Chart 11373 NM 40/09

HORN ISLAND PASS PASCAGOULA HARBOR AND BAYOU CASOTTE CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 2009

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 (MILES)	DEPTH MLLW (FEET)
PASCAGOULA BAR CHANNEL	42.0	44.0A	42.4	7-09	450	6.28	44.0
HORN ISLAND PASS	43.9	44.0	26.2	6-09	600	1.4	44.0
PASCAGOULA LOWER SOUND	38.1B	42.0	40.1	7-09	350	4.3	42.0
PASCAGOULA UPPER SOUND	34.1	34.3	37.8	6-09	350	4.63	38.0
PASCAGOULA RIVER	35.5C	35.1D	34.6E	6-09	350F	2.021	38.0
BAYOU CASOTTE	36.6	40.2G	33.5	6-09	350	4.57	42.0

A. THE CONTROLLING DEPTHS FOR THE MIDDLE HALF OF THE CHANNEL ARE 44.0 FT IN THE LEFT INSIDE QUARTER AND 44.0 FT IN THE RIGHT INSIDE QUARTER.
B. SHOALING TO 37.1 FT AT BEND WIDENING AREA.
C. SHOALING TO 30.3 FT AT CSX RAILROAD BRIDGE.
D. SHOALING TO 18.2 FT AT CSX RAILROAD BRIDGE.
E. SHOALING TO 24.6 FT AT CSX RAILROAD BRIDGE.
F. PASCAGOULA RIVER PROJECT WIDTH VARIES AT SOUTH END OF TERMINAL C TO CSX RAILROAD.
G. SHOALING TO 38.9 FT AT NORTH END OF PROJECT.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11374 (Side B) NM 40/09

HORN ISLAND PASS PASCAGOULA HARBOR AND BAYOU CASOTTE CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 2009

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 (MILES)	DEPTH MLLW (FEET)
PASCAGOULA BAR CHANNEL	42.0	44.0A	42.4	7-09	450	6.28	44.0
HORN ISLAND PASS	43.9	44.0	26.2	6-09	600	1.4	44.0
PASCAGOULA LOWER SOUND	38.1B	42.0	40.1	7-09	350	4.3	42.0
PASCAGOULA UPPER SOUND	34.1	34.3	37.8	6-09	350	4.63	38.0
PASCAGOULA RIVER	35.5C	35.1D	34.6E	6-09	350F	2.021	38.0
BAYOU CASOTTE	36.6	40.2G	33.5	6-09	350	4.57	42.0

A. THE CONTROLLING DEPTHS FOR THE MIDDLE HALF OF THE CHANNEL ARE 44.0 FT IN THE LEFT INSIDE QUARTER AND 44.0 FT IN THE RIGHT INSIDE QUARTER.
B. SHOALING TO 37.1 FT AT BEND WIDENING AREA.
C. SHOALING TO 30.3 FT AT CSX RAILROAD BRIDGE.
D. SHOALING TO 18.2 FT AT CSX RAILROAD BRIDGE.
E. SHOALING TO 24.6 FT AT CSX RAILROAD BRIDGE.
F. PASCAGOULA RIVER PROJECT WIDTH VARIES AT SOUTH END OF TERMINAL C TO CSX RAILROAD.
G. SHOALING TO 38.9 FT AT NORTH END OF PROJECT.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11375 NM 40/09

HORN ISLAND PASS PASCAGOULA HARBOR AND BAYOU CASOTTE CHANNEL DEPTHS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 2009

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 (MILES)	DEPTH MLLW (FEET)
PASCAGOULA BAR CHANNEL	42.0	44.0A	42.4	7-09	450	6.28	44.0
HORN ISLAND PASS	43.9	44.0	26.2	6-09	600	1.4	44.0
PASCAGOULA LOWER SOUND	38.1B	42.0	40.1	7-09	350	4.3	42.0
PASCAGOULA UPPER SOUND	34.1	34.3	37.8	6-09	350	4.63	38.0
PASCAGOULA RIVER	35.5C	35.1D	34.6E	6-09	350F	2.021	38.0
BAYOU CASOTTE	36.6	40.2G	33.5	6-09	350	4.57	42.0

