## REPORT OF CHANNEL CONDITIONS 400 FEET WIDE OR GREATER

 PAGE
 1
 OF
 3

 DATE
 30 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:

NY & NJ Channels, Vicinity of Outerbridge to Seguine Point Bend and Raritan Bay Reaches

MINIMUM DEPTHS IN EACH ¼ WIDTH OF CHANNEL ENTERING FROM SEAWARD

		AUTHO	RIZED PRO	JECT	LEFT OUTSIDE QUARTER (feet)	MID-CHANNEL		RIGHT
NAME OF CHANNEL	DATE OF SURVEY	WIDTH (feet)	LENGTH (nmiles)	<b>DEPTH</b> (feet)		LEFT INSIDE QUARTER (feet	RIGHT INSIDE QUARTER (feet)	OUTSIDE QUARTER (feet)
Reach S – Raritan Bay Reach East: From a point approximately 280 feet landward of GREEN LIGHT #1 to a point approximately 50 feet seaward of RED LIGHT #14	File 1379; Pg 3-6 of 6; 9, 13-16 Apr 2015	600-800	4.06	35	32.2	38.7	37.9	33.3
Reach R – Raritan Bay Reach West: From a point approximately 50 feet seaward of RED LIGHT #14 to approximately 40 feet seaward of GREEN LIGHT #27	File 1379; Pg 1-3 of 6; 9, 13-16 Apr 2015	600	2.42	35	31.5	39.7	39.8	30.7
Reach Q – Seguine Point Bend Reach: From approximately 40 feet seaward of GREEN LIGHT #27 to a point approximately 80 feet seaward of GREEN LIGHT #35	File 1379; Pg 1 of 6; 9, 13-16 Apr 2015 File 1377; Pg 5 of 5; 23-25, 31 Mar, 1,2,6 Apr 2015	600- 1000	.82	35	34.1	35.5	35.1	20.5
Reach P – Red Bank Reach: From approximately 80 feet seaward of GREEN LIGHT #35 to approximately GREEN LIGHT #47	File 1377; Pg 4 & 5 of 5; 23-25, 31 Mar, 1, 2, 6 Apr 2015	600	1.23	35	33.1	40.5	40.7	34.2
Reach O – Ward Point Bend East Reach: From approximately GREEN LIGHT #47 to approximately 60 feet landward of RED LIGHT #56	File 1377; Pg 3 & 4 of 5; 23-25, 31 Mar, 1, 2, 6 Apr 2015	600-800	1.13	35	28.0	39.3	36.0	26.5
Reach N – Ward Point Bend West Reach: From approximately 60 feet landward of RED LIGHT #56 to a point approximately 4,000 feet seaward of RED LIGHT #2	File 1377; Pg 2 & 3 of 5; 23-25, 31 Mar, 1, 2, 6 Apr 2015	600-800	1.35	35	32.5	34.5	33.2	31.8
Partial Reach M – Outerbridge Reach: From a point approximately 4,000 feet seaward of RED LIGHT #2 to approximately 500 feet landward of RED LIGHT #4	File 1377; Pg 1 & 2 of 5; 23-25, 31 Mar, 1, 2, 6 Apr 2015	600-840	1.16	35	19.6	34.9	35.9	33.0

### REPORT OF CHANNEL CONDITIONS 400 FEET WIDE OR GREATER

PAGE	2	OF	3
DATE		30 July 20	015

#### **REMARKS:**

- Depths for Reaches M, N, O, P and Q (Survey File 1377) are relative to Mean Low Water (MLW) datum.
- Depths for Reaches R and S (Survey File 1379) are relative to Mean Lower Low Water (MLLW) datum.
- Channel reach lengths are in nautical miles.
- Partial survey coverage exists for reach M.

