

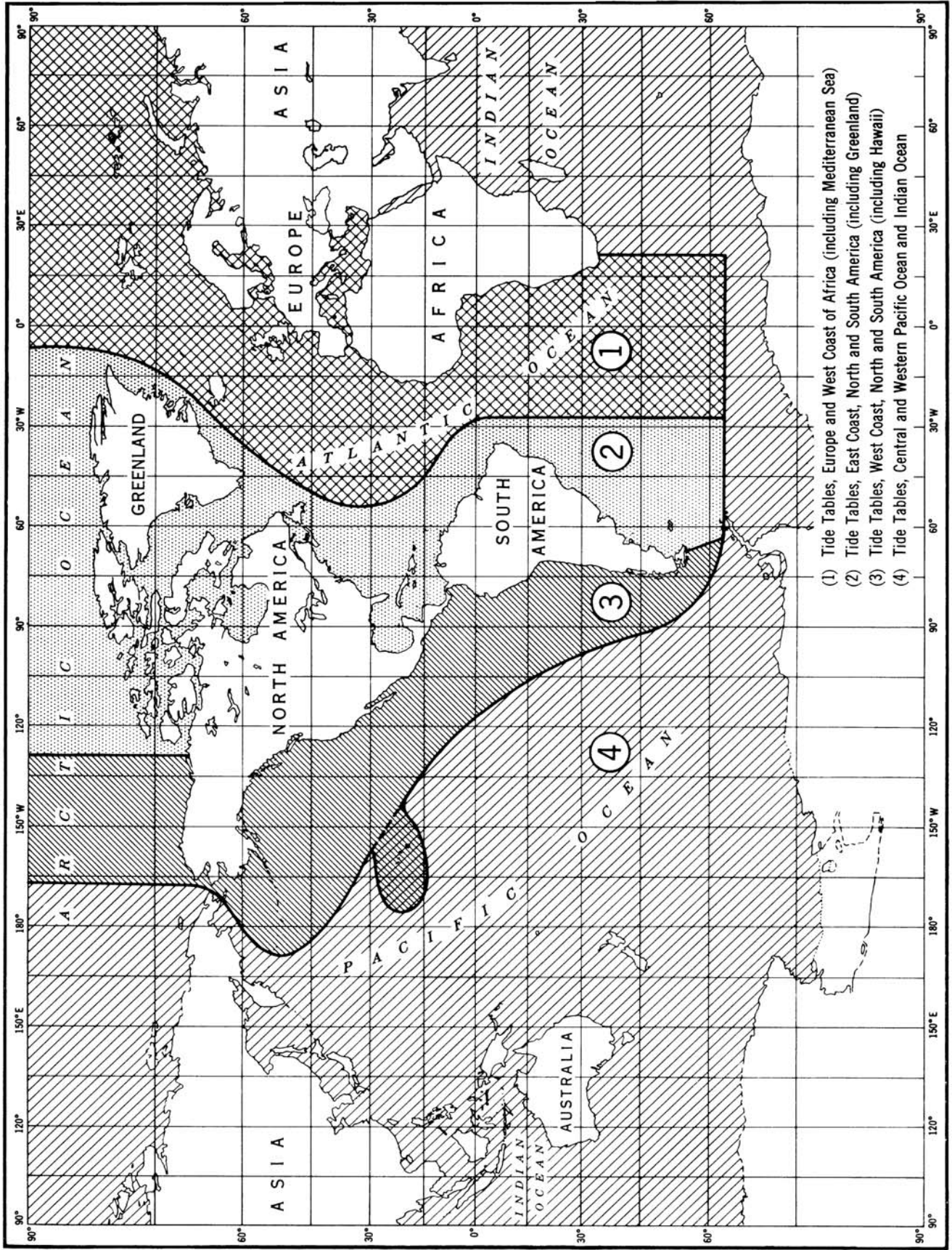
Tidal Current Tables 2010 – Atlantic Coast of North America

Tidal Current Tables 2010

Atlantic Coast of North America



INDEX OF TIDE TABLE COVERAGE



- (1) Tide Tables, Europe and West Coast of Africa (including Mediterranean Sea)
- (2) Tide Tables, East Coast, North and South America (including Greenland)
- (3) Tide Tables, West Coast, North and South America (including Hawaii)
- (4) Tide Tables, Central and Western Pacific Ocean and Indian Ocean

Tidal Current Tables 2010

Atlantic Coast of North America

Issued 2009

SOURCES OF ADDITIONAL INFORMATION

THE NATIONAL OCEAN SERVICE IS NO LONGER PRINTING AND DISTRIBUTING THE TIDE AND TIDAL CURRENT TABLES

Tide and Tidal current data continue to be updated, generated and published by the NOAA/National Ocean Service; however, the printing and distribution in book-form is now done by private companies working from information provided by NOS.

NOS now offers two new vehicles for obtaining predictions. First, the complete set of Tables as camera-ready page-images will be available on CD-ROM. The CD-ROM vehicle is primarily intended for use by private printers who wish to print in book-form the full set of Tables for distribution to resellers and the general public. Second, for domestic tide reference stations, limited predictions are available on the NOS, Center for Operational Oceanographic Products and Services (CO-OPS), web site, (<http://tidesandcurrents.noaa.gov/>).

In addition to predictions, the web site provides updated information on the status of the Tables as they are finalized each year. Notices concerning the most recent Table updates and publication cut-off dates are included.

