

REPORT OF CHANNEL CONDITIONS 100 TO 400 FEET WIDE					PAGE: 1 OF 4		
					DATE: 05 February 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: Shrewsbury River, New Jersey					MINIMUM DEPTHS IN CHANNEL ENTERING FROM SEAWARD		
NAME OF CHANNEL	DATE OF SURVEY	AUTHORIZED PROJECT			LEFT OUTSIDE QUARTER (feet)	MIDDLE HALF (feet)	RIGHT OUTSIDE QUARTER (feet)
		WIDTH (feet)	LENGTH (nmiles)	DEPTH (feet)			
Reach A: Bay to Highlands: Begins in Sandy Hook Bay approximately 205 feet seaward of RED NUN #4 EBB; Ends approximately 470 feet landward of the Route 36 Bridge.	Map 431 pgs 1 thru 5 of 25; 22 Jul – 2 Sep 2015	300	1.83	12	4.8	9.4	7.5
Reach B: Junction of North and South Branch: Begins approximately 460 feet landward of the Route 36 Bridge; Ends at the junction between the North and South Branches, approximately 370 feet seaward of RED-GREEN BUOY W/ LIGHT "NS".	Map 431 pgs 5 & 6 of 25; 22 Jul – 2 Sep 2015	150	0.42	9	12.3	11.8	10.5
Reach C: Buoy #38: Begins at junction between the North and South Branches of the project approximately 370 feet seaward of RED-GREEN BUOY W/ LIGHT "NS"; Ends approximately 40 feet landward of RED LIGHT #38 EBB.	Map 431 pgs 6 & 16 thru 22 of 25; 22 Jul – 2 Sep 2015	150 - 620	3.60	9	5.7	6.3	7.2
Reach D: Sands Point: Begins at approximate 40 feet landward of RED LIGHT #38 EBB; Ends at RED LIGHT #40 EBB at Sands Point.	Map 431 pgs 22 & 23 of 25; 22 Jul – 2 Sep 2015	150	0.49	9	6.7	8.0	5.8
Reach E: Pleasure Bay Bridge: Begins at RED LIGHT #40; Ends at Pleasure Bay Bridge approximately 500 feet seaward of NO WAKE BUOY EBB.	Map 431 pgs 23 & 24 of 25; 22 Jul – 2 Sep 2015	150-230	0.64	9	5.9	7.1	5.3
Reach F: Upstream Project Limit: Begins at Pleasure Bay Bridge approximately 500 feet seaward of NO WAKE BUOY EBB; Ends at approximately 870 feet landward of GREEN CAN #49 EBB at the upstream limit of the project.	Map 431 pgs 24 thru 25 of 25; 22 Jul – 2 Sep 2015	150-260	0.77	9	1.2	0.9	1.0
Reach G: Oceanic Bridge: Begins at the junction between the North and South Branches approximately 610 feet seaward of RED NUN #12 FLOOD; Ends at Oceanic Bridge approximately 525 feet landward of RED NUN #16 FLOOD.	Map 431 pgs 6 thru 9 of 25; 22 Jul – 2 Sep 2015	150	1.84	6	2.3	4.2	3.9
Reach H: Red Bank: Begins at Oceanic Bridge approximately 525 feet landward of RED NUN #16 FLOOD; Ends approximately 2,390 feet landward of RED NUN #24 at Red Bank.	Map 431 pgs 9 thru 15 of 25; 22 Jul – 2 Sep 2015	150	3.21	6	3.8	4.2	4.3

REMARKS:

- All depths are relative to Mean Low Water
- Channel Reach lengths is in nautical miles

SHREWSBURY RIVER, NJ

- **Reach A:** Shoaling exists in the Right Outside Quarter from approximately 210 feet seaward of RED NUN #4 EBB to approximately 425 feet landward of RED NUN #4 EBB with a maximum width of approximately 30 feet. Shoaling exists in the Right Outside Quarter beginning approximately 42 feet seaward of RED NUN #6 EBB and extending landward for approximately 305 feet with a maximum width of approximately 35 feet. Spot shoal begins in the Right Outside Quarter approximately 1,750 feet landward of RED NUN #6 EBB approximately 160 feet long and having a maximum approximate width of 20 feet. Shoaling exists in the Left Outside Quarter beginning approximately 115 feet landward of the beginning of the reach and extending landward for approximately 1,210 feet with a maximum width of approximately 28 feet. Shoaling exists in the Right Outside Quarter beginning approximately 1,390 feet landward of GREEN BUOY W/ LIGHT #9 EBB and extending landward for approximately 385 feet with a width of approximately 43 feet. Spot shoal exists in the Left Outside Quarter approximately 870 feet landward from GREEN BUOY W/ LIGHT #9 having a maximum approximate dimension of 75 feet.

