

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

PAGE 1 OF 4

DATE 31 May 2016

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; Outerbridge Reach to Gulfport Reach

**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)	
Partial Outerbridge Reach (Reach M): Survey coverage begins approximately 975 feet landward of RED #2 W/LIGHT FLOOD and extends to approximately 50 feet seaward of GREEN LIGHTED #5 EBB.	Map 1385, Pg 2 – 4 of 22; 22,30-DEC-2015; 4,11-13,19,21,22-JAN & 1,8-FEB-2016	600 - 800	1.02	35	34.3	34.8	35.8	32.2
Port Secony Reach (Reach L): Begins approximately 50 feet seaward of GREEN LIGHTED #5 EBB and extends to a point approximately 60 feet landward of GREEN LIGHTED #21 EBB	Map 1385, Pg 4 – 5 of 22; 22,30-DEC-2015; 4,11-13,19,21,22-JAN & 1,8-FEB-2016	600 - 800	0.84	35	32.9	35.0	34.9	32.4
Port Reading Reach (Reach K): Begins at a point approximately 60 feet landward of GREEN LIGHTED #11 EBB and extends to approximately 10 feet landward of GREEN LIGHTED #21 FLOOD	Map 1385, Pg 5 – 9 of 22; 22,30-DEC-2015; 4,11-13,19,21,22-JAN & 1,8-FEB-2016	500 - 850	1.79	35	31.7	34.5	34.0	22.3
Fresh Kills Reach (Reach J): Begins at approximately 10 feet landward of GREEN LIGHTED #21 FLOOD and extends to a point approximately 50 feet seaward of RED LIGHTED #30 EBB	Map 1385, Pg 9 – 12 of 22; 22,30-DEC-2015; 4,11-13,19,21,22-JAN & 1,8-FEB-2016	500	1.65	35	33.5	35.0	35.0	32.6
Tremley Point Reach (Reach I): Begins approximately 60 feet seaward of RED LIGHTED #30 EBB and extends to a point approximately 20 feet landward of RED LIGHTED #36 EBB	Map 1385, Pg 12 – 14 of 22; 22,30-DEC-2015; 4,11-13,19,21,22-JAN & 1,8-FEB-2016	500 - 600	0.84	35	32.6	36.8	35.8	31.7
Pralls Island Reach (Reach H): Begins at a point approximately 20 feet landward of RED LIGHTED #36 EBB and extends to GOETHALS BRIDGE.	Map 1373, Pg 14 – 16 of 22; 22,30-DEC-2015; 4,11-13,19,21,22-JAN & 1,8-FEB-2016	500 - 770	1.15	35	31.3	33.9	36.1	27.1
Gulfport Reach (Reach G): Begins at GOETHALS BRIDGE and extends to a point approximately 190 feet landward of the Staten Island R.R./Conrail Bridge	Map 1385, Pg 16 – 18 of 22; 22,30-DEC-2015; 4,11-13,19,21,22-JAN & 1,8-FEB-2016	600 - 500	1.21	35	33.0	36.0	36.4	29.8

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New York, NY 10278-0090

RIVER/HARBOR NAME AND STATE: New York and New Jersey Channels;
Arthur Kill; North of Shooters Island Reach and Elizabethport Reach, 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)	
Elizabeth Port Reach (Reach F): From a point approximately 190 feet landward of the Staten Island R.R./Conrail Bridge, to a point approximately 820 feet seaward of RED #24 NUN FLOOD	Map 1385, Pg 18 – 20 of 22; 22,30-DEC-2015; 4,11-13,19,21,22-JAN & 1,8-FEB-2016	500 - 700	0.94	50	51.3	50.2	52.0	50.2
North of Shooters Island Reach (Reach D): From a point approximately 820 feet seaward of RED #24 NUN FLOOD to a point approximately 190 feet seaward of GREEN #19 W/LIGHT EBB	Map 1385, Pg 20 – 22 of 22; 22,30-DEC-2015; 4,11-13,19,21,22-JAN & 1,8-FEB-2016	570 - 940	1	50	50.7	51.4	50.8	50.3

REMARKS:

- All reported depths are relative to C.O.E. Mean Low Water (MLW) datum.
- Channel reach lengths are in nautical miles.
- For the purpose of this report, seaward is oriented toward the Raritan River and landward is toward the Arthur Kill.

