

**REPORT OF CHANNEL CONDITIONS
(FOR CHANNELS 400 FEET WIDE OR GREATER)**

PAGE 1 **OF** 3

DATE 01 May 2018

TO:
The Record

FROM: U.S. Army Corps of Engineers
26 Federal Plaza, ATTN: CENAN-OP-ST
New York, NY 10278-0090

RIVER/HARBOR NAME AND STATE: New York and New Jersey Channels;
Arthur Kill, NY & NJ

**MINIMUM DEPTHS IN EACH ¼ WIDTH OF
CHANNEL ENTERING FROM SEAWARD**

NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	MID-CHANNEL		RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (n miles)	DEPTH (feet)		LEFT INSIDE QUARTER (feet)	RIGHT INSIDE QUARTER (feet)	
Reach D: Begins approximately 175 feet seaward of Green #19 W/LIGHT FLOOD and continues to approximately 855 feet landward of RED #24 NUN EBB.	Map 1401, Pg. 20-22 of 22; 11, 30 Jan; 1, 5-8, 12-16 Feb 2018	550 – 1200	1.07	50	46.9	49.1	50.7	49.3
Reach F: Begins approximately 855 feet landward of RED #24 NUN EBB and continues to approximately 200 feet seaward of the STATEN ISLAND R.R./CONRAIL BRIDGE.	Map 1401, Pg. 18-20 of 22; 11, 30 Jan; 1, 5-8, 12-16 Feb 2018	500 – 700	0.93	50	49.0	52.1	49.4	49.9
Reach G: Begins approximately 200 feet seaward of the STATEN ISLAND R.R./CONRAIL BRIDGE and continues to approximately 3,530 feet landward of the GOETHALS BRIDGE.	Map 1401, Pg. 17-18 of 22; 11, 30 Jan; 1, 5-8, 12-16 Feb 2018	500 – 600	0.74	40	33.9	41.7	42.6	42.1
SEAWARD is oriented towards New York Harbor in the preceding reaches and to Raritan Bay in the following reaches.								
Reach H: Begins approximately 40 feet seaward of RED LIGHTED #36 EBB and continues to approximately 1,615 feet landward of GREEN LIGHT #43 EBB.	Map 1401, Pg. 14-17 of 22; 11, 30 Jan; 1, 5-8, 12-16 Feb 2018	500 – 770	1.67	35	26.9	34.2	36.3	27.2
Reach I: Begins approximately 110 feet seaward of RED LIGHTED #30 EBB and continues to approximately 40 feet seaward of RED LIGHTED #36 EBB.	Map 1401, Pg. 12-14 of 22; 11, 30 Jan; 1, 5-8, 12-16 Feb 2018	500 – 600	0.85	35	29.5	37.2	36.8	31.8
Reach J: From approximately 35 feet landward of GREEN LIGHTED #21 EBB and continues to approximately 110 feet seaward of RED LIGHTED #30 EBB.	Map 1401, Pg. 9-12 of 22; 11, 30 Jan; 1, 5-8, 12-16 Feb 2018	500	1.66	35	32.9	34.5	36.3	32.7
Reach K: From approximately 35 feet landward of GREEN LIGHTED #11 EBB and continues to approximately 35 feet landward of GREEN LIGHTED #21 EBB.	Map 1401, Pg. 5-9 of 22; 11, 30 Jan; 1, 5-8, 12-16 Feb 2018	500 – 850	1.82	35	30.4	34.4	35.0	26.3

<p>Reach L: Begins at the approximate location of GREEN LIGHTED #5 EBB and continues to approximately 35 feet landward of GREEN LIGHTED #11 EBB.</p>	<p>Map 1401, Pg. 4-5 of 22; 11, 30 Jan; 1, 5-8, 12-16 Feb 2018</p>	600 – 800	0.80	35	32.6	35.1	34.6	32.2
<p>Partial Reach M: Begins approximately 1,200 feet seaward of RED BUOY #2 W/LIGHT EBB and continues to the approximately location of GREEN LIGHTED #5 EBB.</p>	<p>Map 1401, Pg. 2-4 of 22; 11, 30 Jan; 1, 5-8, 12-16 Feb 2018</p>	600 – 850	1.18	35	34.2	35.7	36.4	32.0

REMARKS:

- All reported depths are relative to Mean Lower Low Water (MLLW) datum.
- Channel reach lengths are in nautical miles.
- Landward is oriented towards the intersection of Reaches G and H, where authorized project depth changes from 35 to 40 feet.

ARTHUR KILL:

