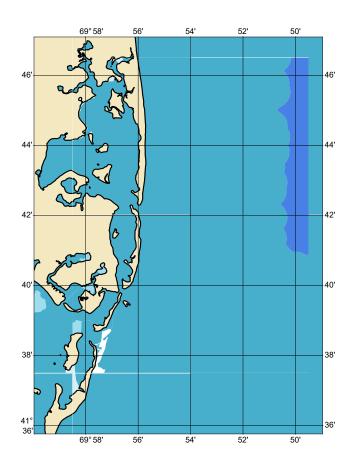
# Zone of Confidence (ZOC) Diagram



# ZOC CATEGORIES

ZOC	COLOR	POSITION ACCURACY	DEPTH ACCURACY	SEAFLOOR COVERAGE
A1		± 5 m + 5% depth ± 16.4 ft + 5% depth	= 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.
В		± 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.
С		± 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.		

### NOAA CUSTOM CHART NOTES GEOSPATIAL DATABASE VERSION 3.0B - 20 FEBRUARY 2025

The records of the NOAA Custom Chart Notes Geospatial Database are current as of February 20, 2025. Subsequent additions and refinements are to be expected. Please refer to all available navigational publications for complete information about the charted area.

### CAUTION CHART UPDATES

This NOAA Custom Chart contains upto-date information only as of the time of creation, and will become outdated. Mariners are advised to visit https://distribution.charts.noaa.gov/navigation-updates/ to check for critical and routine updates, and to render a new NOAA Custom Chart when the ENC data used to make the chart is updated. Notices to Mariners are not issued for corrections to this NOAA Custom Chart.

# 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 REQUESTED

NOAA encourages users to submit inquiries, discrepancies, or comments about this chart via NOAA's ASSIST tool at https://nauticalcharts.noaa.gov/customer-service/assist/.

# CAUTION AUTOMATED CHART GENERATION

This NOAA Custom Chart has been automatically rendered from NOAA Electronic Navigational Chart (NOAA ENC®) data. Mariners using this NOAA Custom Chart are advised that this is a static reproduction of the NOAA ENC®. This NOAA Custom Chart has not been individually quality checked or adjusted for optimal use for navigation. The portrayal may be at a different scale from that of the original NOAA ENC®. Mariners are advised to use caution when using this NOAA Custom Chart for navigation and are encouraged to use the latest NOAA ENC® to access the most up-todate information. Mariners must also comply with all applicable regulatory requirements.

#### **HEIGHTS**

Heights of fixed aids to navigation and vertical clearances of overhead obstructions will be shown in feet if the units are set to feet or fathoms. If units are set to meters, heights will be shown in meters. Land elevation values are shown in meters only.

# 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.

#### 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).

### 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.

### SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 1 for important supplemental information. Refer to charted regulation section numbers.

# SOUNDING DATUM

Soundings referred to Mean Lower Low Water (MLLW).

### 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.

#### AIDS TO NAVIGATION

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

### 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.

### ADDITIONAL INFORMATION

Additional information can be obtained at www.nauticalcharts.noaa.gov

### SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 2 for important supplemental information. Refer to charted regulation section numbers.

### VERTICAL DATUM

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

### NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. 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.

### COLREGS, 80.145 (SEE NOTE A)

International Regulations for Preventing Collisions at Sea, 1972. The entire area of this chart falls seaward of the COLREGS Demarcation Line.

## 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.

# 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

Improved channels are subject to shoaling, particularly at the edges.

# 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 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.

## CAUTION FISH TRAP AREAS

Uncharted stakes, piles and, fishing structures, some submerged, may exist within this area.

# CAUTION UNEXPLODED ORDNANCE

This area is a former firing range active from 1952 to 1961. Mariners are cautioned against anchoring, dredging or trawling in this area due to the possible existence of unexploded ordnance.

### 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.

RESTRICTED AREA RIGHT WHALE SEASONAL MANAGEMENT AREA (50 CFR 224.105)

All vessels greater than or equal to 65 feet / 19.8 meters in length must slow to speeds of 10 knots or less in seasonal management areas.

# NOTE Z NO-DISCHARGE ZONE, 40 CFR 140

Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) completely prohibited from discharging any sewage, treated or untreated, into the waters. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning regulations and requirements may be obtained from the Environmental Protection Agency (EPA) website: https://www.epa.gov/vessels-marinasand-ports .

### PRIVATE AIDS

Privately charted and uncharted aids are placed to mark the eastern channel connecting Pleasant Bay and Chatham Harbor from May 15 to Nov 1.

### PRIVATE AIDS

Privately charted and uncharted aids are placed to mark the channel connecting Chatham Harbor to Chatham Inlet from Apr 15 to Oct 15.

## PRIVATE AIDS

Ryder Cove is marked by charted and uncharted private aids from May 15 to Nov 1.

### CHATHAM HARBOR

This area is subject to continual change. Buoys are not charted because they are frequently shifted in position. Use only with local knowledge.

# MANDATORY SHIP REPORTING SYSTEM AREA 33 CFR 169 (SEE NOTE A)

Navigation regulations are published in Chapter 2 of the U.S. Coast Pilot for this geographic area. Refer to regulation section numbers.

# 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/ 457.2 meters.

### NORTH BEACH CUT AIDS

The North Beach Cut Mid-Channel Buoys are not charted due to their frequent changes in position to mark the best passage through the inlet.

#### PRIVATE AIDS

Privately charted and uncharted aids are placed to mark the western channel in Chatham Harbor from Apr 15 to Oct 15.

### PRIVATE AIDS

Little Pleasant Bay Channel is marked by charted and uncharted private aids from May 1 to Nov 1.

#### PRIVATE AIDS

Entrance to Crows Pond is marked by charted and uncharted private aids from Apr 15 to Oct 15.

### CHANGEABLE AREA

Chatham Roads and Stage Harbor areas are subject to continual change. Buoys are frequently relocated and mariners are cautioned that depths and buoys may differ. Use only with local knowledge.

### TIDAL CURRENTS

In Nantucket Sound the tidal currents are strong and their times and velocities vary considerably from place to place. For supplemental information consult NOAA's Center for Operational Oceanographic Products and Services.

### 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.

Bourne/Hyannis, MA KEC-73 162.550 MHz