For the names of companies printing and distributing the Tables, please call or write to:

National Ocean Service
Products and Services Division, N/OPS3
1305 East-West Highway
Silver Spring, MD 20910
301-713-2815, fax 301-713-4500

PUBLICATIONS:

United States Coast Pilots and Nautical Charts may be ordered from:

FAA, National Aeronautical Charting Office
Distribution Division, AJW-3550
10201 Good Luck Road
Glenn Dale, MD 20769-9700
(301) 436-8301
(800) 638-8972 toll free, U.S. Only
<http://www.naco.faa.gov/>

A list of authorized sales agents is published in the Nautical Chart Catalogs or may be obtained on request from the National Ocean Service. The publications may also be purchased across-the-counter at the NOAA, Distribution Branch office listed above.

TECHNICAL ASSISTANCE:

*Technical questions relating to **tide and current predictions**, as well as requests for **special predictions**, should be addressed to:*

National Ocean Service
Products and Services Division, N/OPS3
1305 East-West Highway
Silver Spring, MD 20910
(301) 713-2815

SOURCES OF ADDITIONAL INFORMATION

Technical questions relating to ***actual tide observations, tidal datums, and other information necessary for engineering projects*** should be addressed to:

National Ocean Service
Products and Services Division, N/OPS3
1305 East-West Highway
Silver Spring, MD 20910
(301) 713-2877

Technical questions relating to *other publications and nautical charts* should be addressed to:

National Ocean Service
Customer Affairs Branch
1315 East-West Highway.
Silver Spring, MD 20910
(301) 713-2729

WEBSITES

Center for Operational Oceanographic Products and Services
(PORTS[®] * Predictions * Observations * Bench Marks * Tides Online * Great Lakes Online)

<http://tidesandcurrents.noaa.gov>

Coastal Services Center - <http://www.csc.noaa.gov>

Marine Chart Division - <http://www.nauticalcharts.noaa.gov>

Ocean Predictions Center - <http://www.opc.ncep.noaa.gov>

National Centers for Environmental Predictions - <http://www.ncep.noaa.gov>

National Climatic Data Center - <http://www.ncdc.noaa.gov>

National Data Buoy Center - <http://www.ndbc.noaa.gov>

National Geodetic Survey - <http://www.ngs.noaa.gov>

National Geophysical Data Center - <http://www.ngdc.noaa.gov>

National Ocean Service - <http://www.nos.noaa.gov>

National Oceanic and Atmospheric Administration - <http://www.noaa.gov>

National Oceanographic Data Center - <http://www.nodc.noaa.gov>

National Weather Service - <http://www.nws.noaa.gov>

U.S. Coast Guard - <http://www.uscg.mil>

U.S. Geological Survey - <http://www.usgs.gov>

U.S. Naval Observatory - <http://www.usno.navy.mil>

U.S. Naval Oceanographic Office - <https://oceanography.navy.mil>

CORRECTIONS:

Corrections to this publication, after the date of printing, may appear in the Notice to Mariners. They may also appear in the Local Notice to Mariners, published weekly, by the various United States Coast Guard Districts.

CONTENTS

	Page
Astronomical data.....	inside back cover
Important notices	VI
Introduction	X
List of reference stations.....	XI
Table 1. —Daily current predictions:	
Explanation of table.....	1
Typical current curves for reference stations	3
Daily predictions for reference stations	4
Table 2. —Current differences and other constants and rotary tidal currents:	
Explanation of table.....	151
Current differences and other constants	154
Table 3. —Speed of currents at any time:	
Explanation of table.....	205
Speed of Currents at any time	206
Table 4. —Duration of slack	207
Table 5. —Rotary tidal currents:	
Explanation of table.....	209
Rotary tidal current stations	210
The Gulf Stream	217
Wind-driven currents.....	219
The combination of currents	221
Current diagrams:	
Explanation.....	223
Current diagrams.....	224
Publications relating to tides and tidal currents	235
Official U.S. Datums	236
Glossary of terms	237
Index to stations.....	243

IMPORTANT NOTICES

Daylight-saving time is not used in this publication. All daily tidal current predictions and predictions compiled by the use of Table 2 data are based on the standard time meridian indicated for each location. Predicted times may be converted to daylight-saving times, where necessary, by adding 1 hour to these data. In converting times from the Astronomical Data page on the inside back cover, it should be remembered that daylight saving time is based on a meridian 15° east of the normal standard meridian for a particular place.

NOS, in partnership with other agencies and institutions, has established a series of Physical Oceanographic Real Time Systems (PORTS[®]) in selected areas. These PORTS[®] sites provide constantly updated information on tide and tidal current conditions, water temperature, and weather conditions. This information is updated every six minutes. PORTS[®] sites are currently in operation at several major harbors with future sites to be added. The information is accessible through a computer data connection or by a voice response system at the following numbers:

PORTS [®] SITES	VOICE ACCESS	INTERNET ACCESS
CHERRY POINT	888-817-7794	www.tidesandcurrents.noaa.gov
CHESAPEAKE BAY	866-CH-PORTS (866-247-6787)	“
DELAWARE RIVER & BAY	866-30-PORTS (866-307-6787)	“
GULFPORT	888-257-1858	“
HOUSTON/GALVESTON	866-HG-PORTS (866-447-6787)	“
LAKE CHARLES	888-817-7692	“
LOS ANGELES/LONG BEACH		“
LOWER COLUMBIA RIVER	888-53-PORTS (888-537-6787)	“
MOBILE BAY	877-84-PORTS (877-847-6787)	“
NARRAGANSETT BAY	866-75-PORTS (866-757-6787)	“
NEW HAVEN	888-80-PORTS (888-807-6787)	“
NEW YORK/NEW JERSEY	866-21-PORTS (866-217-6787)	“
PASCAGOULA	888-257-1857	“
PORT OF ANCHORAGE	866-AK-PORTS (866-257-6787)	“
SABINE NECHES	888-257-1859	“
SAN FRANCISCO BAY	866-SB-PORTS (866-727-6787)	“
SOO LOCKS	301-713-9596	“
TACOMA	888-60-PORTS (888-607-6787)	“
TAMPA BAY	866-TB-PORTS (866-827-6787)	“