Spot shoal begins in the Right Outside Quarter approximately 3,040 feet landward of GREEN BUOY W/ LIGHT #9 EBB approximately 68 feet long and having a maximum approximate width of 20 feet.

Spot shoal begins in the Right Outside Quarter approximately 2,340 feet seaward of GREEN BUOY W/ LIGHT #11A FLOOD approximately 60 feet long and having a maximum approximate width of 90 feet.

Shoaling exists in the Right Outside Quarter beginning approximately 1,645 feet seaward of GREEN BUOY W/ LIGHT #11A FLOOD and extending landward for approximately 135 feet with a maximum width of approximately 75 feet.

Spot shoal begins in the Left Outside Quarter approximately 2,300 feet seaward of GREEN BUOY W/ LIGHT #11A FLOOD approximately 75 feet long and having a maximum approximate width of 33 feet.

Shoaling begins in the Left Outside Quarter beginning approximately 1,460 feet seaward of GREEN BUOY W/ LIGHT #11A FLOOD and extends across the entire channel approximately 230 feet landward, and ends approximately 350 feet landward.

Shoaling exists in the Middle Half beginning approximately 1,325 feet seaward of GREEN BUOY W/ LIGHT #11A FLOOD and extends landward for approximately 84 feet with a width of approximately 25 feet.

Shoaling exists in the Right Outside Quarter beginning approximately 900 feet seaward of GREEN BUOY W/ LIGHT #11A FLOOD and extending landward for approximately 445 feet with a width of approximately 25 feet.

Shoaling exists in the middle of the Right Outside Quarter beginning approximately 728 feet seaward of GREEN BUOY W/ LIGHT #11A FLOOD and extending landward for approximately 150 feet with a maximum width of approximately 13 feet.

- **Reach B:** No shoaling exists in this entire reach.
- **Reach C:** Shoaling exists across most to all of the channel beginning approximately 165 feet landward from the start of the reach and ending approximately an additional 425 feet landward.

A small shoal exists on the Left Outside Quarter toe approximately 1,230 feet landward of RED NUN #22 FLOOD and extends landward for approximately 55 feet with a maximum width of approximately 8 feet.

Shoaling exists on the Left Outside Quarter approximately 190 feet landward of RED NUN #24 FLOOD and extends landward for approximately 200 feet with a maximum width of approximately 35 feet.

Three shoal spots exist in the Right Outside Quarter toe abeam of RED NUN #28 W/LIGHT FLOOD with a maximum width of approximately 18 feet.

A shoal exists on the Left Outside Quarter toe approximately 475 feet landward of RED NUN #28 W/ LIGHT FLOOD and extends landward for approximately 190 feet with a maximum width of approximately 14 feet.

Shoaling starts in the Left Outside Quarter approximately 920 feet seaward of GREEN CAN #29 EBB and expands to cover the entire width of channel approximately 207 feet seaward of GREEN CAN #29 EBB. This shoal continues at full channel width for an additional 440 feet landward, then narrows and ends in the Left Outside Quarter approximately 630 feet seaward of GREEN CAN #29A EBB.

A small shoal exists in the middle of the Right Outside Quarter approximately 655 feet seaward of RED BUOY #30A EBB and extends landward for approximately 135 feet with a maximum width of approximately 22 feet.

A small shoal exists in the middle of the Middle Half approximately 225 feet seaward of RED BUOY #30A EBB and extends landward for approximately 83 feet with a maximum width of approximately 10 feet.

Shoaling exists along the Right Outside Quarter toe approximately 380 feet seaward of RED BUOY #30A EBB and extends landward for approximately 480 feet with a maximum width of approximately 25 feet.