#### SHOALING BY REACHES:

- o **Reach S:** Shoaling exists in the Right Outside Quarter at approximate location of RED LIGHT #14 and continues seaward ending at approximately 110 feet landward of RED NUN #12. Scattered shoaling along the channel's toe also exists on the Right Outside Quarter starting at approximately 2180 feet seaward of RED LIGHT #10 and continuing to the end of the reach at approximately 80 feet seaward of GREEN LIGHT #1 having a maximum width of approximately 120 feet. Shoaling commences along the channel toe line of the Left Outside Quarter from approximately 1900 feet landward of GREEN LIGHT #1 continuing seaward for the remainder of the reach which ends approximately 80 feet seaward of GREEN LIGHT #1.
- o **Reach R:** Shoaling with a maximum width of approximately 80 feet exists along the toe of the channel in the Right Outside Quarter commencing approximately 900 feet seaward from GREEN LIGHT #27 and extending to the end of the reach at approximately 50 feet seaward from RED LIGHT #14. Shoaling with a maximum width of approximately 90 feet commences in the Left Outside Quarter approximately 110 feet seaward of GREEN LIGHT #27 FLOOD and continues seaward ending approximately 1130 feet seaward of RED LIGHT #18.
- Reach Q: Shoaling with a maximum width of approximately 60 feet exists along the toe of the channel in the Right Outside Quarter starting at approximately 220 feet landward of GREEN LIGHT #31 EBB and continuing seaward to approximately 440 feet landward of RED LIGHT #30 W/BELL FLOOD. Scattered minor shoaling exists in the Left Outside Quarter starting at approximately 160 feet seaward of GREEN LIGHT #35 EBB and continuing seaward to approximately 130 feet landward of GREEN LIGHT #27 FLOOD.
- Reach P: Scattered shoaling exists in the Right Outside Quarter starting at approximately 260 feet landward of RED NUN #40 EBB and continuing seaward to approximate location of RED LIGHT #36 EBB. Scattered shoaling exists along the toe of the channel in the Left Outside Quarter starting at approximately 50 feet seaward of GREEN LIGHT #47 FLOOD and continuing seaward to approximately 1340 feet seaward of GREEN LIGHT #47 FLOOD. Spot shoaling exists along the toe of the channel in the Left Outside Quarter starting at approximately 270 feet landward of RED LIGHT #36 EBB and continuing seaward to end of the reach at approximately 80 feet seaward of GREEN LIGHT #35 EBB.
- Reach O: Sporadic shoaling along the channel's toe, having a maximum width of approximately 110 feet, exists in the Right Outside Quarter starting at approximately 50 feet landward of RED LIGHT #56 FLOOD and continuing seaward to approximately 580 feet seaward of JUNCTION BUOY 'E' FLOOD. Scattered shoaling with a maximum width of approximately 70 feet exists in the Left Outside Quarter starting at approximately 190 feet landward of GREEN LIGHT #53 FLOOD and continuing seaward to approximately 60 feet landward of GREEN LIGHT #47 FLOOD.
- Reach N: Uncharted obstruction exists in the Left Inside Quarter approximately 2400 feet landward of RED NUN #60 FLOOD. Sporadic shoaling with a maximum width of approximately 40 feet exists along the toe of the channel in the Right Outside Quarter starting at approximately 2600 feet landward of RED NUN #60 FLOOD and continuing seaward to approximately 20 feet landward of RED NUN #60 FLOOD. Shoaling commences at approximately 320 feet seaward of RED NUN #60 and extends seaward with a maximum width of 330 feet in the Right Outside Quarter, Right Inside Quarter and extending briefly into the Left Inside Quarter before tapering off to a point at the toe of the channel in the Right Outside Quarter approximately 340 feet landward of RED LIGHT #56 FLOOD. Shoaling with a maximum width of approximately 40 feet exists along the toe of the channel in the Left Outside Quarter starting approximately 1500 feet landward of RED NUN #60 FLOOD and extending approximately 280 feet seaward. Shoaling with a maximum width of approximately 120 feet exists in the Left Outside Quarter starting at approximately 660 feet seaward of RED NUN #60 FLOOD and continuing seaward to approximately 1360 feet seaward of FIXED ATON RED #58.

# REPORT OF CHANNEL CONDITIONS 400 FEET WIDE OR GREATER

PAGE	3	OF	3
DATE		30 July 20	15

### SHOALING BY REACHES (continued):

0	Partial Reach M: Scattered shoaling begins in the Right Outside Quarter along the channel's toe approximately 120 feet seaward
	of RED LIGHT #4 FLOOD and extends seaward to a point approximately 660 feet seaward of RED LIGHT #4 FLOOD. Small
	shoal exists at bend in channel along the channel toe approximately 70 feet landward of RED LIGHT #2 EBB. Shoaling also exists
	along the toe of the channel in the Right Outside Quarter beginning approximately 1980 feet seaward of RED LIGHT #2 FLOOD
	and extending approximately 340 feet seaward, with a maximum width of 40 feet. Small spot shoal exists in the Left Inside
	Quarter under the Outerbridge Crossing. Uncharted obstruction exists in the middle of the Left Inside Quarter approximately 570
	feet seaward of the Outerbridge Crossing. Sporadic shoaling with a maximum width of approximately 20 feet exists along the toe
	of the channel in the Left Outside Quarter starting approximately 130 feet landward of Outerbridge Crossing and continuing
	seaward to approximately 440 feet seaward of Outerbridge Crossing. Spot shoal with a maximum width of approximately 60 feet
	exists in the Left Outside Quarter beginning approximately 140 feet seaward of RED LIGHT #2 EBB extending approximately 140
	feet seaward. Sporadic shoaling exists along the toe of the channel in the Left Outside Quarter beginning approximately 770 feet
	seaward of RED LIGHT #2 FBB and continues seaward for approximately 2600 feet, with a maximum width of 20 feet