PUBLISHED CAUTIONARY NOTICES

Published in Local Notice to Mariners and United States Coast Pilot Notices

CHANGES TO 2008 EDITIONS OF THE NOS TIDAL CURRENT TABLES

three new tidal current reference stations have been added to the National Ocean Service tidal Current Tables for 2008. Table 2 "time" and "velocity" correction factors at secondary stations which are affected by these changes have been updated based on the new reference station data.

Tidal Current Tables - 2008 - Atlantic Coast of North America

1. Bucksport, Penobscot Bay, Maine (new)
2. George Washington Bridge, Hudson River (new)
3. Kingston-Rhinecliff, Bridge, Hudson River (new)

(Issued October 1, 2006)

IMPORTANT NOTICES

TIDAL CURRENT PREDICTIONS INSIDE U.S. ESTUARIES

At present there are several U.S. estuaries with operational Physical Oceanographic Real Time Systems (PORTS) installed. PORTS systems are presently being installed in several additional estuaries. Over the next ten years there are projected to be twenty or more additional systems installed. In the past, the tidal current reference station has always been located at the entrance to each estuary. All tidal current secondary stations both inside and outside (along the coast) have been referred to the reference station at the entrance to the estuary. This will no longer be the case in estuaries with an operational PORTS system.

Estuaries with an operational PORTS system will have at least two reference stations. One will be the historic station at the entrance to the estuary. All secondary stations along the coast will continue to be referred to this station. The second tidal current reference station will be the primary PORTS station within the estuary. All secondary locations within the estuary itself will be referred to this location. Depending on the circulation dynamics of the estuary, daily tidal current predictions may be provided for one or more additional stations within the estuary.

(Issued October 1, 1999)

ARANSAS PASS – CORPUS CHRISTI BAY, TX

The Aransas-Corpus Christi Pilots have reported that published tidal current predictions for Aransas Pass deviate from observations by as much as two (2) hours. The published predictions must be used with extreme caution. The Pilots should be consulted for critical transits. Tidal Current predictions of the National Ocean Service (NOS) are derived from analysis of observed data at tidal harmonic frequencies which in turn are based on predictable astronomic positions of the moon and sun. The problem in many areas of the Gulf of Mexico, including the south Texas coast, is that localized meteorological conditions can significantly effect and alter the times of maximum flood and ebb currents. Real-time observation and reporting systems, such as the Physical Oceanographic Real Time System (PORTS) installed in the Galveston-Houston area, are the only means of providing accurate tidal current data for areas such as this.

(Issued July 17, 1997)

BISCAYNE BAY/PORT OF MIAMI, FL

The Biscayne Bay Pilots report that recent dredging and construction by the US Corps of Engineers (COE) supporting Miami port expansion has significantly effected the currents in Miami Harbor. Both flood and ebb currents should be expected to be stronger than indicated in official published predictions. The actual times for maximum and slack currents should be expected to deviate from the published predictions. Funding to support a survey to obtain new data for more accurate tidal current predictions is not available at this time. Installation of a Physical Oceanographic Real Time System (PORTS), like the one in operation in Tampa Bay, would be the best solution for long term marine safety.

(Issued July 17, 1997)

CHARLESTON HARBOR, SC

The US Army Corps of Engineers (CEO) is planning dredging and construction projects for Charleston Harbor in 1996-1997. Such projects in the past in other areas have resulted in dramatic changes in the observed tidal currents of those areas. Once dredging and/or construction operations commence, the Tidal Current predictions for this region should be considered questionable and potentially dangerous to rely upon. Tide predictions will also be affected but to a lesser degree. Funding for a real time system to monitor the Tidal Currents and a resurvey of the area after COE operations are complete is presently not available. Therefore, once COE operations begin and until such time as a real-time system is installed or a resurvey of the area conducted, the National Oceanic and Atmospheric Administration, National Ocean Service will be unable to provide accurate Tidal Current predictions necessary for marine safety and navigation in this area.

(Issued June 5, 1996)

IMPORTANT NOTICES

CHESAPEAKE & DELAWARE CANAL AND BALTIMORE HARBOR CONNECTING CHANNELS

The US Army Corps of Engineers (COE) is planning a project involving the Chesapeake & Delaware Canal (C&D) and the channels in the upper Chesapeake Bay connecting the canal to Baltimore, MD in 1996-1997. Such projects in the past in other areas have resulted in dramatic changes in the observed tidal currents of those areas. Once the project begins, the Tidal Current predictions for the C&D Canal and the channels connecting the canal to Baltimore should be considered questionable and potentially dangerous to rely upon. Tide predictions will be affected but to a lesser degree. Funding for a real-time system to monitor the Tidal Currents and a resurvey of these areas after COE operations are complete is presently not available. Therefore, once COE operations begin and until such time as a real-time system is installed or a resurvey of the area conducted, the National Oceanic and Atmospheric Administration, National Ocean Service will be unable to provide accurate Tidal Current predictions necessary for marine safety and navigation in this area.

