

SECTION I

NM 10/09

Chart 11372 (Side B)

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SHIP ISLAND PASS AND GULFPORT HARBOR CHANNELS							
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEP 2008							
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SHIP ISLAND BAR CHANNEL	31.2	32.2	29.3	9-08	300	10.0	38
GULFPORT CHANNEL	22.7	A25.8	25.6	9-08	220	10.6	36
ANCHORAGE BASIN	C29.7	C27.2	B31.1	2-08	1110-1220	0.4	32-36

A. EXCEPT FOR A REPORTED OBSTRUCTION LOCATED IN APPROXIMATE POSITION 30°20'00.0"N, 89°04'06.0"W.  
 B. EXCEPT FOR A REPORTED OBSTRUCTION LOCATED IN APPROXIMATE POSITION 30°21'00.0"N, 89°05'00.0"W.  
 C. EXCEPT FOR A SUBM BREAKWATER LOCATED APPROXIMATELY FROM 30°21'04.6"N, 89°05'21.6"W TO 30°21'01.9"N, 89°05'08.6"W.  
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11373

NM 10/09

SHIP ISLAND PASS AND GULFPORT HARBOR CHANNELS							
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEP 2008							
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SHIP ISLAND BAR CHANNEL	31.2	32.2	29.3	9-08	300	10.0	38
GULFPORT CHANNEL	22.7	A25.8	25.6	9-08	220	10.6	36
ANCHORAGE BASIN	C29.7	C27.2	B31.1	2-08	1110-1220	0.4	32-36

A. EXCEPT FOR A REPORTED OBSTRUCTION LOCATED IN APPROXIMATE POSITION 30°20'00.0"N, 89°04'06.0"W.  
 B. EXCEPT FOR A REPORTED OBSTRUCTION LOCATED IN APPROXIMATE POSITION 30°21'00.0"N, 89°05'00.0"W.  
 C. EXCEPT FOR A SUBM BREAKWATER LOCATED APPROXIMATELY FROM 30°21'04.6"N, 89°05'21.6"W TO 30°21'01.9"N, 89°05'08.6"W.  
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12327

NM 10/09

ARTHUR KILL, KILL VAN KULL, NEWARK BAY, PASSAIC AND HACKENSACK RIVERS CHANNEL DEPTHS TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 2008 AND SURVEYS TO JUL 2008			
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)			
NAME OF CHANNEL	DEPTH MLLW (FEET)	WIDTH (FEET)	DATE OF SURVEY
ARTHUR KILL (OUTERBRIDGE REACH TO NORTH OF SHOOTERS I. REACH)	A26.4	800-500	7-07;6,7-08
KILL VAN KULL (CONSTABLE HOOK REACH TO BERGEN POINT W. REACH)	39.3	2000-800	6-08
SOUTH OF SHOOTERS I. REACH	B6.5	400	11-04;10-05;5-06
NEWARK BAY (NEWARK BAY SOUTH REACH TO TURNING BASIN)	C14.4	1750-300	7-05;12-06;9-07;4-08
PASSAIC RIVER (KEARNY POINT REACH TO ARLINGTON REACH)	D6.6	300-200	5-08
HACKENSACK RIVER (DROYERS POINT REACH TO TURNING BASIN)	15.4	300-800	5-08

A. A DEPTH OF 34.2 FEET WAS AVAILABLE IN THE MIDDLE HALF.  
 B. NUMEROUS WRECKS AND OBSTRUCTIONS WITH MINIMUM DEPTH TO 4 FEET  
 WITHIN CHANNEL LIMITS. NOT ALL SHOWN AT THIS SCALE. USE CHART 12333.  
 C. EXCEPT FOR SHOALING TO 7.7 FEET FROM 40° 42' 08.0" N, 74° 06' 58.0" W TO  
 40° 42' 13.5" N, 74° 06' 56.8" W ALONG THE RIGHT OUTSIDE QUARTER.  
 D. DEPTH REPORTED IS FOR MIDDLE HALF OF CHANNEL. SHOALING TO 3.7 FEET  
 EXISTS IN THREE PLACES WITHIN 30 FEET OF THE OUTSIDE QUARTERS.  
 NOTE - SEE LARGE SCALE CHARTS FOR MORE DETAIL OF REACHES.  
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS  
 SUBSEQUENT TO THE ABOVE

