

Mercator projection  
Geodetic Reference System 1980; North American Datum of 1983  
Longitude of central meridian 70°19' W; latitude of true scale 41°39' N  
False easting 0 m; false northing 0 m  
This map is not intended for navigational purposes



CONTOURS SHOW SEALED DEPTH BELOW DATUM; CONTOUR INTERVAL 5 METERS  
ADDITIONAL 1-METER CONTOURS INCLUDED TO SHOW BOTTOM ROUGHNESS  
DATUM MEAN LOWER LOW WATER

**DESCRIPTION OF MAP UNITS**

[Mud content is given in mean weight percents. For textural characteristics of individual substrates, see the section "Description of Map Units (Substrates)" in pamphlet, tables 6 and 7 (in pamphlet), and Valentine and Cross (2024b)]

- M <1 Mud content <1—Equivalent to substrates A1, A3, B, and W
- M 1 to <5 Mud content 1 to <5—Equivalent to substrates H, J, and K
- M 5 to <10 Mud content 5 to <10—Equivalent to substrate I

- M 10 to <20 Mud content 10 to <20—Equivalent to substrates L, N, and O
- M 20 to <50 Mud content 20 to <50—Equivalent to substrates M, P, Q, and T
- M 50 to <90 Mud content 50 to <90—Equivalent to substrates R and V
- M ≥90 Mud content ≥90—Equivalent to substrate S
- GP Gravel pavement—Equivalent to substrate U

- Boulder ridges <1 m in height—Equivalent to substrate C
- Boulder ridges ≥1 m in height—Equivalent to substrate C

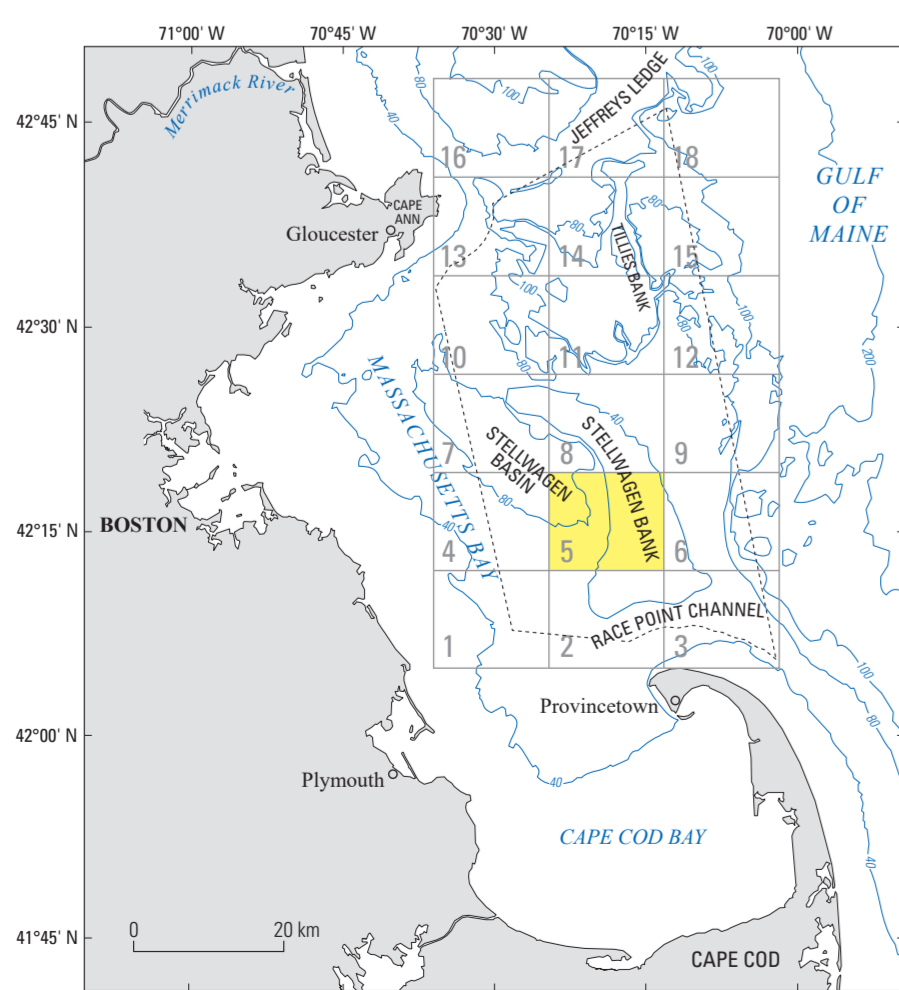
**EXPLANATION OF MAP SYMBOLS**

- Stellwagen Bank crestline
- Leading edge of sand sheet formed by episodic sediment transport

**Map G.—Distribution of Substrate Mud Content and Boulder Ridges**

Seabed Maps Showing Topography, Ruggedness, Backscatter Intensity, Sediment Mobility, and the Distribution of Geologic Substrates in Quadrangle 5 of the Stellwagen Bank National Marine Sanctuary Region Offshore of Boston, Massachusetts

By  
Page C. Valentine and VeeAnn A. Cross  
2024



Location Map. Map showing the location of quadrangle 5 (highlighted in yellow) of the Stellwagen Bank National Marine Sanctuary region offshore of Boston, Massachusetts. The numbered grid indicates the quadrangles of the U.S. Geological Survey multibeam sonar substrate-mapping project. The dashed line represents the Stellwagen Bank National Marine Sanctuary boundary. Bathymetric contours are labeled in meters and the contour interval is variable. Base from Valentine and Gallea (2015).

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