(Issued June 5, 1996)

ST. AUGUSTINE, FL – ATLANTIC INTRACOASTAL WATERWAY

The US Coast Guard (USCG) has reported a problem involving the Tidal Currents in the Atlantic Intracoastal Waterway (AICW) in the St. Augustine, FL area. The specific location is the Bridge of Lions over the waterway. Numerous accidents have occurred at this site which are related to the currents in the waterway. There is no National Ocean Service (NOS) Tidal Current Station at or near the Bridge of Lions. Thus the NOS cannot, at this time, make Tidal Current predictions for this location. The USCG states that the cause of the accidents is loss of maneuverability (control) as a vessel passes under the bridge. The loss of maneuverability results in the vessel striking the bridge supports. The USCG states in part:

“The affect of a ‘fair’ tide on a navigating vessel is to reduce the vessel’s ability to maneuver. When a vessel is proceeding with a current (fair tide), less water flows across the vessel’s rudders. This condition has the affect of reducing the vessel’s maneuverability for a given speed over ground (all other things being equal).

The Bridge of Lions is a difficult bridge to navigate, even under ideal conditions. This circa 1926 Bascule bridge has a horizontal clearance of only 76’ verses the 90’ horizontal clearance of most of the other bridges on this section of the AICW.”

In addition, according to the US Coast Pilot, Vol 4, Chapter 12, Tidal Currents in excess of 2 knots often run at right angles to the bridge opening. The Coast Pilot advises mariners to transit the bridge at minimal Tidal Current conditions. Funding for real-time monitoring of the Tidal Currents or a survey to obtain Tidal Current observations upon which to base Tidal Current predictions for this location is not presently available. A consortium of local, state, and federal officials in conjunction with the private sector and commercial shipping interests are presently studying various options to provide accurate Tidal Current predictions necessary for marine safety and navigation at this location.

(Issued June 5, 1996)

WILMINGTON AND CAPE FEAR RIVER, NC

The US Army Corps of Engineers (COE) is due to begin dredging operations in the Wilmington and Cape Fear River area in 1997. The plans call for the deepening of the channel approaching Wilmington and extending up the Cape Fear River. Such actions in the past in other areas have resulted in dramatic changes in the observed tidal currents of those areas. Once dredging operations commence, the Tidal Current predictions for this region should be considered questionable at best and potentially dangerous to rely upon. Tide predictions will also be affected but to a lesser degree. Funding for a real-time system to monitor the Tidal Currents during the project and a resurvey of the area after COE operations are complete is presently not available. Therefore, once COE operations begin and until such time as a real-time system is installed or a resurvey of the area conducted, the National Oceanic and Atmospheric Administration, National Ocean Service will be unable to provide accurate Tidal Current predictions necessary for marine safety and navigation in this area.

(Issued June 5, 1996)

IMPORTANT NOTICES

HAMPTON ROADS, VA

Tidal currents in Hampton Roads and Elizabeth River have been significantly altered by dredging and construction of a new bridge/tunnel. Recent dredging by the U.S. Army Corps of Engineers has deepened the channels by 10 feet to a depth of 50 feet. Pilots and officials at the Norfolk Naval Base report hazardous conditions including significantly higher than predicted maximum current velocities, and significant deviation in the predicted times of maximum current. Mariners should exercise **EXTREME CAUTION** and **DISCRETION** in the use of published NOS tidal current predictions for this area. Funding for a Quality Assurance study and a full scale resurvey of the area is presently not available.

(Issued March 24, 1992)

CHINCOTEAGUE CHANNEL, VA

United States Coast Guard (USCG) Personnel at the Chincoteague Coast Guard Station, VA report that the times of high and low water computed from differences in Table 2 of the East Coast Tide Tables are frequently off by as much as an hour. The channel is subject to shoaling and is frequently dredged. Exercise caution in using Table 2 Tide differences for this area.

(Issued May 17, 1991)

INTRODUCTION

Current tables for the use of mariners have been published by the National Ocean Service (formerly the Coast and Geodetic Survey) since 1890. Tables for the Atlantic coast first appeared as a part of the tide tables and consisted of brief directions for obtaining the times of the current for a few locations from the times of high and low waters. Daily predictions of slack water for five stations were given for the year 1916, and by 1923 the tables had so expanded that they were then issued as a separate publication entitled Current Tables, Atlantic Coast. A companion volume, Current Tables, Pacific Coast, was also issued that year. In 1930 the predictions for the Atlantic coast were extended to include the times and velocities of maximum current.

In the preparation of these tables, all available observations were used. In some cases, however, the observations were insufficient for obtaining final results, and as further information becomes available it will be included in subsequent editions. All persons using these tables are invited to send information or suggestions for increasing their usefulness to the National Ocean Service, Products and Services Division, 1305 East-West Highway, N/OPS3, Silver Spring, Maryland 20910, U.S.A. The data for lightship stations are based on observations obtained through the cooperation of the U.S. Coast Guard. By cooperative arrangements, full predictions for Bay of Fundy Entrance (Grand Manan Channel) were furnished by the Canadian Hydrographic Service.

Daily predicted times of slack water and predicted times and velocities of maximum current (flood and ebb) are presented in table 1 for a number of reference stations. Similar predictions for many other locations may be obtained by applying the correction factors listed in table 2 to the predictions of the appropriate reference station. The speed of a current at times between slack water and maximum current may be approximated by the use of table 3. The duration of weak current near the time of slack water may be computed by the use of table 4.