CHANNEL SHOALING:

- **Partial Outerbridge Reach (Reach M):**
 - A spot shoal is present in the Left Outside Quarter commencing approximately 110 feet seaward of RED #2 W/LIGHT FLOOD and extends approximately 160 feet landward with a maximum width of 50 feet.
 - Intermittent shoaling exists along the toe of the Left Outside Quarter throughout the reach.
 - Spot shoaling is present in the Left Inside and Left Outside Quarters at the approximate location of Outerbridge.
 - There is a spot shoal along the toe of the Right Outside Quarter approximately 60 feet seaward of RED #2 W/LIGHT.
 - Shoaling along the toe of the Right Outside Quarter begins approximately 590 feet seaward of RED #4 W/LIGHT FLOOD and continues to approximately 130 feet landward of RED LIGHTED #6 EBB (in REACH L).
- **Port Secony Reach (Reach L):**
 - Shoaling exists in the Left Outside Quarter beginning approximately 210 feet landward of RED LIGHTED #10 EBB, covering the majority of the width of the quarter, thence tapers off to end approximately 600 feet seaward of GREEN LIGHTED #11 EBB.
 - Sporadic spot shoaling exist in the Left Outside Quarter starting approximately 120 feet seaward of GREEN LIGHTED #11 EBB and ends approximately 420 feet landward of same buoy (in REACH K).
 - Spot shoaling exists in the Right Outside Quarter between RED NUN #8 EBB and RED LIGHTED #10 EBB.
 - Shoaling exists in the Right Outside Quarter starting approximately 470 feet landward of RED LIGHTED #10 EBB and ends at the approximate location of RED LIGHTED #12 EBB (in REACH K).

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REMARKS:

- All reported depths are in reference to C.O.E. Mean Low Water (MLW) datum.
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CHANNEL SHOALING (continued):

• **Port Reading Reach (Reach K):**

- Shoaling exists in the Right Outside Quarter starting approximately 375 feet landward of RED LIGHTED #12 EBB and ends approximately 270 feet seaward of RED NUN #14A EBB.
- Sporadic spot shoaling exists along the toe of the Right Outside Quarter starting approximately 610 feet landward of RED NUN #14A and ends at the approximate location of RED LIGHTED #16 FLOOD.
- Shoaling exists in the Right Outside Quarter starting approximately 90 feet landward of RED LIGHTED #20 FLOOD and ends approximately 370 feet landward of the same buoy, having a maximum width of approximately 80 feet.
- Shoaling exists in the Right Outside Quarter, along the toe, starting approximately 300 feet seaward of RED LIGHTED #18 FLOOD and ends approximately 300 feet seaward of RED LIGHTED #20 FLOOD.
- Shoaling exists in the Right Outside Quarter starting at the approximate location of RED LIGHTED #18 FLOOD and ends approximately 320 feet seaward of RED LIGHTED #20 FLOOD.
- Shoaling exists in the right Outside Quarter beginning approximately 100 feet landward of RED LIGHTED #20 FLOOD and continues approximately 225 feet landward, having a maximum width of approximately 80 feet.
- Spot shoaling exists in the Left Inside Quarter starting at the approximate location of GREEN LIGHTED #17 FLOOD and continues approximately 500 feet landward. Shoaling exists in the Left Inside Quarter starting approximately 130 feet seaward of GREEN LIGHTED #21 FLOOD and ends at the approximate location of same buoy.
- Shoaling exists in the Left Outside Quarter, along the toe, starting approximately 530 feet seaward of GREEN LIGHTED #13 EBB and ends approximately 240 feet landward of the same buoy.
- Intermittent shoaling exists along the channel's toe in the Left Outside Quarter starting approximately 210 feet landward of GREEN LIGHTED #17 FLOOD and ends approximately 40 feet seaward of GREEN LIGHTED #21 FLOOD.