A. THE CONTROLLING DEPTHS FOR THE MIDDLE HALF OF THE CHANNEL ARE 44.0 FT IN THE LEFT INSIDE QUARTER AND 44.0 FT IN THE RIGHT INSIDE QUARTER.
B. SHOALING TO 37.1 FT AT BEND WIDENING AREA.
C. SHOALING TO 30.3 FT AT CSX RAILROAD BRIDGE.
D. SHOALING TO 18.2 FT AT CSX RAILROAD BRIDGE.
E. SHOALING TO 24.6 FT AT CSX RAILROAD BRIDGE.
F. PASCAGOULA RIVER PROJECT WIDTH VARIES AT SOUTH END OF TERMINAL C TO CSX RAILROAD.
G. SHOALING TO 38.9 FT AT NORTH END OF PROJECT.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18521 NM 40/09

COLUMBIA RIVER CHANNEL DEPTHS
ENTRANCE TO MILLER SANDS RANGE

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 28, 2009

* SEE FOOTNOTES						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
ENTRANCE RANGE	53	50	48	45	5-09	2640	3.3	48
SAND ISLAND RANGE	50	47	44	43	5-09	2640	2.2	48
LOWER DESDEMONA SHOAL	46	47	49	48	7-09	600	3.4	40
UPPER DESDEMONA SHOAL	41	44	46	44	7-09	600	3.6	40
TANSY POINT TURN AND RANGE	40	42	43	34	7-09	600	4.8	40
ASTORIA RANGE	41	42	43	38	7-09	600	2.7	40
TONGUE POINT CHANNEL	42	43	43	42	7-09	600	2.2	40
HARRINGTON POINT RANGE	38	42	40	36	6,7-09	600	2.6	40
MILLER SANDS RANGE	40	44	43	40	6-09	600	2.2	40

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT
* CONTROLLING DEPTHS IN CHANNELS ENTERING FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER FROM THE ENTRANCE TO HARRINGTON POINT AND COLUMBIA RIVER DATUM ABOVE THAT POINT.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18524 (Left Panel) NM 40/09

COLUMBIA RIVER CHANNEL DEPTHS
GULL ISLAND TURN AND CHANNEL TO SAINT HELENS TURN

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 28, 2009

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
GULL ISLAND TURN AND CHANNEL	48	43	42	37	6,7-09	600	2.2	40
STELLA RANGE	40	43	41	42	7-09	600	3.0	40
FISHER ISLAND CHANNEL	40	43	42	36	6-09	600	0.8	40
WALKER ISLAND CHANNEL	40	41	40	34	6-09	600	1.4	40
BARLOW POINT CHANNEL	44	45	46	39	6-09	600	1.6	40
SLAUGHTERS CHANNEL	40	39	43	43	7-09	600	2.2	40
SLAUGHTERS TURN AND TURN BASIN	42	42	41	38	7-09	600	1.7	40
COTTONWOOD ISLAND LOWER RANGE	42	41	41	39	7-09	600	1.7	40
COTTONWOOD ISLAND TURN	43	46	41	40	7-09	600	2.7	40
COTTONWOOD ISLAND UPPER RANGE	43	44	44	42	7-09	600	1.6	40
KALAMA LOWER RANGE	44	44	42	33	7-09	600	1.8	40
KALAMA UPPER RANGE	39	43	42	40	7-09	600	2.2	40
BYBEE LEDGE CHANNEL	42	43	43	43	7-09	600	2.1	40
MARTIN ISLAND CHANNEL	43	44	40	40	7-09	600	2.0	40
MARTIN ISLAND RANGE	42	42	42	43	7-09	600	1.4	40
COLUMBIA CITY CHANNEL	40	39	42	43	7-09	600	1.2	40
ST. HELENS RANGE	41	43	42	42	7-09	600	2.0	40
ST. HELENS TURN	38	43	43	40	7-09	600	1.7	40