LIST OF REFERENCE STATIONS

<i>Station Names</i>	<i>Page</i>	<i>Updated</i>	<i>Data Series</i>
Aransas Pass (between jetties), Texas	140	1995	1 month (4/9/1990-5/7/1990)
Baltimore Harbor Approach (off Sandy Pt.), Maryland	84	1965	29 days beginning 8/14/1963)
Bay of Fundy Entrance (Grand Manan Channel).....	4		
Bergen Point Reach (Bayonne Bridge), New York.....	60	1999	4 months (1/1/1998-4/30/1998)
Bolivar Roads, Galveston Bay, Texas	136	2000	453 days (5/22/1997-9/9/1998)
Boston Harbor (Deer Island Light), Massachusetts	20	1976	5 months (5/10/1971-10/26/1971)
Brandywine Shoal Light, Delaware Bay, Delaware	68	2004	1 month (11/22/02-12/23/02)
Bucksport, Penobscot Bay Maine	12	2008	1 month (7/14/2006-8/22/2006)
Cape Cod Canal, Massachusetts	24	1958	58 days, August 1955
Charleston Harbor (off Ft. Sumter), South Carolina.....	92	1997	2 months (5/26/1987-7/28/1987)
Chesapeake and Delaware Canal (Chesapeake City).....	88	2005	3 months (3/15/2004 -6/21/2004)
Chesapeake Bay Entrance, Virginia	80	1988	330 days beginning 3/30/1982
Delaware Bay Entrance	64	1987	221 days beginning 4/25/1984
Estes Head, Eastport, Maine.....	8	2000	16 months (5/22/1997-9/9/1998)
Galveston Bay Entrance, Texas.....	132	1970	58 days beginning 4/5/1935
George Washington Bridge, Hudson River	52	2008	3 months (8/14/2006-11/01/2006)
Hell Gate, East River, New York	44	1970	35 days (1932)
Key West, Florida.	108	1967	29 days beginning 1/22/1954
Kingston-Rhinecliff Bridge, Hudson River	56	2008	3 months (8/14/2006-11/01/2006)
Miami Harbor Entrance, Florida.....	104	1987	29 days beginning 1/18/1985
Mobile Bay Entrance, Alabama.....	128	1944	29 days (1935)
Old Tampa Bay Entrance, (Port Tampa), Florida	120	1994	2 months (6/25/1990-9/11/1990)
Philadelphia (Penns Landing), Delaware River, Pennsylvania....	76	2004	1 month (3/25/03-4/25/03)
Pollock Rip Channel, Massachusetts.....	32	1965	2 years (1934-1936)
Portsmouth Harbor Entrance, New Hampshire.....	16	1953	15 days beginning 9/16/1953
Quonset Point, Narragansett Bay, Rhode Island.....	28	2003	1 year (7/1/2000-6/29/2001)
Reedy Point, Delaware Bay, Delaware	72	2004	1 month (3/11/03-4/21/03)
St. Andrew Bay Entrance, Florida*	124	2010	2 months (1/11/2008-3/6/2008)
St. Johns River Entrance, Florida.....	100	2000	3 months (4/16/1998-7/21/1998)
Savannah River Entrance, Georgia.....	96	1999	2 months (5/7/1997-7/20/1997)
Tampa Bay Entrance (Egmont Channel), Florida.....	112	1994	13 months (8/20/1990-9/25/1991)
Tampa Bay (Sunshine Skyway Bridge), Florida	116	1994	8 months (8/22/1990-6/10/1991)
The Narrows, New York Harbor, New York	48	2003	6 months (10/19/2001-4/30/2002)
The Race, Long Island Sound	36	1994	2 months (1/1/1989-3/12/1989)
Throgs Neck, Long Island Sound, New York.....	40	1994	5 months (4/2/1989-9/30/1989)
Vieques Passage, Puerto Rico	144	1967	15 days beginning 4/8/1965

*New reference station.

TABLE 1.— DAILY CURRENT PREDICTIONS

EXPLANATION OF TABLE

This table gives the predicted times of slack water and the predicted times and speeds of maximum current (flood and ebb) for each day of the year at a number of stations on the Atlantic coast of North America. The times are given in hours and minutes and the speeds in knots.

Time.— The kind of time used for the predictions at each reference station is indicated by the time meridian at the bottom of each page. **Daylight-saving time is not used in this publication.** If daylight-saving time is required, add one (1) hour to the predicted time.

Slack water and maximum current.— The columns headed “Slack” contain the predicted times at which there is no current; or, in other words, the times at which the current has stopped setting in a given direction and is about to begin to set in the opposite direction. Offshore, where the current is rotary, slack water denotes the time of minimum current. Beginning with the slack water before flood, the current increases in speed until the strength or maximum speed of the flood current is reached; it then decreases until the following slack water, or slack before ebb. The ebb current then begins, increases to a maximum speed, and then decreases to the next slack. The predicted times and speeds of maximum current are given in the columns headed “Maximum.” Flood speeds are marked with an “F,” the ebb speeds with an “E.” An entry in the “Slack” column will be slack, flood begins if the maximum current which follows it is marked “F.” Otherwise the entry will be slack, ebb begins.

Direction of set.— The terms flood and ebb do not in all cases clearly indicate the direction of the current, the approximate direction toward which the currents flow are given at the top of each page to distinguish the two streams.

