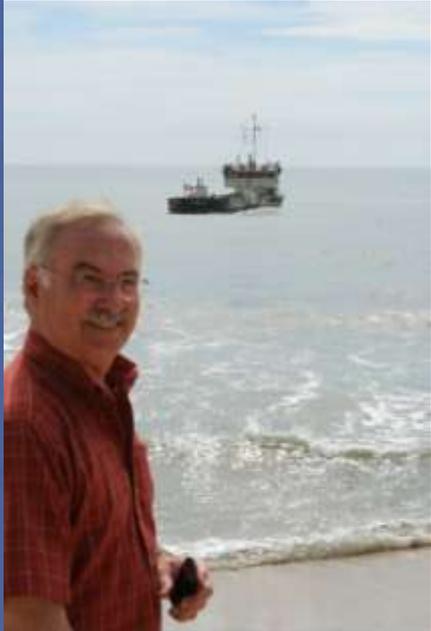


Oyster Creek Channel

July 2014-15



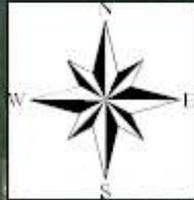
Coastal Navigation Channels with Nearshore Placement



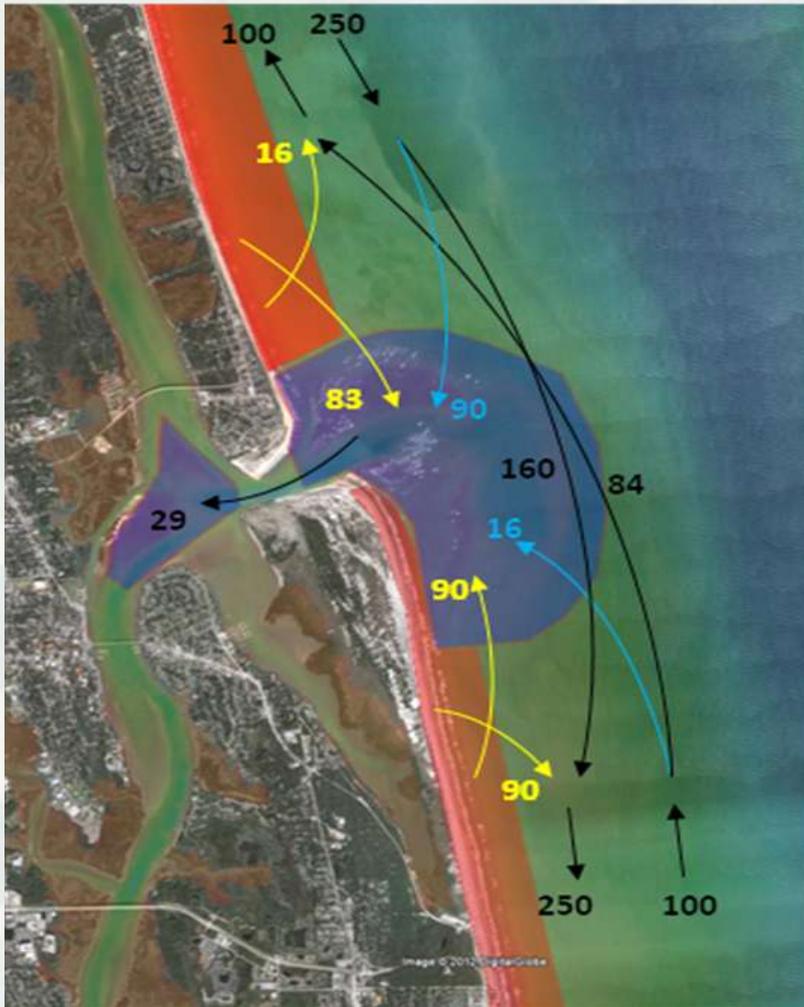
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

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St. Augustine Inlet Florida, U.S.



St Augustine Inlet



- RSM Study 2010-2013
- New State of Florida Inlet Management Plan
- 280k cy/yr Inlet Shoaling
- 100k cy/yr bypassing to north beaches
- 180k cy/yr bypassing to south beaches
- ~175k being placed on north beaches now



RSM FY15 IPR

Evaluation of RSM Actions Using Government Shallow Draft Dredges North Atlantic and South Atlantic Divisions, Rich Thorsen & Dylan Davis

Description/Challenge

- Government Shallow Draft Dredges (SDD) serve multiple projects on Atlantic coast
- Little to no technical coordination to promote and achieve more efficient sediment management

Goals/Issues to Address

- Evaluate ways to improve sediment management on projects in NAD and SAD that use Government Shallow Draft Dredges (SDD)
- Identify RSM Opportunities across Business Lines using SDD fleet



BLUF: Explore how the government fleet of Shallow Draft Dredges can improve sediment management practices and strategies within NAD/SAD and across business lines



Questions/Discussion

