

| REPORT OF CHANNEL CONDITIONS 400 FEET WIDE OR GREATER | | | | | | PAGE 1 OF 5 | | |
|---|---|--------------------|------------------|--------------|--|----------------------------|-----------------------------|------------------------------|
| | | | | | | DATE 10 July 2015 | | |
| 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 940 feet seaward of RED #2 W/LIGHT FLOOD and extends to approximately 130 feet seaward of GREEN #5 W/LIGHT FLOOD | Map 1373, Pg 2 – 4 of 22; 14-15, 28-29 JAN, 4, 18 FEB 2015 | 600 - 800 | 1.09 | 35 | 29.6 | 34.5 | 35.8 | 32.4 |
| Port Secony Reach (Reach L): Begins approximately 130 feet seaward of GREEN #5 W/LIGHT FLOOD and extends to a point approximately 40 feet landward of GREEN #11 W/LIGHT EBB | Map 1373, Pg 4 – 5 of 22; 14-15, 28-29 JAN, 4, 18 FEB 2015 | 600 - 800 | 0.81 | 35 | 31.9 | 35.0 | 35.2 | 32.8 |
| Port Reading Reach (Reach K): Begins at a point approximately 40 feet landward of GREEN #11 W/LIGHT EBB and extends to approximately 50 feet landward of GREEN #21 W/LIGHT EBB | Map 1373, Pg 5 – 9 of 22; 14-15, 28-29 JAN, 4, 18 FEB 2015 | 500 - 850 | 1.75 | 35 | 31.9 | 34.8 | 34.8 | 24.4 |
| Fresh Kills Reach (Reach J): Begins at approximately 50 feet landward of GREEN #21 W/LIGHT EBB and extends to a point approximately 30 feet seaward of RED #30 w/LIGHT FLOOD | Map 1373, Pg 9 – 12 of 22; 14-15, 28-29 JAN, 4, 18 FEB 2015 | 500 | 1.60 | 35 | 29.0 | 35.0 | 35.9 | 32.7 |
| Tremley Point Reach (Reach I): Begins approximately 30 feet seaward of RED #30 w/LIGHT FLOOD and extends to a point approximately 110 feet landward of RED #36 w/LIGHT FLOOD | Map 1373, Pg 12 – 14 of 22; 14-15, 28-29 JAN, 4, 18 FEB 2015 | 500 - 600 | 0.79 | 35 | 29.5 | 37.0 | 35.9 | 33.2 |
| Pralls Island Reach (Reach H): Begins at a point approximately 110 feet landward of RED #36 w/LIGHT FLOOD and extends to a point approximately 800 feet seaward of GREEN #43 w/LIGHT EBB | Map 1373, Pg 14 – 16 of 22; 14-15, 28-29 JAN, 4, 18 FEB 2015 | 500 - 770 | 1.19 | 35 | 31.6 | 34.7 | 35.3 | 27.8 |
| Gulfport Reach (Reach G): Begins at a point approximately 800 feet seaward of GREEN #43 w/LIGHT EBB and extends to a point approximately 190 feet seaward of the Staten Island R.R./Conrail Bridge | Map 1373, Pg 16 – 18 of 22; 14-15, 28-29 JAN, 4, 18 FEB 2015 | 600 - 500 | 1.10 | 35 | 30.6 | 36.6 | 36.7 | 21.7 |