Shoaling exists along the Left Outside Quarter toe approximately 265 feet seaward of GREEN CAN #29A EBB and extends landward for approximately 217 feet with a maximum width of approximately 44 feet.

Shoaling exists along the Left Outside Quarter toe approximately 165 feet landward of GREEN CAN #29A EBB and extends landward for approximately 180 feet with a maximum width of approximately 25 feet.

Shoaling exists along the Left Outside Quarter toe approximately 55 feet landward of GREEN LIGHT #31 EBB and extends landward for approximately 420 feet with a maximum width of approximately 35 feet.

Shoaling begins along the Right Outside Quarter toe approximately 525 feet landward of RED NUN #32 EBB and extends landward for approximately 1,200 feet with a maximum width of approximately 19 feet.

Shoaling exists along the Right Outside Quarter toe approximately 580 feet seaward of GREEN CAN #33 EBB and extends landward for approximately 105 feet with a maximum width of approximately 4 feet.

Shoaling exists along the Left Outside Quarter toe approximately 515 feet seaward of GREEN CAN #33 EBB and extends landward for approximately 255 feet with a maximum width of approximately 20 feet.

Shoaling exists along the Left Outside Quarter toe approximately 312 feet landward of GREEN CAN #33 EBB and extends landward for approximately 265 feet with a maximum width of approximately 11 feet.

Shoaling exists along the Left Outside Quarter toe approximately 75 feet landward of GREEN CAN #35 EBB and extends landward for approximately 530 feet with a maximum width of approximately 18 feet.

Shoaling starts in the Right Outside Quarter toe approximately 16 feet landward of RED LIGHT #38 EBB and extends landward for approximately 110 feet with a maximum width of approximately 9 feet.

- **Reach D:** Shoaling exists in the Left Outside Quarter beginning approximately at GREEN CAN #37 EBB and extends into the Middle Half approximately 500 feet landward of GREEN CAN #37 EBB and terminates approximately 420 feet seaward of GREEN CAN #39 EBB. The maximum width of this shoal is approximately 80 feet. Shoaling also exists in most of the Left Outside Quarter beginning approximately 315 feet seaward of GREEN CAN #39 EBB and extends approximately 170 feet landward with a maximum width of approximately 38 feet.

Shoaling starts in the Right Outside Quarter approximately 915 feet seaward of GREEN CAN #39 and extends landward to the end of the reach. This shoal extends into the Middle Half a maximum of 40 feet and has a maximum overall width of approximately 80 feet.

- **Reach E:** Shoaling exists across a majority of the Right Outside Quarter and portions of the Middle Half of the channel from the beginning of the reach at the approximate location of RED LIGHT #40 to approximately 80 feet seaward of RED NUN #44 EBB.

Shoaling also starts in the Right Outside Quarter approximately 45 feet landward to approximately 275 feet landward of RED NUN #44 with a maximum width of approximately 17 feet.

Five small shoals exist along the left side of the Left Outside Quarter from approximately 280 feet landward of GREEN CAN #39 EBB to approximately 150 feet landward of RED RED NUN #42 EBB with a maximum width of approximately 28 feet.

A Shoal starts in the Left Outside Quarter approximately 215 feet landward of RED NUN #42 and extends into Middle Half approximately 190 feet seaward of RED NUN #44, and eventually covers the entire channel approximately 135 feet seaward of the end of the Reach at Pleasure Bay Bridge.

- **Reach F:** Shoaling exists across the majority of the channel width from the start of the reach at the Pleasure Bay Bridge and extends until the end of the reach at the upstream limit of the project. There are several spots that have no shoaling in the Middle Half and Right Outside Quarter from the beginning of the Reach to approximately 680 feet landward of RED NUN #46 EBB. There is predominately no shoaling in the Left Outside Quarter from approximately 440 feet to approximately 640 feet landward of the beginning of the Reach, and in the Middle Half from approximately 610 feet to approximately 865 feet landward of the beginning of the Reach.

- **Reach G:** A large spot shoal exists in the Middle Half approximately 190 feet landward of RED NUN #2 FLOOD and extends landward approximately 138 feet with a maximum width of approximately 50 feet.