SECTION I

NM 10/09

Chart 12331

NM 10/09

RARITAN BAY, ARTHUR KILL AND RARITAN RIVER								
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 2008 AND SURVEYS TO JUL 2008								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
RARITAN BAY EAST REACH	32.8	38.2	37.7	33.9	6,7-07	600	4.0	35
RARITAN BAY WEST REACH	32.9	39.6	39.2	33.3	6,7-07	600	2.4	35
SEGUINE POINT BEND	32.9	35.0	36.9	30.5	9-06;7-07	600-800	1.2	35
RED BANK REACH	35.7	41.0	40.6	36.6	7-07	600	1.2	35
WARD POINT BEND (EAST)	30.5	38.4	36.9	34.9	7-07	600-800	1.1	35
WARD POINT BEND (WEST)	35.7	34.5	31.0	30.7	7-07	600-800	1.3	35
OUTERBRIDGE REACH	33.6	34.5	35.6	34.8	7-07;6,7-08	600	1.6	35
PORT SOCONY REACH	31.8	34.6	35.0	31.0	6,7-08	600-800	0.8	35
PORT READING REACH	29.5	34.4	34.7	26.4	6,7-08	500	1.8	35
FRESH KILLS REACH	31.0	34.8	35.8	33.8	6,7-08	500	1.8	35
RARITAN RIVER CUTOFF	17.8	19.8	17.9	12.9	7-08	600-1100	1.0	20
WARD POINT SECONDARY CHANNEL	17.4	17.5	20.0	19.8	6-04;8-06;1-08	400	0.9	30
GREAT BEDS REACH	18.8	21.6	22.3	19.8	7-08	300	0.6	25
SOUTH AMBOY REACH	19.8	21.9	22.0	17.9	7-08	300	1.2	25

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12332

NM 10/09

RARITAN BAY, ARTHUR KILL AND RARITAN RIVER								
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 2008 AND SURVEYS TO JUL 2008								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
WARD POINT BEND (EAST)	30.5	38.4	36.9	34.9	7-07	600-800	1.1	35
WARD POINT BEND (WEST)	35.7	34.5	31.0	30.7	7-07	600-800	1.3	35
OUTERBRIDGE REACH	33.6	34.5	35.6	34.8	7-07;6,7-08	600	1.6	35
RARITAN RIVER CUTOFF	17.8	19.8	17.9	12.9	7-08	600-1100	1.0	20
WARD POINT SECONDARY CHANNEL	17.4	17.5	20.0	19.8	6-04;8-06;1-08	400	0.9	30
GREAT BEDS REACH	18.8	21.6	22.3	19.8	7-08	300	0.6	25
SOUTH AMBOY REACH	19.8	21.9	22.0	17.9	7-08	300	1.2	25
SANDY POINT REACH	20.4	A20.3	A20.2	20.4	7-08	300	0.9	25
KEASBEY REACH	14.0	18.7	21.7	19.7	7-08	300	0.9	25
RED ROOT REACH	B12.2	16.3	17.2	13.2	7-08	300	1.5	25
CRAB ISLAND REACH	C15.0	C14.5	C14.5	12.5	9-88	200	1.2	15
NORTHWEST REACH	6.0	7.5	7.5	12.2	7-62	200	1.2	15
TITANIUM REACH	4.2	4.0	2.2	1.7	7-08	300	0.6	25
SOUTH CHANNEL	D2.0	E4.2	F4.2	F2.1	7-62;3,4-90	150	0.7	15-10

A. EXCEPT FOR SHOALS TO 18.2 FT AT 40°29'47.6"N 74°16'54.0"W ON THE WESTSIDE OF THE BRIDGE FENDER  
 B. EXCEPT FOR SHOALS TO 4.4 FT AT 40°29'30.0"N 74°19'42.8"W ALONG THE LEFT OUTSIDE QUARTER OF REACH.  
 C. SHOALS LOCATED APPROXIMATELY 40°29'01.0"N, 74°21'16.0"W TO 400 YARDS SOUTH; A DEPTH OF 13 FT FOR A WIDTH OF 200 FT WAS AVAILABLE TO THE WEST OF THE PROJECT CHANNEL.  
 D. POSSIBLE 6 FT OBSTRUCTION LOCATED AT 40°29'35.4"N, 74°19'04.5"W.  
 E. POSSIBLE 4 FT OBSTRUCTION LOCATED AT 40°29'37.4"N, 74°19'04.0"W.  
 F. POSSIBLE 6 FT OBSTRUCTION LOCATED AT 40°29'34.4"N, 74°19'03.0"W.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