Number of slacks and strengths.— There are usually four slacks and four maximums each day. If one is missing in a given day, it will occur soon after midnight as the first slack or maximum of the following day. At some stations where the diurnal inequality is large, there may be on certain days a continuous flood or ebb current with varying speed throughout half the day giving only two slacks and two maximums on that particular day.

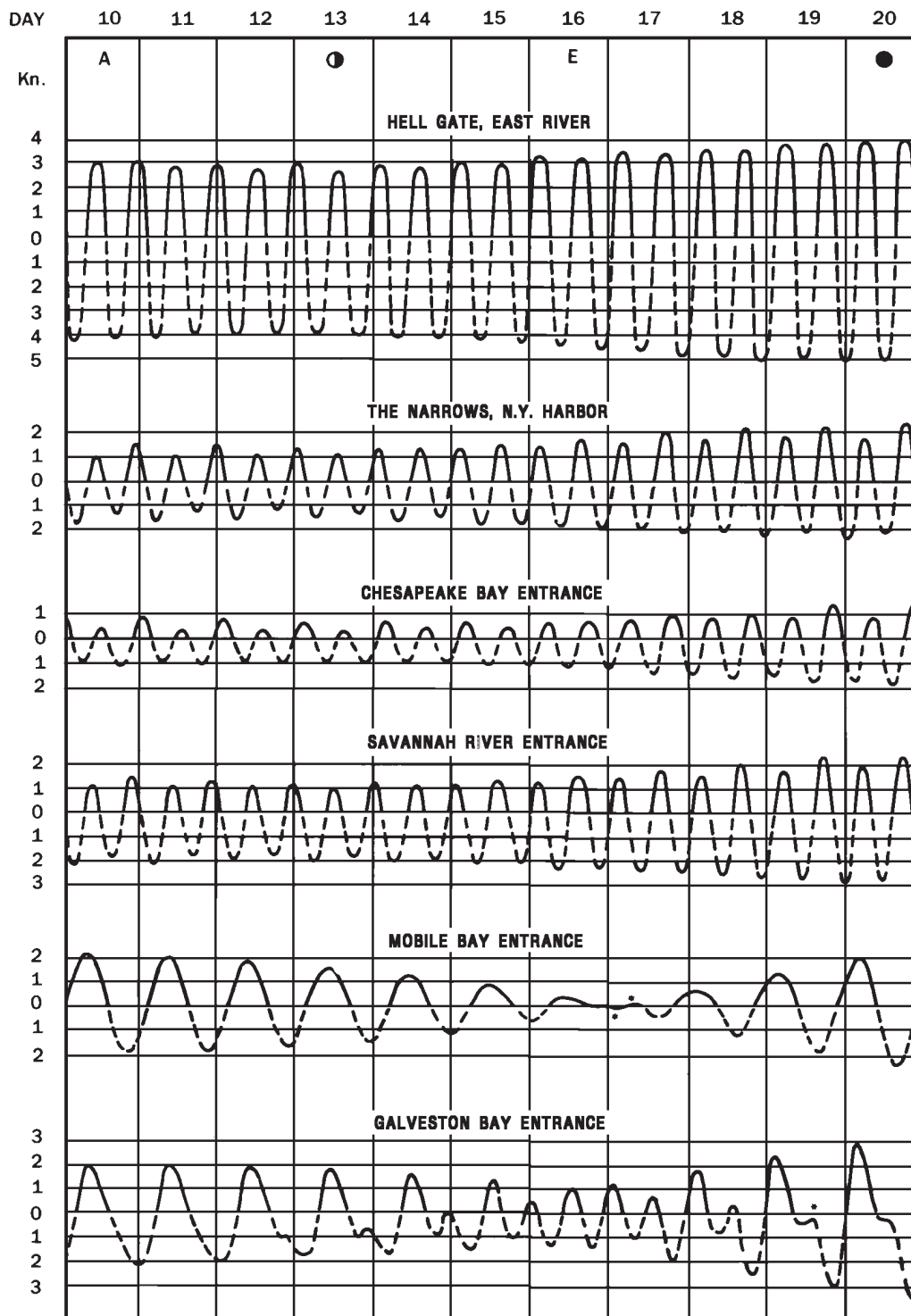
Current and tide.— It is important to note that the predicted slacks and strengths given in this table refer to the horizontal motion of the water and not to the vertical rise and fall of the tide. The relation of current to tide is not constant, but varies from place to place, and the time of slack water does not generally coincide with the time of high or low water, nor does the time of maximum speed of the current usually coincide with the time of most rapid change in the vertical height of the tide. At stations located on a tidal river or bay the time of slack water may differ from 1 to 3 hours from the time of high or low water. The times of high and low waters are given in the Tide Tables published by the National Ocean Service.

Variations from predictions.— In using this table, bear in mind that actual times of slack or maximum occasionally differ from the predicted times by as much as half an hour and in rare instances the difference may be as much as an hour. Comparisons of predicted with observed times of slack water indicate that more than 90 percent of the slack waters occurred within half an hour of the predicted times. To make sure, therefore, of getting the full advantage of a favorable current or slack water, the navigator should reach the entrance or strait at least half an hour before the predicted time of the desired condition of current. Currents are frequently disturbed by wind or variations in river discharge. On days when the current is affected by such disturbing influences, the times and speeds will differ from those given in the table, but local knowledge will enable one to make proper allowance for these effects.