- **REACH D:** Shoaling exists in the Left Outside Quarter, extending into the Left Inside Quarter, approximately 660 feet landward of GREEN #19 W/LIGHT FLOOD and continues approximately 3,060 feet landward with a maximum width of 225 feet. Shoaling exists in the Right Outside Quarter along the channel's toe approximately 540 feet seaward of GREEN/RED JUNCTION BUOY "A" FLOOD and continues 815 feet landward.
 - **REACH F:** Shoaling exists in the Left Outside Quarter along the channel's toe approximately 2105 feet landward of RED #24 NUN EBB and continues 535 feet landward.
 - **REACH G:** Shoaling exists in the Left Outside Quarter around the GOETHALS BRIDGE abutment from approximately 130 feet seaward and continues approximately 340 feet landward.
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- **REACH H:** A spot shoal exists in the Left Outside Quarter approximately 190 feet landward of RED LIGHTED #36 EBB. Shoaling exists in the Left Outside Quarter along the channel's toe approximately 535 feet landward of RED LIGHTED #38 EBB and continues approximately 425 feet landward with a maximum width of approximately 85 feet. Intermittent shoaling exists in the Left Outside Quarter along the channel's toe approximately 4,825 feet seaward of GREEN LIGHT #43 EBB and continues sporadically to the reach's landward boundary with a maximum width of approximately 40 feet. Shoaling exists in the Left Inside Quarter approximately 255 feet landward of RED LIGHTED #36 EBB and continues 475 feet landward with a maximum width of approximately 70 feet. Shoaling exists in the Right Outside Quarter along the channel's toe for approximately the first 60 feet of the reach, extending into Reach I with a maximum width of 45 feet. Shoaling exists in the Right Outside Quarter along the channel's toe approximately 375 feet landward of RED LIGHTED #38 EBB and continues 780 feet landward with a maximum width of approximately 60 feet. Intermittent shoaling exists in the Right Outside Quarter along the channel's toe for the approximately final 4,100 feet of the reach until the landward end with a maximum width of approximately 70 feet.
 - **REACH I:** Shoaling exists in the Left Outside Quarter approximately 450 feet landward of RED LIGHTED #30 EBB and continues 315 feet landward with a maximum width of approximately 45 feet. Shoaling exists in the Left Outside Quarter along the channel's toe approximately 940 feet seaward of RED LIGHTED #34 EBB and continues 705 feet landward. Shoaling exists in the Right Outside Quarter along the channel's toe from the seaward boundary to approximately 300 feet landward. Shoaling exists in the Right Outside Quarter along the channel's toe approximately 180 feet seaward of RED LIGHTED #34 EBB and continues to the approximate location of the buoy. Shoaling exists in the Right Outside Quarter along the channel's toe for the approximately final 80 feet of the channel, extending into Reach H.
 - **REACH J:** Shoaling exists in the Left Outside Quarter approximately 820 feet landward of GREEN LIGHTED #21 EBB and continues landward approximately 1,305 feet with a maximum width of approximately 50 feet. Shoaling exists in the Left Outside Quarter approximately 145 feet landward of RED LIGHTED #24 EBB along the channel's toe and continues intermittently 4,085 feet landward with a maximum width of approximately 40 feet. A spot shoals exists in the Left Inside Quarter approximately 260 feet landward of GREEN LIGHTED #21 EBB. Shoaling exists in the Right Outside Quarter along the channel's toe approximately 1,285 feet landward of RED LIGHTED #24 EBB and continues intermittently 3,200 feet landward with a maximum width of approximately 15 feet. Shoaling exists in the Right Outside Quarter along the channel's toe for the last approximately 1,320 feet of the channel, extending into Reach I.

- **REACH K:** Shoaling exists in the Left Outside Quarter for the beginning approximately 235 feet of the reach, extending into Reach L. Shoaling exists in the Left Outside Quarter approximately 485 feet seaward of GREEN LIGHTED #13 EBB and continues 700 feet landward with a maximum width of approximately 35 feet. Shoaling exists in the left Outside Quarter approximately 1,620 feet seaward of GREEN LIGHTED #17 and continues 895 feet landward with a maximum width of approximately 40 feet. Shoaling exists in the Left Outside Quarter approximately 255 feet landward of GREEN LIGHTED #17 EBB and continues 920 feet landward with a maximum width of approximately 40 feet. Spot shoaling exists in the Left Inside Quarter approximately 575 feet landward of GREEN LIGHTED #17 EBB. Shoaling exists in the Right Outside Quarter for the first approximately 320 feet of the reach, across the width of the quarter and extends into Reach L. Shoaling exists in the Right Outside Quarter approximately 370 feet landward of RED LIGHTED #12 EBB and continues approximately 1,495 feet landward with a maximum width of approximately 115 feet. A spot shoal exists in the Right Outside Quarter along the channel's toe approximately 45 feet landward of RED LIGHTED #16 EBB. Shoaling exists in the Right Outside Quarter approximately 200 feet landward of RED LIGHTED #18 EBB and continues 560 feet landward with a maximum width of approximately 105 feet. Shoaling exists in the Right Outside Quarter approximately 160 feet landward of RED LIGHTED #24 EBB and continues landward for approximately 195 feet with a maximum width of approximately 65 feet.
- **REACH L:** Shoaling exists in the Left Outside Quarter approximately 80 feet landward of RED LIGHTED #10 EBB across the quarter's width and continues 1,230 feet landward with a maximum width of approximately 150 feet. Shoaling exists in the Left Outside Quarter for the approximately final 360 feet of the reach, extending into Reach K with a maximum width of approximately 110 feet. Shoaling exists in the Right Outside Quarter for the beginning approximately 660 feet of the reach, extending into Reach M with a maximum width of approximately 70 feet. Spot shoaling exists in the Right Outside Quarter approximately 400 feet landward of RED NUN #8 EBB. Shoaling exists in the Right Outside Quarter, and into the Right Inside Quarter, approximately 455 feet landward of RED LIGHTED #10 EBB and continues for the final 1,220 feet of the reach, extending into Reach K, with a maximum width of approximately 210 feet.
- **PARTIAL REACH M:** Spot shoaling exists in the Left Outside Quarter approximately 270 feet seaward of RED BUOY #2 W/LIGHT EBB. Shoaling exists in the Left Outside Quarter approximately 185 feet seaward of GREEN LIGHTED #5 EBB. Shoaling exists in the Right Outside Quarter approximately 445 feet seaward of RED BUOY #4 W/LIGHT EBB and continues intermittently 2,521 to the reach's landward end, extending into Reach L, with a maximum width of approximately 70 feet.