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Chart 12333

NM 10/09

ARTHUR KILL, KILL VAN KULL, NEWARK BAY AND UPPER BAY CHANNEL DEPTHS TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 2008 AND SURVEYS TO JUL 2008								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
FRESH KILLS REACH	31.0	34.8	35.8	33.8	6,7-08	500	1.8	35
TREMLEY POINT REACH	30.6	37.7	36.6	28.2	6,7-08	600	0.9	35
PRALLS ISLAND REACH	30.2	34.2	35.3	28.0	6,7-08	500	1.2	35
GULFPORT REACH	32.8	36.6	37.4	30.3	6,7-08	500-600	1.1	35
ELIZABETHPORT REACH	42.0	43.8	43.1	42.3	6-08	500-600	1.1	41
NORTH OF SHOOTERS ISLAND REACH	40.1	41.4	42.5	42.1	6-08	600	1.0	41
SOUTH OF SHOOTERS ISLAND REACH	A10.1	A14.5	A13.8	A6.5	11-04;10-05;5-06	400	1.0	30
BERGEN POINT WEST REACH	51.8	52.6	52.9	50.2	6-08	800	1.1	45
BERGEN POINT EAST REACH	51.9	52.5	52.7	49.9	6-08	800	1.0	45
CONSTABLE HOOK REACH	39.3	46.2	44.9	44.2	6-08	2000-900	2.2	45
NEWARK BAY SOUTH REACH	47.4	46.3	45.8	43.9	9-07;4,6-08	1750-900	1.4	45
NEWARK BAY MIDDLE REACH	36.8	37.7	34.7	28.8	9-07;4-08	800-570	1.4	40
NEWARK BAY NORTH REACH	31.4	34.3	20.8	B14.4	7-05;12-06	500-900	1.1	35
ELIZABETH CHANNEL	43.6	43.3	42.5	41.3	1,4-08	500	1.4	45
PORT NEWARK CHANNEL :								
BRANCH CHANNEL	27.7	32.0	38.3	33.5	9-07;4-06	1775-400	0.4	40
PIERHEAD CHANNEL	32.9	32.6	32.1	30.2	3-08	300-750	0.7	40

A. NUMEROUS WRECKS AND OBSTRUCTIONS WITH MINIMUM DEPTH TO 4 FEET WITHIN CHANNEL LIMITS.  
 B. EXCEPT FOR SHOALING TO 7.7 FEET FROM 40° 42' 08.0" N, 74° 06' 58.0" W TO 40° 42' 13.5" N, 74° 06' 56.8" W (SEE CHART 12337).  
 \* CONTROLLING DEPTHS IN CHANNELS OF RARITAN BAY - EAST REACH TO AND INCLUDING GULFPORT REACH ARE REFERENCED FROM SEAWARD WHEN ENTERING FROM LOWER NEW YORK BAY. CONTROLLING DEPTHS FROM CONSTABLE HOOK TO AND INCLUDING ELIZABETHPORT REACH ARE REFERENCED FROM SEAWARD WHEN ENTERING FROM UPPER NEW YORK BAY.  
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 14975