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|--|---|--------------------|---------------------|-----------------|---|-------------------------------------|--------------------------------------|---------------------------------------|
| | | | | | | DATE 10 July 2015 | | |
| 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; North of Shooters Island Reach and Elizabethport Reach, NY & NJ | | | | | MINIMUM DEPTHS IN CHANNEL ENTERING FROM SEAWARD | | | |
| NAME OF CHANNEL | DATE OF SURVEY | AUTHORIZED PROJECT | | | LEFT OUTSIDE QUARTER (feet) | LEFT INSIDE QUARTER (feet) | RIGHT INSIDE QUARTER (feet) | RIGHT OUTSIDE QUARTER (feet) |
| | | WIDTH (feet) | LENGTH (n miles) | DEPTH (feet) | | | | |
| Elizabethport Reach (Reach F): From a point approximately 190 feet seaward of the Staten Island R.R./Conrail Bridge, to a point approximately 190 feet seaward of RED #24 NUN EBB | Map 1373, Pg 18 – 20 of 22; 14-15, 28-29 JAN, 4, 18 FEB 2015 | 500 - 700 | 0.96 | 50 | 51.7 | 52.3 | 52.5 | 50.8 |
| North of Shooters Island Reach (Reach D): From a point approximately 190 feet seaward of RED #24 NUN EBB to a point approximately 170 feet landward of GREEN #19 W/LIGHT EBB | Map 1373, Pg 20 – 22 of 22; 14-15, 28-29 JAN, 4, 18 FEB 2015 | 570 - 940 | 0.93 | 50 | 51.3 | 51.9 | 51.8 | 51.7 |
| REMARKS: <ul style="list-style-type: none"> All reported depths are in reference to C.O.E. Mean Low Water (MLW) datum. Channel reach lengths are in nautical miles. | | | | | | | | |
| CHANNEL SHOALING: <ul style="list-style-type: none"> Partial Outerbridge Reach (Reach M): <ul style="list-style-type: none"> - A spot shoal is present between the Left Outside Quarter (LOQ) and Left Inside Quarter (LIQ) commencing approximately 500 feet seaward of RED #2 W/LIGHT FLOOD and extending approximately 115 feet landward with a maximum width of 50 feet. - There is an uncharted obstruction at the center of the LIQ approximately 700 feet landward from RED #2 W/LIGHT FLOOD. - There is shoaling in the LOQ along the toe of the channel beginning approximately 450 feet seaward from the Outerbridge Crossing with an approximate length of 90 feet & 15 feet in width. - There is shoaling in the LOQ along the toe of the channel beginning approximately 90 feet seaward from the Outerbridge Crossing with an approximate length of 30 feet & 15 feet in width. - There is intermittent shoaling in the LOQ along the toe of the channel beginning approximately 630 feet and 650 landward from the Outerbridge Crossing with an approximate width of 12 feet. - There is spot shoaling along the toe of the channel in the Right Outside Quarter (ROQ) beginning approximately 510 feet seaward from RED #4 W/LIGHT FLOOD, extending 60 feet into the center of the ROQ from the toe and ending at approximately 75 feet seaward from RED #4 W/LIGHT FLOOD. - There is shoaling along the toe of the channel in the LOQ beginning approximately 235 feet seaward from GREEN #5 W/LIGHT FLOOD and ending at approximately 45 feet seaward from GREEN #5 W/LIGHT FLOOD with a width of 13 feet. - There is shoaling along the toe of the channel on the ROQ beginning approximately 550 feet landward of RED #4 W/LIGHT FLOOD with a width of 55 feet and extending in to Reach L approximately 150 feet landward from RED #6 W/LIGHT SLACK. Port Secony Reach (Reach L): <ul style="list-style-type: none"> - There is shoaling along the toe of the channel on the ROQ beginning approximately 550 feet landward of RED #4 W/LIGHT FLOOD with a maximum width of 40 feet in REACH L and ending approximately 150 feet landward from RED #6 W/LIGHT SLACK. - There is spot shoaling in the ROQ along the toe of the channel and extending as much as 45 feet in to the ROQ from the channel toe beginning approximately 60 feet landward from RED #8 W/LIGHT SLACK and ending at about approximately 97 feet seaward from RED #10 W/LIGHT SLACK. - There is a small spot shoal in the LOQ at about approximately 168 feet seaward from RED #10 W/LIGHT SLACK. - There is intermittent shoaling with a maximum width of approximately 120 feet in the LOQ beginning approximately 238 feet landward from RED #10 W/LIGHT SLACK and extending to approximately 640 feet seaward from GREEN #11 W/LIGHT EBB. | | | | | | | | |

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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:

• **Port Secony Reach (Reach L) (continued):**

- There is shoaling along the toe of the channel in the ROQ starting approximately 810 feet seaward from GREEN #11 W/LIGHT EBB and ending at approximately 718 feet seaward from GREEN #11 W/LIGHT EBB with a width of approximately 17 feet.
- There is minor shoaling along the toe of the channel in the ROQ starting from approximately 221 feet seaward from GREEN #11 W/LIGHT EBB and ending approximately 142 feet seaward from GREEN #11 W/LIGHT EBB.
- There is a small spot shoal in the LOQ located approximately 37 feet landward from GREEN #11 W/LIGHT EBB.
- There is minor shoaling along the toe of the channel in the LOQ beginning approximately from 18 feet landward of GREEN #11 W/LIGHT EBB extending approximately 30 feet landward.

