NOAA encourages users to submit inquiries, discrepancies or comments about this chart at http://www.nauticalcharts.noaa.gov/staff/contact.htm.

Formerly C&GS 286, 1st Ed., Jan 1924 KAPP 2241

SOUNDINGS IN FEET

12331

JOINS CHART 12333

SUPPLEMENTAL INFORMATION
Consult U.S. Coast Pilot 2 for important supplemental information.

SCALE 1:15,000
Nautical Miles
Yards

CAUTION
BASCULE BRIDGE CLEARANCES
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.

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.

New York, NY KWO-35 162.550 MHz

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.

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.

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Great Kills Harbor	(40°33'N/74°08'W)	5.2	4.9	0.2
Princes Bay	(40°30'N/74°12'W)	5.5	5.1	0.2
Carteret	(40°35'N/74°13'W)	5.7	5.3	0.2
Keyport	(40°26'N/74°12'W)	5.6	5.3	0.2

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov. (Oct 2014)

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
Aids to Navigation (lights are white unless otherwise indicated):
AERO aeronautical; Al alternating; B black; Bn beacon; C can; DA diaphone; F fixed; Fl flashing; G green; IQ interrupted quick; Iso isophase; LT HO lighthouse; M nautical mile; m minutes; MICRO TR microwave tower; Mkr marker; Mo morse code; N nun; OBSC obscured; Oc occulting; Or orange; Q quick; R red; Ra Ref radar reflector; R Bn radiobeacon; R TR radio tower; Rot rotating; s seconds; SEC sector; St M statute miles; VQ very quick; W white; WHIS whistle; Y yellow
Bottom characteristics:
Bldrs boulders; bk broken; Cy clay; Co coral; Grs grass; gy grey; h hard; M mud; Oys oysters; Rk rock; S sand; so soft; Sh shells; sy sticky
Miscellaneous:
AUTH authorized; ED existence doubtful; Obstn obstruction; PA position approximate; PD position doubtful; Rep reported; Subm submerged
Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

HEIGHTS
Heights in feet above Mean High Water.

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.

CAUTION
Improved channels shown by broken lines 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.

SMITH CREEK
The controlling depth at Mean Lower Low Water from the entrance to a point about 125 yards beyond the first bend was 7 feet.
Jan 1984

PORT READING REACH
PROJECT DEPTH 35 FEET
(see notes)

PORT SOCONY REACH
PROJECT DEPTH 35 FEET
(see note)

OUTER BRIDGE REACH
PROJECT DEPTH 35 FEET
(see note)

WARD POINT BEND WEST REACH
PROJECT DEPTH 35 FEET
(see note)

WARD POINT BEND EAST REACH
PROJECT DEPTH 35 FEET
(see note)

RED BANK REACH
PROJECT DEPTH 35 FEET
(see note)

SEGUINE POINT BEND
PROJECT DEPTH 35 FEET
(see note)

RARITAN BAY WEST REACH
PROJECT DEPTH 35 FEET
(see note)

RARITAN BAY EAST REACH
PROJECT DEPTH 35 FEET
(see note)

RARITAN RIVER CUTOFF
PROJECT DEPTH 35 FEET
(see note)

SOUTH AMBOY REACH
PROJECT DEPTH 35 FEET
(see note)

GREAT BEDS REACH
PROJECT DEPTH 25 FEET (see note)

WARD POINT SECONDARY CHANNEL
PROJECT DEPTH 30 FEET (see note)

KEYPORT HARBOR CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEP 2016 AND SURVEYS TO JUL 2016

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW) LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	PROJECT DIMENSIONS WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
REACH A	7.0	7.1	6.6	7-16	200	0.54	8
REACH B	4.3	5.5	5.3	7-16	200 - 100	0.32	8

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

PROJECT DEPTHS
Channel legends and tabulations, where indicated, reflect the U.S. Army Corps of Engineers (USACE) project depths. The channel may be significantly shoaler, particularly at the edges. For detailed channel information and minimum depths as reported by USACE, use NOAA Electronic Navigational Charts. USACE surveys and channel condition reports are available at http://navigation.usace.army.mil/Surveys/Hydro.

HORIZONTAL DATUM
The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.381" northward and 1.480" eastward to agree with this chart.