NM 10/09

DULUTH HARBOR TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2008								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)
DULUTH ENTRY	A	A	A	A				
1	23.7	29.8	31.2	29.4	6-2008	245-1000	.13	32
2	27.2	33.4	33.5	29.9	6-2008	245	.08	31
3	29.4	32.4	32.0	32.7	6-2008	245	.07	30
4	31.8	31.3	31.3	31.6	6-2008	245	.07	29
5	29.8	32.2	32.4	25.1	6-2008	245-480	.07	28
DULUTH HARBOR BASIN								
NORTHERN SECTION	25.0	27.5	27.9	24.6	6-2008	1100-2700	.64	28
SOUTHERN SECTION	24.3	25.5	25.6	24.2	7-2006; 5-2007; 7-2008	1200-2700	.91	27
EAST GATE BASIN (NORTH)	25.3	26.6	25.8	22.8	7-2005; 7, 10-2007	1500-3300	.33	27
WEST GATE BASIN	24.7	28.0	26.8	21.4	10-2007	400-850	.66	27
HOWARDS BAY	21.9	23.2	23.8	20.1	10-2006; 6, 10-2007	100-750	.99	27
NORTH CHANNEL								
EASTERN SECTION	18.4	20.4	21.6	B13.9	6-2004; 10-2006; 10-2007	400	1.66	27
WESTERN SECTION	19.9	20.7	20.7	19.4	6-2004; 10-2007	400	.59	21
21ST AVE WEST CHANNEL	7.8	14.4	20.1	19.4	6-1998	200	.33	20
SOUTH CHANNEL								
EASTERN SECTION	20.7	22.6	24.4	25.7	10-2007	400-800	.74	27
WESTERN SECTION	21.9	22.6	23.1	22.1	10-2007	400	.83	23
CROSS CHANNEL	22.1	28.3	29.0	18.9	10-2007	1300	.33	27
UPPER CHANNEL	19.3	23.6	19.9	19.6	10-2007	500	1.00	23
MINNESOTA CHANNEL								
EASTERN SECTION	C14.9	21.8	20.7	D20.1	10-2007	600	.95	23
WESTERN SECTION	E9.0	14.5	10.4	F 8.5	10-1998;10-2004; 10-2007	200	2.39	20

A. CHANNEL DIVIDED INTO QUARTERS WHEN ENTERING FROM LAKE.  
 B. SHOALING TO UNKNOWN DEPTH BEHIND THE 12 FT CURVE FROM 46°45'02.5" N - 92°06'08.8" W TO 46°45'07.2" N - 92°06'18.6" W  
 C. SHOALING TO 4.3 FT WITHIN 100 FT FROM 46°43'13.01" N - 92°08'34.57" W.  
 D. SHOALING TO 10.1 FT IN THE OUTSIDE HALF OF THE QUARTER FOR THE NORTHERN 600 FT OF THE REACH.  
 E. SHOALING TO 4.6 FT ALONG THE REACH WITHIN 75 FT FROM 46°41'55.24" N - 92°11'58.58" W  
 F. SHOALING TO 3.1 FT IN THE OUTSIDE HALF OF THE QUARTER.  
 NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION.

## SECTION I

NM 10/09

Chart 14975

NM 10/09

SUPERIOR HARBOR TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2008								
CONTROLLING DEPTHS FROM SEAWARD IN FEET AT GREAT LAKES LOW WATER DATUM (LWD)						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT	LEFT	RIGHT	RIGHT	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH LWD (FEET)
	OUTSIDE QUARTER	INSIDE QUARTER	INSIDE QUARTER	OUTSIDE QUARTER				
SUPERIOR ENTRY	A	A	A	A				
1	27.2	31.6	31.9	27.0 B	7-06	600-1100	.18	31
2	27.3	30.7	32.0	28.8	7-06; 10-07	415-1100	.15	30
3	29.1	31.1	29.5	26.8	10-07	415	.08	29
4	23.3	30.6	29.1	25.7	10-07	415-430	.08	28
5	25.4	29.5	30.4	25.9	10-07	430-840	.08	27
SUPERIOR HARBOR BASIN	25.6 C	24.4	22.9	20.9 D	7-06; 10-07	600-2000	1.21	27
ALLOUEZ BAY CHANNEL	20.8	23.7	23.3	22.6	7, 10-06; 10-07	400-900	.44	27
SUPERIOR FRONT CHANNEL	25.2	27.0	26.7	24.4	8, 10-07; 7-08	600	2.32	27
EAST GATE BASIN (SOUTH)	26.3	26.1	25.1	25.9	7-06; 10-07; 7-08	600-3200	.57	27
A. CHANNEL DIVIDED INTO QUARTERS WHEN ENTERING FROM LAKE. B. SHOALING TO 18.6 FEET WITHIN 30 FEET OF CHANNEL LIMIT. C. SHOALING TO 23.4 FEET AT 46°42'14.3"N 092°01'34.2"W D. SHOALING TO 19.8 FEET AT 46°42'28.3"N 092°01'26.4"W AND 2.5 FEET AT 46°42'35"N 092°01'43.4"W NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION								