Chart 11343 NM 48/03

SABINE AND NECHES RIVERS CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF SEP 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SABINE-NECHES CANAL :								
PORT ARTHUR TO NECHES RIVER	28	37	35	28	7-03	400	9.6	40
NECHES RIVER TO SABINE RIVER	24	26	27	25	7-03	200	3.9	30
NECHES RIVER:								
MOUTH TO SMITH BLUFF	34	37	35	33	7-03	400	8.3	40
TURNING BASIN AT DEER BAYOU	43	42	42	41	7-03	700	0.2	40
TURNING BASIN AT SMITHS BLUFF	38	38	35	34	7-03	1400-400	0.2	40
SMITH BLUFF TO BEAUMONT	33	39	37	30	7-03	400	7.5	40
TURNING BASIN (30°02'12"N, 94°01'58"W)	36	39	40	37	7-03	400-1306	0.2	40
CHANNEL EXTENSION	34	36	34	28	4-03	350	0.2	36
MANEUVERING AREA (30°04'44"N, 94°05'05"W)	32	39	38	32	7-03	400-1000	0.6	40
BEAUMONT TURNING BASIN	37	35	36	30	4-03	400-535	0.2	34
TURNING BASIN EXTENSION	34	33	33	25	7-03	300	0.2	34
THENCE TO TRINITY INDUSTRIES	18	22	23	16	4-03	200	0.6	30
SABINE RIVER:								
MOUTH TO ORANGE MUNICIPAL SLIP	26	29	30	27	7-03	200	6.6	30
ORANGE TURNING BASIN	28	31	31	31	7-03	200 - 1400	0.6	30
ORANGE MUNICIPAL SLIP	24	30	26	20	9-02	150-200	0.5	30
ORANGE MUNICIPAL SLIP TO OLD HIGHWAY BRIDGE SITE	27	29	32	29	12-02	200	2.2	30
CHANNEL AROUND ORANGE HARBOR ISLAND	13	16	20	18	9-02	150-200	1.6	25

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

Chart 11373 NM 48/03

SHIP ISLAND PASS AND GULFPORT HARBOR CHANNELS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUN 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				PROJECT DIMENSIONS		
	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	33.8	36.0	34.7	4-00	300	10.0	38
GULFPORT CHANNEL	34.6	36.0	35.8	6-03	220	10.6	36
ANCHORAGE BASIN	31.8	26.2	30.1	5-03	1110-1220	0.4	32-36

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

Chart 11376 NM 48/03

MOBILE BAY AND RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 2003

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)
ENTRANCE CHANNEL	42.2	47.0	44.2	7-03	600	7.0	47
MOBILE BAY:							
LOWER REACH (TO LIGHT 50)	40.8	44.6	42.5	7-03	400	11.8	45
UPPER REACH	32.1	39.7	36.5	7-03	400	13.4	40-45
MOBILE RIVER:							
PINTO ISLAND REACH	34.6	37.7	35.1	3-02	700-800	0.6	40
MOBILE CHANNEL	35.9	40.0	36.4	4-02	600	1.5	40
MOBILE TURNING BASIN	39.9	39.1	39.8	3-02	200-675	0.4	40
BLAKELEY ISLAND REACH	38.3	38.0	31.9	3-02	500	1.0	40
ST. LOUIS POINT REACH	18.9	25.4	22.3	6-00	500	0.2	25
CHICKASAW CREEK CHANNEL	15.6	24.7	22.4	7-01	250	2.7	25
ARLINGTON CHANNEL	15.7	18.9	19.0	4-03	150	1.4	27
OCEAN TERMINAL TURNING BASIN	16.5	18.4	14.5	4-03	600	0.1	27
THEODORE SHIP CHANNEL:							
BAY CUT	35.2	37.5	37.1	9-01	400	4.5	40
ANCHORAGE AREA	40.0	40.0	39.9	9-01	300	0.2	40
LAND CUT	36.6	38.4	A36.6	9-01	300	1.5	40
TURNING BASIN	37.0	38.0	34.8	9-01	1400	0.3	40
BARGE CHANNEL	10.4	11.6	9.0	1-02	100	1.1	12

A. ROCK OBSTRUCTIONS REPORTED FROM BUOY "20", CONTINUING FOR APPROXIMATELY 600 FEET EASTWARD. MINIMUM DEPTH OVER ROCKS IS 38 FEET.

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

Chart 13235 NM 48/03

WOODS HOLE CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF JUL 1991 AND SURVEYS TO SEP 2001

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)
THE STRAIT	12.0	13.0	12.0	9-01	300	0.61	13
BROADWAY	12.6	11.6	12.7	8-89	300	0.17	13
BRANCH	12.1	13.0	13.0	8-89	300	0.13	13

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

Chart 18531 (Lower Panel) NM 48/03

COLUMBIA RIVER CHANNEL DEPTHS
TOMAHAWK BAR TO BONNEVILLE LOCKS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MARCH 2003

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	18	18	17	10-01	300	3.7	27
AIRPORT BAR	17	16	18	3-03	300	2.8	27
GOVERNMENT ISLAND LOWER RANGE	16	17	16	2,3-03	300	1.1	27
GOVERNMENT ISLAND MIDDLE RANGE	15	15	16	2-03	300	1.6	27
FISHER QUARRY CHANNEL RANGE	27	24	22	2-03	300	1.0	27
GOVERNMENT ISLAND RANGE	19	27	26	2-03	300	1.1	27
GOVERNMENT ISLAND UPPER RANGE	16	18	20	2-03	300	0.8	27
LADY ISLAND RANGE	17	20	19	2-03	300	2.1	27
LADY ISLAND CHANNEL AND UPPER RANGE	27	27	21	2-03	300	0.9	27
WASHOUGAL LOWER RANGE	23	26	29	2-03	300	1.5	27
WASHOUGAL UPPER RANGE	21	23	29	2-03	300	1.1	27
GARY ISLAND RANGE	15	16	16	2-03	300	0.9	27
REED ISLAND RANGE	17	17	14	3-01,2-03	300	2.2	27
TUNNEL POINT CHANNEL	23	22	24	3-01	300	0.8	27
ROOSTER ROCK CHANNEL	23	21	21	3-01	300	1.2	27
CAPE HORN CHANNEL	29	29	28	3-01	300	2.4	27
CANDIANA CHANNEL	31	27	26	3-01,10-02	300	1.0	27
FASHION REEF LOWER RANGE	14	19	19	10-02	300	2.2	27
MULTNOMAH FALLS BAR RANGE	12	23	26	10-02	300	1.3	27
MULTNOMAH FALLS TURN	12	17	21	3-01,10-02	300	0.8	27
MULTNOMAH FALLS UPPER RANGE	19	20	26	3-01	300	3.2	27
MCGOWANS CHANNEL	38	29	26	3-01	300	1.1	27
WARRENDALE LOWER RANGE	22	22	19	3-01	300	0.9	27
WARRENDALE UPPER RANGE	25	27	19	3-01	300	0.8	27
HAMILTON ISLAND REACH	28	28	25	3-01	300	0.9	27
ENTRANCE TO BONNEVILLE LOCKS	24	32	26	3-01	300	0.6	27

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

Chart 18584 NM 48/03

UMPQUA RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF OCT 2002 AND SURVEYS TO JUN 2003

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)
ENTRANCE CHANNEL TO LT. 21	18	18	18	3, 4, 6-02; 8, 9, 10-02 6-03	200	7.0	26-22
LT. 21 TO REEDSPORT	17	19	17	5-02; 9, 10-02	200	2.7	22
REEDSPORT TURNING BASIN	25	24	24	5-02; 10-02	600	0.2	22
LT. 21 TO GARDINER	12	13	11	10-01	200	1.15	22
GARDINER TURNING BASIN	5	2	2	10-01	500	0.2	22

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

Chart 18651 NM 48/03

REDWOOD CITY HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2003

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)
CHANNEL ENTRANCE (37°33'10"N., 122°11'43"W.) TO LIGHT 8	28.3	28.0	28.0	3-01; 7-03	700-300	1.07	30
LIGHT 8 TO LIGHT 14	27.0	28.0	26.7	3-01; 7-03	300-350	.90	30
LIGHT 14 TO LIGHT 15	26.4	26.8	27.1	3-01	300	.28	30

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

Chart 18652 (Page E) NM 48/03

SUISUN BAY AND SAN JOAQUIN RIVER

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2003

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)
SUISUN PT. REACH	44.3	45.5	47.2	2-03	300	0.8	35
BULLS HEAD CHANNEL	36.4	35.7	34.5	2-03	300-350	1.2	35
EAST BULLS HEAD CHANNEL	33.4	34.2	33.7	2-03	350	1.1	35
PT. EDITH CROSSING RANGE	35.1	34.7	28.2	2-03	350	1.1	35
PRESTON PT. REACH	35.5	35.7	24.4	2-03	350	0.9	35
ROE ISLAND CHANNEL	33.2	35.8	33.0	2-03	350	1.1	35
PORT CHICAGO REACH	38.0	38.0	38.1	2-03	350	0.52	35
MIDDLE GROUND CHANNEL							
WEST REACH	37.4	37.7	36.4	2-03	350	1.29	35
EAST REACH	36.4	38.2	36.8	2-03	350	1.09	35
NEW YORK SLOUGH							
WEST REACH	35.1	35.5	34.9	2-03; 7-03	400	1.3	35
EAST REACH	35.0	35.0	35.0	7-03	400	1.7	35
SAN JOAQUIN RIVER							
ANTIOCH REACH	32.2	32.6	31.3	4-03	400	3.3	35

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

Chart 18654 NM 48/03

PINOLE SHOAL CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2003

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)
CHANNEL ENTRANCE (38°01'33"N, 122°22'47"W) TO LT. 11	30.9	35.4	34.1	7-03	600	2.8	35
THENCE TO 38°03'31"N, 122°17'08"W	32.7	35.1	35.0	5-02; 7-03	600	2.2	35

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

Chart 18656 NM 48/03

SUISUN BAY

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2003

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)
SUISUN PT. REACH	44.3	45.5	47.2	2-03	300	0.8	35
BULLS HEAD CHANNEL	36.4	35.7	34.5	2-03	300-350	1.2	35
EAST BULLS HEAD CHANNEL	33.4	34.2	33.7	2-03	350	1.1	35
PT. EDITH CROSSING RANGE	35.1	34.7	28.2	2-03	350	1.1	35
PRESTON PT. REACH	35.5	35.7	24.4	2-03	350	0.9	35
ROE ISLAND CHANNEL	33.2	35.8	33.0	2-03	350	1.1	35
PORT CHICAGO REACH	38.0	38.0	38.1	2-03	350	0.52	35
MIDDLE GROUND CHANNEL							
WEST REACH	37.4	37.7	36.4	2-03	350	1.29	35
EAST REACH	36.4	38.2	36.8	2-03	350	1.09	35
NEW YORK SLOUGH							
WEST REACH	35.1	35.5	34.9	2-03; 7-03	400	1.3	35
EAST REACH	35.0	35.0	35.0	7-03	400	1.7	35

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

Chart 18659 NM 48/03

SUISUN BAY

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2003

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)
NEW YORK SLOUGH							
WEST REACH	35.1	35.5	34.9	2-03; 7-03	400	1.3	35
EAST REACH	35.0	35.0	35.0	7-03	400	1.7	35

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

Chart 18666 NM 48/03

SUISUN BAY

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO JUL 2003

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)
MIDDLE GROUND CHANNEL							
WEST REACH	37.4	37.7	36.4	2-03	350	1.29	35
EAST REACH	36.4	38.2	36.8	2-03	350	1.09	35
NEW YORK SLOUGH							
WEST REACH	35.1	35.5	34.9	2-03; 7-03	400	1.3	35
EAST REACH	35.0	35.0	35.0	7-03	400	1.7	35

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