SOURCE DIAGRAM
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

SOURCE

A	1990-2014	NOS Surveys	full bottom coverage
B2	1970-1989	NOS Surveys	partial bottom coverage
B4	1900-1939	NOS Surveys	partial bottom coverage
B5	Pre-1900	NOS Surveys	partial bottom coverage

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. Additions or revisions to Chapter 2 are published in the Notice 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 New York, N.Y.
Refer to charted regulation section numbers.

FISH TRAP AREAS
Boundary lines of fish trap areas are shown thus: ———— ———
Submerged piling may exist in these areas.

ANCHORAGE AREAS
110.155 (see note A)
Limits and assigned numbers of anchorage areas are shown in magenta
(44) ANCHORAGE FOR DEEP-DRAFT VESSELS
ALL OTHER ANCHORAGES ARE FOR GENERAL USE

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).

CAUTION
Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

CAUTION
Fixed and floating obstructions, some submerged, may exist within the magenta tinted bridge construction area. Mariners are advised to proceed with caution.

NOTE C
The U.S. Coast Guard operates a mandatory Vessel Traffic Services (VTS) system in the New York Bay and surrounding areas. Vessel operating procedures and designated radiotelephone frequencies are published in 33 CFR 161, the U.S. Coast Pilot, and/or the VTS User's Manual. The entire area of the chart falls within the Vessel Traffic Services (VTS) system.

CAUTION
SUBMARINE PIPELINES AND CABLES
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:
Pipeline Area — Cable Area
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.

NOTE F
GREAT KILLS HARBOR
Great Kills Channel and Harbor are subject to continual change due to shoaling. Buoys may be frequently relocated to mark best water.

NOTE D
Numerous uncharted pilings may exist throughout Great Kills Harbor.

NOTE B
Channel is marked by private seasonal buoys or markers.

NOTE E
Depths deeper than charted may exist in borrow areas.

Carteret; Chrome; Port Reading; Sewaren; Port Socony; Charleston; Maurer; Ploughshare Pt; Rossville; Smoking Pt; Tufts Pt; Cedar Pt; Island of Meadows; Little Fresh Kills; Great Fresh Kills; Fresh Kills; Main Creek; Richmond Creek; Greenridge; Bay Terrace; Great Kills Park; Great Kills; Elting ville; Crookes Pt; Annadale; Huguenot; Huguenot Beach; Pleasant Plains; Richmond Valley; Princes Bay; Seguine Pt; Wolfe's Pond Park; Red Bank; Mt Loretto; TOTTENVILLE; PERTH AMBOY; SOUTH AMBOY; Ward Pt; Morgan; Morgan Beach; Laurence Harbor; Seidler Beach; Matawan Pt; Cliffwood Beach; KEYPORT; Conaskonk Pt; Union Beach; Pt Comfort; KEANSBURG; Keyport Harbor; Cheesequake Creek; Stump Creek; Matawan Creek; Whale Cr; Chesebrough Cr; East Creek; Wesquake Cr; Horns Creek; Woodbridge Creek; Arthur Kill; Raritan River; Raritan Bay; Great Beds; Round Shoal; Raritan Bay; Lower New York Bay; Sandy Hook Bay; Newark Bay; Staten Island; New Jersey Turnpike; Garden State Parkway; Outerbridge Crossing Cantilever Bridge; Bridge above conn arches; Fixed Bridge; Bascule Bridge; Swing Bridge; Pipeline Area; Cable Area; Cable and Pipeline Area; Marsh; Wreckage; Obstn; Rep; Subm piling; Piles; Ramp; Stacks; Tanks; Spires; Cupola; Standpipe; Sch Ho Cup; Oil Spills; Sand and Mud; Mud; Sand; Shells; Rocks; Gravel; Grass; Clay; Foul; Dolphin; Fish Haven; Borrow Area (see note E); Anchorage Area; Special Anchorage (110.1, 110.60 (see note A)); Safety and Security Zone 165.169 (see note A); New York Vessel Traffic Services Area (see note C); North Limit Fish Trap Area; Fish Trap Area; Outerbridge Crossing; Fixed Bridges; Bascule Bridge; Swing Bridge; Overhead Power Cable; Submarine Power Cable; Submarine Telephone Cable; Submarine Pipeline; Submarine Cable; Submarine Cable and Pipeline; Submarine Pipeline and Cable; Submarine Cable Area; Submarine Pipeline Area; Submarine Cable and Pipeline Area; Submarine Pipeline and Cable