TABLE 1.—DAILY CURRENT PREDICTIONS

Typical current curves.— The variations in the tidal current from day to day and from place to place are illustrated on the opposite page by the current curves for representative ports along the Atlantic and Gulf Coasts of the United States. Flood current is represented by the solid line curve above the zero speed (slack water) line and the ebb current by the broken line curve below the slack water line. The curves show clearly that the currents along the Atlantic coast are semi-diurnal (two floods and two ebbs in a day) in character with their principal variations following changes in the Moon's distance and phase. In the Gulf of Mexico, however, the currents are diurnal in character. Because the dominant factor is the change in the Moon's declination, the currents in the Gulf tend to become semi-diurnal when the Moon is near the Equator. By reference to the curves, it will be noted that with this diurnal type of current there are times when the current may be erratic (marked with an asterisk), or one flood or ebb current of the day may be quite weak. Therefore, in using the predictions of the current, it is essential to carefully note the speeds as well as the times.

TYPICAL CURRENT CURVES FOR REFERENCE STATIONS (flood: Solid line, Ebb: Broken Line.)



*Current weak and variable.

A discussion of these curves is given on the preceding page.

- Lunar data:
- A—moon in apogee
 - ◐—last quarter
 - E—moon on equator
 - new moon

Bay of Fundy Entrance (Grand Manan Channel), 2010

F—Flood, Dir. 032° True E—Ebb, Dir. 212° True

January				February				March															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0002	0303	2.5E	16 Sa	0050	0346	2.0E	1 M	0118	0424	3.3E	16 Tu	0115	0422	2.7E	1 M	0017	0323	3.3E	16 Tu	0013	0320	2.7E
	0554	0856	2.9F		0634	0932	2.2F		0721	1019	3.4F		0718	1013	2.8F		0621	0920	3.3F		0617	0913	2.7F
	1203	1521	3.1E		1238	1554	2.4E		1326	1637	3.4E		1319	1628	2.7E		1228	1536	3.4E		1220	1527	2.7E
	1823	2129	3.3F		1849	2156	2.6F		1934	2240	3.8F		1921	2227	3.2F		1831	2139	3.8F		1818	2125	3.2F
2 Sa	0049	0351	2.8E	17 Su	0120	0420	2.2E	2 Tu	0157	0504	3.4E	17 W	0141	0450	2.9E	2 Tu	0055	0402	3.6E	17 W	0038	0348	3.0E
	0644	0944	3.0F		0710	1005	2.3F		0803	1059	3.4F		0750	1044	2.9F		0701	0959	3.5F		0648	0944	3.0F
	1251	1607	3.2E		1311	1626	2.5E		1408	1718	3.3E		1349	1657	2.7E		1308	1615	3.5E		1251	1556	2.8E
	1908	2214	3.5F		1921	2226	2.8F		2014	2319	3.7F		1952	2257	3.3F		1910	2216	3.9F		1849	2154	3.4F
3 Su	0133	0438	3.0E	18 M	0148	0452	2.3E	3 W	0236	0545	3.3E	18 Th	0209	0520	2.9E	3 W	0131	0440	3.6E	18 Th	0106	0417	3.1E
	0732	1030	3.1F		0744	1038	2.4F		0845	1140	3.3F		0822	1117	3.0F		0740	1037	3.5F		0720	1016	3.2F
	1338	1653	3.3E		1343	1657	2.5E		1450	1758	3.1E		1422	1728	2.6E		1347	1653	3.3E		1322	1627	2.8E
	1953	2258	3.5F		1952	2256	2.9F		2053	2357	3.5F		2024	2330	3.2F		1947	2252	3.7F		1921	2226	3.4F
4 M	0217	0523	3.0E	19 Tu	0216	0522	2.4E	4 Th	0314	0625	3.1E	19 F	0240	0552	2.9E	4 Th	0206	0517	3.5E	19 F	0136	0448	3.2E
	0819	1116	3.1F		0817	1111	2.5F		0927	1221	3.0F		0858	1153	2.9F		0819	1115	3.3F		0753	1050	3.2F
	1424	1738	3.2E		1415	1728	2.5E		1533	1839	2.7E		1459	1802	2.5E		1426	1731	3.0E		1357	1659	2.8E
	2036	2341	3.5F		2024	2328	2.9F		2132				2059				2024	2327	3.4F		1955	2300	3.4F
5 Tu	0301	0609	3.0E	20 W	0245	0554	2.5E	5 F	0036	031F		20 Sa	0006	031F		5 F	0241	0554	3.2E	20 Sa	0208	0521	3.1E
	0906	1201	3.0F		0852	1145	2.5F		0354	0707	2.8E		0315	0628	2.7E		0858	1152	3.0F		0830	1127	3.1F
	1511	1823	2.9E		1450	1800	2.4E		1010	1303	2.6F		0938	1233	2.7F		1505	1809	2.5E		1435	1736	2.5E