• **Port Reading Reach (Reach K):**

- There is edge shoaling approximately 10 feet wide and spot shoaling in the LOQ starting approximately 18 feet landward from GREEN #11 W/LIGHT EBB and ending approximately 360 feet landward from GREEN #11 W/LIGHT EBB.
- There is spot shoaling in the ROQ approximately 290 feet and 265 feet seaward from RED #12 W/LIGHT EBB with a maximum width of approximately 12 feet.
- There is a spot shoal at the approximate location of RED #12 W/LIGHT EBB.
- There is shoaling with an approximate width of 5 feet in the Right Inside Quarter (RIQ) starting approximately 275 feet seaward and ending approximately 245 feet seaward from RED #12 W/LIGHT EBB.
- There is intermittent shoaling in the ROQ along the toe of the channel beginning approximately 300 feet landward from RED #12 W/LIGHT EBB and extending to approximately 410 feet seaward from RED NUN #14A EBB.
There is shoaling with a width of approximately 55 feet along the toe of the channel in the LOQ starting approximately 440 feet seaward from GREEN #13 W/LIGHT EBB and ending approximately 270 feet landward from GREEN #13 W/LIGHT EBB.
- There is shoaling located at the toe of the channel and the center of the ROQ approximately 640 feet landward from RED NUN #14A EBB and ending 920 feet landward from RED NUN #14A EBB.
- There is shoaling in the ROQ along the toe of the channel beginning approximately 1700 feet seaward from RED #16 W/LIGHT FLOOD and ending approximately 30 feet landward from the aforementioned buoy.
- There is a small area of spot shoaling located at the center of the ROQ at approximately 670 feet landward of RED #16 W/LIGHT FLOOD and extending to 735 feet landward of RED #16 W/LIGHT FLOOD.
- There is shoaling along the toe of the channel on the LOQ beginning approximately 1685 feet seaward of RED #17 W/LIGHT EBB and ending approximately 725 feet seaward of the aforementioned buoy.
- There is shoaling along the toe of the channel in the ROQ located approximately 70 feet landward from RED #18 W/LIGHT EBB to approximately 690 feet landward of RED #18 W/LIGHT EBB with a width of approximately 110 feet.
- There is shoaling along the tow of the channel in the LOQ beginning approximately 140 feet landward of RED #17 W/LIGHT EBB and extending 335 feet landward of the aforementioned buoy.
- There is shoaling with an approximate width of 10 feet in the center of the LIQ starting approximately 500 feet landward of RED #17 W/LIGHT EBB and ending approximately 635 feet landward of the aforementioned buoy.
- There is spot shoaling in ROQ located approximately 240 feet seaward of GREEN #21 W/LIGHT EBB.
- There is intermittent shoaling along the toe of the channel in the LOQ approximately 530 feet seaward of GREEN #21 W/LIGHT EBB and ending approximately 10 feet seaward of GREEN #21 W/LIGHT EBB.
- There is shoaling with an approximate width of 80 feet in the ROQ beginning approximately 120 feet landward of RED #20 W/LIGHT EBB and extending 400 feet landward of RED #20 W/LIGHT EBB.
There is also spot shoaling located in the LIQ at about the same location of GREEN #21 W/LIGHT EBB.

• **Fresh Kills Reach (Reach J):**

- There is intermittent shoaling along the tow of the channel of the LOQ beginning approximately 450 feet landward of GREEN #21 W/LIGHT EBB and extending to approximately 2210 feet landward of the aforementioned buoy with a maximum width of 18 feet.
- There is spot shoaling in the ROQ located approximately 375 feet seaward of RED #24 W/LIGHT EBB with a maximum width of 30 feet.

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CHANNEL SHOALING (continued):

