



# UNITED STATES — EAST COAST APPROACHES TO NEW YORK HARBOR

The Narrows · Lower Bay · Ambrose Channel

Scale 1 : 45 000 at lat 40°40'N  
 DEPTHS IN METRES · HEIGHTS IN METRES  
 Mercator Projection · WGS 84  
 IALA Maritime Buoyage System — Region B  
 Soundings reduced to Mean Lower Low Water

**DEPTHS & SOUNDINGS**  
 Soundings and contours are reduced to Mean Lower Low Water; no charted depths are conservative — each is the shallowest spot found in the patch, with a subscript adding depth of 4 metres. The blue lines are depth contours joining equal soundings; the heavier line is the 5 metres shall edge; a deep-draught vessel watch.

**THE APPROACHES**  
 This chart covers the seaward approach to New York — Ambrose Channel runs in from the Atlantic, across the Lower Bay, passes through the Narrows beneath the Verrazano-Narrows Bridge, and opens into the Upper Bay. The dredged Freestone channels are the deep space; the great ships still follow, kept to depth by constant survey and maintenance dredging.

**SOURCE**  
 Compiled from NOAA Electronic Navigational Chart (ENC) US1NY1AQ (public domain), 2026. Survey data span 1930–2022 across zones of confidence A1-D — a grade of how trustworthy each survey is. At the best and D the least, here mostly B and C, reliability not independently assessed. Larger-scale charts cover nearby and adjacent depths; shallower than charted may exist. Shoreline read and rail detail © OpenStreetMap contributors (ODBL, openstreetmap.org/copyright).

**POSITIONS**  
 Positions are referred to WGS 84 and plot directly onto this chart, at this scale the offset from NAD 83 is negligible. A satellite fix should still be checked against charted features — receiver, datum and system errors can each displace a position from its true place.

**TIDES & STREAMS**  
 The tables (upper right) give tidal levels and stream rates from NOAA predictions; heights are in metres above chart datum (MLLW = 0.0). The range amplifies markedly up the East River — Kings Point reaches nearly double the Battery's mean range; and Hell Gate runs to roughly five knots on the ebb, the harbor's fiercest current.

**MAGNETIC**  
 The compass rose carries two rings — the outer (true) north, the inner magnetic north, currently about 13° west of true and easing slowly east each year. All bearings on the chart are degrees true unless taken from the inner ring.

**NOT FOR NAVIGATION**  
 An Almanac integrating compiled from public-domain ENC data — not an official chart, not maintained to Notices to Mariners, and not for navigation. © Data Hub's Almanac · CC BY-NC-SA 4.0.

**HOW TO READ**  
 New to a sea chart? Start with the water: The palest blue and white mark the deep, open water; the big blue shows 40, 30, 20, 10, 5, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 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999, 1000.

**TIDAL LEVELS**  
 heights in metres above Chart Datum (MLLW = 0.0)

Place	Lat	Long	MHHW	MHW	MTL	MLW	MN
The Battery	40°42'N	074°01'W	1.54	1.44	0.75	0.06	1.38
Bergen Point †	40°38'N	074°09'W	1.68	1.58	0.82	0.06	1.52
Sandy Hook †	40°28'N	074°01'W	1.59	1.49	0.77	0.06	1.43
Kings Point †	40°49'N	073°46'W	2.38	2.27	1.18	0.08	2.18
Willets Point †	40°48'N	073°47'W	2.37	2.26	1.17	0.08	2.18

† Reference station off this sheet. The tidal range amplifies up the East River — Kings Point & Willets Point reach = 2.2 m mean range, against 1.4 m at the Battery; NOAA datasets, 1983–2001 epoch; all-side means; not spring/neap levels.

**TIDAL STREAMS**  
 set 'T' · rate mean / max in knots

Station	Flood	Ebb
A Ambrose Ch.	299° 1.0/1.9	118° 1.9/2.7
B The Narrows	328° 1.2/1.8	144° 1.9/2.3
C Hudson R. Ent.	011° 1.3/2.5	183° 2.2/2.7
D Hell Gate	045° 3.4/4.3	241° 4.3/5.2

Tidal streams from NOAA harmonic current predictions, set in 'T' mean = average daily peak rate; max = strongest over a 30-day window (= a spring peak). Predictions, not spring/neap-decomposed rates — illustrative, not for navigation.

Adjoining NOAA Chart 12331

Adjoining NOAA Chart 12350