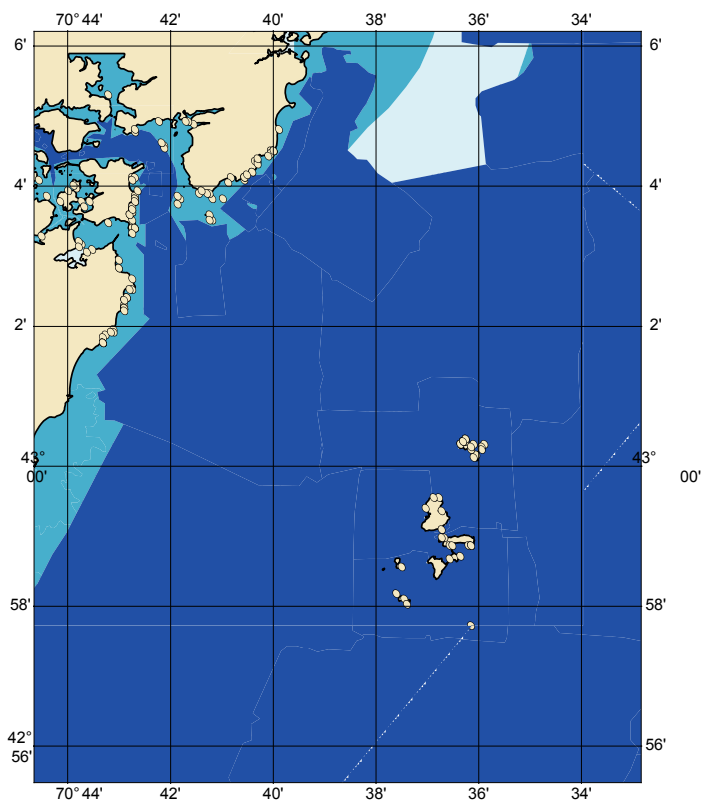


Chart_2

Zone of Confidence (ZOC) Diagram



ZOC CATEGORIES

ZOC	COLOR	POSITION ACCURACY	DEPTH ACCURACY	SEAFLOOR COVERAGE
A1		± 5 m ± 16.4 ft	= 0.50 m +1% d = 1.6 ft +1% d = 0.3 fm +1% d	All significant seafloor features detected.
A2		± 20 m ± 65.6 ft	= 1.00 m +2% d = 3.3 ft +2% d = 0.6 fm +2% d	All significant seafloor features detected.
B		± 50 m ± 164.0 ft	= 1.00 m +2% d = 3.3 ft +2% d = 0.6 fm +2% d	Uncharted features hazardous to surface navigation are not expected but may exist.
C		± 500 m ± 1640.4 ft	= 2.00 m +2% d = 6.6 ft +2% d = 1.1 fm +2% d	Depth anomalies may be expected.
D		Worse than ZOC C	Worse than ZOC C	Large depth anomalies may be expected.
U		Unassessed - The quality of the bathymetric data has yet to be assessed.		

Chart_2

NOAA CUSTOM CHART NOTES GEOSPATIAL DATABASE VERSION 1.2 - 1 OCTOBER 2021

The records of the NOAA Custom Chart Notes Geospatial Database are current as of October 1, 2021. Subsequent additions and refinements are to be expected. Please refer to all available navigational publications for complete information about the charted area.

CHART EXPIRATION

Notice to Mariners are not issued for this NOAA Custom Chart. Users are strongly encouraged to replace this chart every six months.

HEIGHTS

Regardless of the units for depths, heights - including bridge and other overhead clearances - shown on this chart are in meters. Multiply meters by 3.28 to convert to feet.

WATER LEVELS, CURRENTS, AND TIDES

Real-time water levels, tide predictions, and tidal current predictions are available on the internet from NOAA's Center for Operational Oceanographic Products and Services (CO-OPS) at https://tidesandcurrents.noaa.gov/water_level_info.html and https://tidesandcurrents.noaa.gov/currents_info.html.

ABBREVIATIONS

For complete list of Symbols and Abbreviations, see Chart No. 1.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

USCG CARRIAGE REQUIREMENTS

Mariners should use the latest NOAA electronic navigational charts for navigation. This NOAA Custom Chart does not meet U.S. Coast Guard carriage requirements in several sections of titles 33 and 46 of the Code of Federal Regulations (CFR) for commercial vessels to maintain "currently corrected marine charts."

AUTOMATED CHART GENERATION

This chart has been automatically rendered from NOAA Electronic Navigational Chart (NOAA ENC®) data. Mariners using this chart must understand this is a static reproduction of the ENC and has not been individually quality checked or adjusted for optimal use for navigation.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard and National Geospatial-Intelligence Agency.

COMMENTS REQUEST

Inquiries, discrepancies or comments about the application used to generate this chart may be submitted to: <https://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs>

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

Chart_2

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 1 for important supplemental information.

Refer to charted regulation section numbers.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 1. Additions or revisions to Chapter 2 are published in the Notices to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in Concord, MA.

Refer to charted regulation section numbers.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details, see U.S. Coast Guard Light List.

CAUTION BASCULE BRIDGES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

SOUNDING DATUM

Soundings referred to Mean Lower Low Water (MLLW).

VERTICAL DATUM

Overhead clearances are referred to Mean High Water (MHW).

COLREGS DEMARCATION LINE

The Inland Navigational Rules Act of 1980 is in effect for vessels transiting this area. The seaward boundaries of this area are the COLREGS demarcation lines. In the area seaward of the COLREGS demarcation lines, vessels are governed by COLREGS: International Regulations for Preventing Collisions at Sea, 1972. The COLREGS demarcation line is defined in COLREGS 33 CFR 80.115b.

CAUTION LIMITATIONS ON THE USE OF RADIO SIGNALS

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Chart_2

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

CAUTION

SUBMERGED CABLES AND PIPELINES

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging or trawling.

Covered wells may be marked by lighted or unlighted buoys.

CAUTION

USACE conducts hydrographic surveys to monitor navigation conditions. These surveys are not intended to detect underwater features. Uncharted features hazardous to surface navigation are not expected but may exist in federal channels. For more information visit <https://navigation.usace.army.mil/Survey/Hydro>.

RIGHT WHALE CRITICAL HABITAT
(PRECAUTIONARY AREA: 50 CFR 226.203, 224.103C; SEE NOTE A)

It is illegal to approach any right whale anywhere closer than 500 yards.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Gloucester,MA WNG-574 162.425MHz