• **Fresh Kills Reach (Reach J):**

- Intermittent shoaling exists along the tow of the channel in the Left Outside Quarter beginning approximately 860 feet landward of GREEN LIGHTED #21 FLOOD continuing approximately 7,000 feet landward, having a maximum width of 35 feet.
- There is spot shoaling in the Right Outside Quarter located approximately 425 feet seaward of RED #24 EBB with a maximum width of 30 feet.
- Shoaling exists in Right Outside Quarter along the channel's toe starting approximately 1,065 feet landward of RED LIGHTED #24 EBB and ends approximately 530 feet landward of RED LIGHTED #30 EBB (in Reach I).

• **Tremley Point Reach (Reach I):**

- Shoaling exists in the Left Outside Quarter starting approximately 475 feet landward of RED LIGHTED #30 EBB and continues approximately 375 feet seaward, having a maximum width of approximately 60 feet.
- Spot shoaling exists along the toe of the Left Outside Quarter starting approximately 450 feet landward of RED LIGHTED #32 EBB and continues approximately 720 feet landward of the same buoy.
- Shoaling exists along toe in the Left Outside Quarter starting approximately 1215 feet landward of RED LIGHTED #32 EBB and ends approximately 200 feet seaward of RED LIGHTED #34 EBB.
- Shoaling exists along the toe in the Right Outside Quarter starting approximately 85 feet seaward of RED LIGHTED #34 EBB and ends approximately 75 feet landward of same buoy.
- Shoaling exists along the toe of the Right Outside Quarter starting approximately 445 feet landward of RED LIGHTED #34 EBB and ending approximately 565 feet landward of the same buoy.
- Shoaling exists in the Right Outside Quarter starting approximately 55 feet seaward of RED LIGHTED #36 EBB and ends approximately 150 feet landward of the same buoy (in Reach H).

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CHANNEL SHOALING (continued):

- **Pralls Island Reach (Reach H):**

- Spot shoaling exists in the throughout the Right Outside Quarter starting approximately 180 feet landward of RED LIGHTED #36 EBB and ends approximately 575 feet seaward of RED LIGHTED #38 EBB.
- Shoaling exists in the Right Outside Quarter and starts approximately 345 feet landward of RED LIGHTED #38 EBB and ends approximately 1160 feet landward of same buoy, having a maximum width of approximately 70 feet.
- Shoaling exists along the toe in the Right Outside Quarter beginning approximately 755 feet seaward of the Goethals Bridge and continues approximately 415 feet landward, having a maximum width of approximately 40 feet.
- Shoaling exists in the Left Inside Quarter starting approximately 340 feet landward of the beginning of the reach and ends approximately 600 feet seaward of RED LIGHTED #38 EBB.
- Shoaling exists in the Left Outside Quarter starting approximately 180 feet landward of RED LIGHTED #36 EBB and ends approximately 790 feet landward of same buoy.
- Shoaling exists in the Left Outside Quarter, along the toe, starting approximately 225 feet landward of RED LIGHTED #36 and ends approximately 670 feet landward of same buoy.
- Shoaling exist in the Left Outside Quarter and starts approximately 470 feet landward of RED LIGHTED #38 EBB and ends approximately 940 feet landward of the same buoy.
- Shoaling exists along the toe of the Left Outside Quarter and starts approximately 1910 feet landward of RED LIGHTED #38 EBB and end approximately 1500 feet landward of GREEN LIGHT #43 FLOOD (in Reach G).

- **Gulfport Reach (Reach G):**

- Shoaling exists along the toe in the Right and Left Outside Quarters starting approximately 250 feet landward of the Goethals Bridge and continues approximately 3,050 feet landward, having a maximum width of approximately 80 feet.

- **Elizabeth Port Reach (Reach F):**

- There is no shoaling in this reach.

- **North of Shooters Island Reach (Reach D):**

- There is no shoaling in this reach.