- Fresh Kills Reach (Reach J) (continued):**
 - There is intermittent shoaling along the edge of the channel toe in the LOQ beginning approximately 175 feet seaward of RED #24 w/LIGHT EBB and extending to approximately 2250 feet seaward from RED #30 w/LIGHT FLOOD with a width of approximately 55 feet.
 - There is shoaling along the toe of the channel of the ROQ beginning approximately 1315 feet landward of RED #24 w/LIGHT EBB and extending to same location of RED #30 w/LIGHT FLOOD with a width of approximately 45 feet.
- Tremley Point Reach (Reach I):**
 - There is shoaling along the toe of the channel in the ROQ beginning approximately 40 feet seaward of RED #30 w/LIGHT FLOOD and extending approximately 535 feet landward from the aforementioned buoy.
 - There is shoaling along the toe of the channel in the LOQ starting from approximately 500 feet landward of RED #30 w/LIGHT FLOOD and extending to 800 feet landward of the aforementioned buoy with a width of approximately 60 feet.
 - There is spot shoaling in the LOQ beginning approximately 490 feet landward from RED #32 w/LIGHT FLOOD and extending to approximately 890 feet landward of the aforementioned buoy with a width of 22 feet.
 - There is shoaling along the toe of the channel in the LOQ with a width of approximately 25 feet starting at approximately 1220 feet seaward of RED #34 w/LIGHT FLOOD and ending approximately 500 feet seaward of RED #34 w/LIGHT FLOOD.
 - There is shoaling along the toe of the channel in the ROQ beginning approximately 400 feet landward of RED #34 w/LIGHT FLOOD and extending approximately 110 feet landward.
- Pralls Island Reach (Reach H):**
 - There is spot shoaling along the center of the LIQ beginning approximately 600 feet landward from RED #36 W/LIGHT and extending to 1050 feet landward from RED #36 w/LIGHT with a maximum width of 40 feet.
 - There is shoaling along the toe of the channel in the LOQ beginning approximately 600 feet landward of RED #36 w/LIGHT FLOOD and extending to approximately 1120 feet landward from the aforementioned buoy.
 - There is a small spot shoal in the ROQ approximately 610 feet landward from RED #36 w/LIGHT FLOOD.
 - There is shoaling along the toe of the channel beginning approximately 750 feet landward of RED #36 w/LIGHT FLOOD and ending approximately 1400 feet landward from the aforementioned buoy.
 - There is spot shoaling along the toe of the channel in the LOQ beginning approximately 640 feet landward of RED #38 w/LIGHT FLOOD and ending at about approximately 940 feet landward of the aforementioned buoy.
 - There is shoaling in the ROQ along the toe of the channel starting about 420 feet landward of RED #38 w/LIGHT FLOOD and extending to approximately 1450 feet landward of the aforementioned buoy with a width of 70 feet.
 - There is shoaling along the toe of the channel in the LOQ starting approximately 2180 feet landward of RED #38 w/LIGHT FLOOD and ending approximately 800 feet seaward of GREEN #43 w/LIGHT EBB at the reach's landward end with a width of approximately 60 feet.
 - There is shoaling along the toe of the channel in the ROQ starting approximately 1480 feet seaward of GREEN #43 w/LIGHT EBB and extending to the reach's landward end located approximately 800 feet seaward of GREEN #43 w/LIGHT EBB.
 - There is shoaling with a maximum width of approximately 40 feet in the ROQ along the toe of the channel starting approximately 2550 feet seaward of GREEN #43 w/LIGHT EBB and extending approximately 400 feet landward.
- Gulfport Reach (Reach G):**
 - There is shoaling along the toe of the channel in the ROQ beginning from the reach's seaward end located approximately 800 feet seaward of GREEN #43 w/LIGHT EBB and extending to approximately 1590 feet landward from the aforementioned buoy with a width of 70 feet.

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CHANNEL SHOALING (continued):

- **Gulfport Reach (Reach G) (continued):**
 - There is shoaling along the toe of the channel in the LOQ beginning from the reach's seaward end located approximately 800 feet seaward of GREEN #43 w/LIGHT EBB and extending to approximately 1445 feet landward from the aforementioned buoy with a width of approximately 45 feet.
 - There is spot shoaling along the center of the LOQ beginning approximately 775 feet seaward of GREEN #43 w/LIGHT EBB and extending to 120 feet landward from the aforementioned buoy with a width of approximately 20 feet.
 - There is shoaling along the toe of the channel in the LOQ starting at approximately 1230 feet seaward of the Goethals Bridge and ending approximately 340 feet seaward from the aforementioned bridge.
 - There is spot shoaling in the center of the ROQ located approximately from approximately 540 feet seaward from the Goethals Bridge and extending to approximately 460 feet seaward from the aforementioned bridge.
 - There is shoaling along the toe of the channel in the ROQ starting at approximately 950 feet seaward of the Goethals Bridge and extending all the way to approximately 110 feet landward of the SIRR/CONRAIL Bridge with a width of approximately 30 feet.
- **Elizabethport Reach (Reach F):**
 - There is no shoaling in this reach.
- **North of Shooters Island Reach (Reach D):**
 - There is no shoaling in this reach.