

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

DATE 25 April 2023

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 at the approximate location of RED #18 W/LIGHT EBB and continues to approximately 810 feet landward of RED #24 EBB.	File No. 5256/N1/N3, Pg. 23-25 of 25; 22-24,28 Feb & 23,24,27,30 Mar 2023	550 – 1200	1.07	50	41.5	44.8	48.5	45.8
Reach F: Begins approximately 810 feet landward of RED #24 EBB and continues to approximately 240 feet seaward of the STATEN ISLAND R.R./CONRAIL BRIDGE.	File No. 5256/N1/N3, Pg. 20-23 of 25; 22-24,28 Feb & 23,24,27,30 Mar 2023	500 – 700	0.93	50	44.4	50.3	49.6	41.0
Reach G: Begins approximately 240 feet seaward of the STATEN ISLAND R.R./CONRAIL BRIDGE and continues for approximately 4,500 feet along the centerline of the reach.	File No. 5256/N1/N3, Pg. 19-20 of 25; 22-24,28 Feb & 23,24,27,30 Mar 2023	500 – 600	0.74	40	28.1	41.2	42.6	41.5
SEAWARD is oriented towards New York Harbor in the preceding reaches and to Raritan Bay in the following reaches.								
Reach H: Begins at the approximate location of RED #36 W/LIGHT FLOOD and continues to approximately 1,610 feet landward of GREEN #43 W/LIGHT EBB.	File No. 5256/N1/N3, Pg. 15-19 of 25; 22-24,28 Feb & 23,24,27,30 Mar 2023	500 – 770	1.67	35	26.9	34.5	36.4	26.7
Reach I: Begins at the approximate location of RED #30 W/LIGHT FLOOD and continues to the approximate location of RED #36 W/LIGHT FLOOD.	File No. 5256/N1/N3, Pg. 13-15 of 25; 22-24,28 Feb & 23,24,27,30 Mar 2023	500 – 600	0.85	35	31.9	36.2	36.8	31.6
Reach J: Begins at the approximate location of GREEN #21 W/LIGHT SLACK and continues to the approximate location of RED #30 W/LIGHT FLOOD.	File No. 5256/N1/N3, Pg. 10-13 of 25; 22-24,28 Feb & 23,24,27,30 Mar 2023	500	1.66	35	32.5	34.9	35.6	33.1

<p>Reach K: Begins at the approximate location of GREEN #11 W/LIGHT SLACK and continues to the approximate location of GREEN #21 W/LIGHT SLACK.</p>	<p>File No. 5256/N1/N3, Pg. 6-10 of 25; 22-24,28 Feb & 23,24,27,30 Mar 2023</p>	500 – 850	1.82	35	25.7	34.4	35.0	24.6
<p>Reach L: Begins approximately 80 feet landward of GREEN #5 W/LIGHT SLACK and continues to the approximate location of GREEN #11 W/LIGHT SLACK.</p>	<p>File No. 5256/N1/N3, Pg. 4-6 of 25; 22-24,28 Feb & 23,24,27,30 Mar 2023</p>	600 – 800	0.80	35	32.8	35.8	35.5	32.4

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 40 to 35 feet.

ARTHUR KILL:

- **REACH D:** Shoaling exists in the Right Outside Quarter extending into the Right Inside Quarter and in the Left Outside Quarter extending into the Left Inside Quarter. The controlling depth of -41.5 feet MLLW exists near the toe of the channel in Left Outside Quarter, approximately 1,990 feet landward of GREEN #19 W/LIGHT EBB.
- **REACH F:** Major shoaling exists in the Right Outside and Left Outside Quarters. The controlling depth of -41.0 feet MLLW exists along the toe of the channel in the Right Outside Quarter, approximately 2,720 feet seaward from the landward end of this reach.
- **REACH G:** Shoaling exists along the channel's toe in the Left Outside Quarter. The controlling depth of -28.1 feet MLLW exists along the toe of the channel in the Left Outside Quarter, approximately 840 feet landward of the beginning of this reach.
- **REACH H:** Sporadic shoaling exists along the channel's toe in the Left Outside and Right Outside Quarter. The controlling depth of -26.7 feet MLLW exists along the toe of the channel in the Left Outside Quarter, approximately 560 feet landward of RED #38 W/LIGHT FLOOD.
- **REACH I:** Sporadic shoaling exists along the channel's toe in the Left Outside and Right Outside Quarter.-The controlling depth of -31.6 feet MLLW exists along the toe of the channel in the Right Outside Quarter, at the approximate location of RED #36 W/LIGHT FLOOD.
- **REACH J:** Edge shoaling exists in the Left Outside Quarter and the Right Outside Quarter. The controlling depth of -32.5 feet MLLW exists along the toe of the channel in the Left Outside Quarter approximately 665 feet landward of RED #24 W/LIGHT FLOOD.
- **REACH K:** Small area of shoaling exists in the Left Inside Quarter near the landward end of the reach. Shoaling exists in the Left Outside Quarter and the Right Outside Quarter of this reach. The controlling depth of -24.3 feet MLLW exists along the toe of the channel in the Right Outside Quarter, approximately 165 feet seaward of RED #18 W/LIGHT FLOOD.
- **REACH L:** Sporadic shoaling exists along the channel's toe of Left Outside Quarter and the Right Outside Quarter. The controlling depth of -32.4 feet MLLW exists along the toe of the channel in the Left Outside Quarter, at the approximate location of RED #10 W/LIGHT FLOOD.