Shoaling exists abeam of RED NUN #4 FLOOD for approximately 57 feet with a maximum width of approximately 11 feet.

Shoaling starts in the Right Outside Quarter approximately 170 feet landward of RED NUN #4 FLOOD and extends up to 30 feet into the Middle Half ending approximately 380 feet landward with a maximum width of approximately 85 feet.

Shoaling exists along most of the Right Outside Quarter approximately 457 feet seaward of RED NUN #6 FLOOD and extends landward approximately 590 feet with a maximum width of approximately 56 feet.

A spot shoal exists along the Left Outside Quarter toe abeam of RED NUN #6 FLOOD and is approximately 60 feet long and 18 feet wide.

A spot shoal exists along the Right Outside Quarter toe approximately 70 feet landward of RED NUN #10 FLOOD extending landward for approximately 85 feet with a maximum width of approximately 23 feet.

Shoaling starts in the Left Outside Quarter approximately 205 feet seaward of GREEN CAN #11 FLOOD and extends up to 55 feet into the Middle Half ending approximately 220 feet seaward of GREEN BUOY W/ LIGHT #13 FLOOD with a maximum width of approximately 92 feet.

A spot shoal exists in the Middle Half approximately 445 feet landward of GREEN CAN #11 FLOOD extending landward for approximately 100 feet with a maximum width of approximately 25 feet.

A shoal exists along the Right Outside Quarter toe approximately 415 feet landward of GREEN CAN #11 FLOOD extending landward for approximately 250 feet with a maximum width of approximately 24 feet.

A shoal exists along the Right Outside Quarter/Middle Half boundary approximately 735 feet landward of GREEN CAN #11 FLOOD extending landward for approximately 200 feet with a maximum width of approximately 15 feet.

A spot shoal exists in the Right Outside Quarter approximately 360 feet seaward of GREEN BUOY W/ LIGHT #13 FLOOD extending landward for approximately 77 feet with a maximum width of approximately 23 feet.

Shoaling starts in the Left Outside Quarter approximately 180 feet seaward of GREEN BUOY W/ LIGHT #13 FLOOD and extends up to 24 feet into the Middle Half extending landward approximately 475 feet with a maximum width of 62 feet. A spot shoal exists in the Left Outside Quarter approximately 425 feet landward of GREEN BUOY W/ LIGHT #13 FLOOD extending landward for approximately 175 feet with a maximum width of approximately 30 feet.

Shoaling exists along the Right Outside Quarter approximately 650 feet landward of RED NUN W/ LIGHT #14 FLOOD extending landward for approximately 795 feet with a maximum width of approximately 35 feet.

Shoaling exists along the Right Outside Quarter approximately 315 feet seaward of RED NUN #16 FLOOD extending landward for approximately 460 feet with a maximum width of approximately 36 feet.

A shoal exists along the Left Outside Quarter abeam of GREEN CAN #15A FLOOD extending landward for approximately 230 feet with a maximum width of approximately 38 feet.

- **Reach H:** Shoaling exists on the toe of the Left Outside Quarter beginning approximately 765 feet landward of GREEN CAN #15A FLOOD and extends landward for approximately 145 feet with a maximum width of approximately 8 feet.

Shoaling begins in the Left Outside Quarter approximately 390 feet landward of GREEN CAN #21 W/ LIGHT and in the Right Outside Quarter approximately 1,005 feet landward of GREEN CAN #21 W/ LIGHT, and eventually covers the entire channel approximately 285 feet seaward of GREEN CAN #23 EBB. This shoal leaves the Left Outside Quarter and the entire channel approximately 100 feet and approximately 560 feet landward of RED NUN #24 EBB respectively.

Shoaling starts in the Left Outside Quarter approximately 580 feet landward of RED NUN #24 EBB and extends up to 42 feet into the Middle Half ending approximately 340 feet landward with a maximum width of 80 feet.

Shoaling begins in the Right Outside Quarter approximately 1,260 feet landward of RED NUN #24 EBB and in the Left Outside Quarter approximately 1,655 feet landward of RED NUN #24 EBB and eventually covers the entire channel approximately 530 feet from the end of the reach to the end of the reach.