* CONTROLLING DEPTHS ROUNDED TO NEAREST FOOT
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18525 NM 40/09

COLUMBIA RIVER CHANNEL DEPTHS
SAINT HELENS TURN TO TOMAHAWK BAR

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 28, 2009

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
ST. HELENS TURN	38	43	43	40	7-09	600	1.7	40
WARRIOR ROCK RANGE	40	42	43	43	7-09	600	1.3	40
DUCK CLUB TURN	44	46	47	44	7-09	600	1.4	40
HENRICI RANGE	41	44	41	41	7-09	600	2.6	40
FALES CHANNEL	43	44	43	40	7-09	600	1.1	40
KNAPP POINT CHANNEL	41	43	43	40	6-09	600	1.8	40
WILLOW LOWER RANGE	40	41	42	41	6-09	600	2.1	40
WILLOW UPPER RANGE	40	42	42	46	6-09	600	1.1	40
MORGAN BAR	41	47	49	49	6-09	600	1.0	40
MORGAN CHANNEL	44	45	44	40	6-09	600	1.5	40
VANCOUVER LOWER CHANNEL	47	48	48	50	6-09	500	1.0	40
VANCOUVER RANGE	46	45	43	41	6-09	500	1.3	40
VANCOUVER UPPER CHANNEL	43	45	43	40	6-09	500	0.9	40
VANCOUVER LOWER TURN BASIN	32	39	45	45	7-09	800	1.0	40
VANCOUVER UPPER TURN BASIN	34	28	28	27	7-09	800	0.9	35
TOMAHAWK BAR	16	17	17	18	4-09	300	3.7	27

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18526 NM 40/09

COLUMBIA RIVER CHANNEL DEPTHS
MORGAN CHANNEL TO TOMAHAWK BAR

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 28, 2009

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE						PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
MORGAN CHANNEL	44	45	44	40	6-09	600	1.5	40
VANCOUVER LOWER CHANNEL	47	48	48	50	6-09	500	1.0	40
VANCOUVER RANGE	46	45	43	41	6-09	500	1.3	40
VANCOUVER UPPER CHANNEL	43	45	43	40	6-09	500	0.9	40
VANCOUVER LOWER TURN BASIN	32	39	45	45	7-09	800	1.0	40
VANCOUVER UPPER TURN BASIN	34	28	28	27	7-09	800	0.9	35
TOMAHAWK BAR	16	17	17	18	4-09	300	3.7	27

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18531 (Lower Panel) NM 40/09

COLUMBIA RIVER CHANNEL DEPTHS
TOMAHAWK BAR TO BONNEVILLE LOCKS
TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 28, 2009

CONTROLLING DEPTHS IN FEET AT COLUMBIA RIVER DATUM (CRD) * SEE FOOTNOTE					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (STAT. MILES)	DEPTH CRD (FEET)
TOMAHAWK BAR	16	17	18	4-09	300	3.7	27
AIRPORT BAR	16	16	17	3-09	300	2.8	27
GOVERNMENT ISLAND LOWER RANGE	17	17	16	3-09	300	1.0	27
GOVERNMENT ISLAND MIDDLE RANGE	16	16	17	3-09	300	1.7	27
FISHER QUARRY CHANNEL	29	24	22	3-09	300	1.0	27
GOVERNMENT ISLAND RANGE	23	27	29	3-09	300	1.1	27
GOVERNMENT ISLAND UPPER RANGE	17	20	23	4-09	300	0.8	27
LADY ISLAND RANGE	21	23	28	4-09	300	2.1	27
LADY ISLAND CHANNEL AND UPPER RANGE	28	29	21	4-09	300	0.9	27
WASHOUGAL LOWER RANGE	19	27	30	4-09	300	1.5	27
WASHOUGAL UPPER RANGE	22	20	28	4-09	300	1.1	27
GARY ISLAND CHANNEL	17	16	16	4-09	300	0.6	27
REED ISLAND CHANNEL	19	16	14	4-09	300	2.5	27
TUNNEL POINT CHANNEL	25	26	28	4-09	300	0.8	27
ROOSTER ROCK CHANNEL	27	24	25	4-09	300	1.5	27
CAPE HORN CHANNEL	34	33	35	4-09	300	2.1	27
CANDIANA CHANNEL	23	40	35	4-09	300	1.0	27
FASHION REEF LOWER RANGE	11	12	14	4-09	300	2.4	27
MULTNOMAH FALLS RANGE	13	21	17	4-09	300	1.1	27
MULTNOMAH FALLS TURN	13	16	21	4-09	300	0.8	27
MULTNOMAH FALLS UPPER RANGE	19	24	27	4-09	300	3.2	27
MCGOWANS CHANNEL	35	26	25	4-09	300	1.1	27
WARRENDALE LOWER RANGE	20	21	23	4-09	300	0.9	27
WARRENDALE UPPER RANGE	24	26	22	4-09	300	0.7	27
HAMILTON ISLAND REACH	20	29	28	4-09	300	1.0	27
ENTRANCE TO BONNEVILLE LOCKS	19	21	19	4-09	300	1.2	27

* CONTROLLING DEPTHS ROUNDED TO THE NEAREST FOOT

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