	2120				2056				1618	1923	2.2E		1540	1842	2.2E		2100				2032	2338	3.1F
6 W	0346	0655	3.3F	21 Th	0002	0302	2.9F	6 Sa	0117	0417	2.6F	21 Su	0046	0346	2.8F	6 Sa	0002	0302	3.0F	21 Su	0245	0559	2.9E
	0954	1248	2.8F		0317	0627	2.4E		0436	0753	2.3E		0355	0710	2.4E		0316	0632	2.7E		0911	1208	2.8F
	1559	1911	2.6E		0929	1223	2.5F		1058	1350	2.1F		1225	1525	2.4F		0938	1231	2.6F		1518	1818	2.2E
	2205				1527	1836	2.2E		1711	2013	1.6E		2225				1630	1930	1.8E		1547	1849	2.0E	2114
7 Th	0110	0410	3.0F	22 F	0039	0339	2.8F	7 Su	0202	0502	2.0F	22 M	0133	0433	2.3F	7 Su	0040	0340	2.4F	22 M	0020	0320	2.8F
	0432	0744	2.6E		0353	0705	2.3E		0523	0847	1.9E		0444	0804	2.1E		0353	0714	2.2E		0327	0644	2.5E
	1044	1337	2.5F		1011	1304	2.3F		1153	1445	1.6F		1119	1416	2.0F		1021	1313	2.0F		0958	1256	2.5F
	1652	2001	2.2E		1610	1916	2.0E		1819	2117	1.1E		1736	2036	1.4E		1636	1935	1.4E		1611	1910	1.8E
8 F	0158	0458	2.6F	23 Sa	0120	0420	2.6F	8 M	0258	0558	1.5F	23 Tu	0234	0534	1.9F	8 M	0121	0421	1.8F	23 Tu	0111	0411	2.3F
	0522	0836	2.3E		0434	0749	2.2E		0624	0956	1.5E		0548	0917	1.8E		0436	0804	1.7E		0419	0742	2.1E
	1138	1431	2.1F		1058	1352	2.1F		1301	1600	1.3F		1230	1531	1.7F		1113	1405	1.5F		1056	1356	2.1F
	1751	2057	1.8E		1701	2005	1.7E		1956	2242	0.8E		1906	2208	1.2E		1744	2040	0.9E		1721	2023	1.4E
9 Sa	0251	0551	2.2F	24 Su	0208	0508	2.3F	9 Tu	0415	0715	1.1F	24 W	0355	0655	1.6F	9 Tu	0212	0512	1.3F	24 W	0216	0516	1.8F
	0617	0935	2.0E		0523	0843	2.0E		0747	1119	1.3E		0713	1048	1.7E		0532	0916	1.2E		0528	0901	1.8E
	1238	1533	1.8F		1154	1449	1.9F		1422	1741	1.2F		1353	1703	1.8F		1221	1519	1.1F		1209	1514	1.8F
	1901	2202	1.5E		1806	2109	1.4E		2134				2044	2342	1.4E		1937	2218	0.6E		1855	2159	1.3E
10 Su	0044	0352	1.8F	25 M	0307	0607	2.0F	10 W	0013	0313	0.9E	25 Th	0531	0831	1.6F	10 W	0334	0634	0.8F	25 Th	0343	0643	1.5F
	0720	1040	1.8E		0624	0951	1.8E		0246	0557	1.0F		0846	1211	2.0E		0708	1051	1.0E		0701	1033	1.7E
	1344	1646	1.6F		1301	1559	1.8F		0915	1236	1.4E		1511	1827	2.1F		1348	1717	1.1F		1333	1647	1.9F
	2021	2314	1.3E		1927	2228	1.3E		1537	1905	1.5F		2158				2123	2357	0.7E		2028	2328	1.5E
11 M	0152	0502	1.6F	26 Tu	0421	0721	1.8F	11 Th	0123	0423	1.2E	26 F	0056	0356	1.8E	11 Th	0540	0840	0.8F	26 F	0520	0820	1.7F
	0828	1149	1.8E		0739	1109	1.8E		0406	0715	1.3F		0346	0651	2.0F		0855	1213	1.2E		0834	1153	2.0E
	1454	1804	1.6F		1416	1721	1.8F		1021	1336	1.7E		0959	1316	2.4E		1508	1845	1.4F		1449	1808	2.3F
	2139				2054	2353	1.4E		1634	1956	1.8F		1614	1929	2.7F		2220				2136		
12 Tu	0026	0326	1.3E	27 W	0543	0843	1.8F	12 F	0213	0513	1.5E	27 Sa	0153	0453	2.4E	12 F	0103	0403	1.1E	27 Sa	0037	0337	2.1E
	0305	0617	1.5F		0858	1224	2.0E		0501	0805	1.6F		0447	0750	2.5F		0351	0659	1.1F		0331	0636	2.1F
	0934	1253	1.8E		1528	1839	2.1F		1109	1421	2.0E		1057	1409	2.8E		1002	1311	1.5E		0944	1255	2.4E
	1558	1912	1.8F		2208				1716	2033	2.2F		1706	2018	3.2F		1603	1930	1.8F		1550	1907	2.8F
13 W	0131	0431	1.4E	28 Th	0105	0405	1.7E	13 Sa	0252	0552	1.9E	28 Su	0240	0540	2.9E	13 Sa	0148	0448	1.6E	28 Su	0131	0431	2.6E
	0413	0721	1.6F		0351	0658	2.1F		0542	0842	1.9F		0537	0838	3.0F		0439	0742	1.5F		0428	0731	2.6F
	1033	1350	2.0E		1008	1328	2.4E		1147	1458	2.2E		1145	1454	3.2E		1046	1353	1.8E		1039	1346	2.8E
	1652	2006	2.0F		1630	1941	2.6F		1751	2103	2.5F		1750	2100	3.6F		1644	2001	2.2F		1641	1954	3.2F
14 Th	0224	0524	1.6E	29 F	0205	0505	2.2E	14 Su	0325	0625	2.2E	29 M	0240	0540	2.9E	14 Su	0222	0522	2.0E	29 M	0216	0516	3.1E
	0509	0813	1.8F		0455	0759	2.5F		0616	0913	2.2F		0447	0750	2.5F		0515	0815	2.0F		0516	0817	3.1F
	1121	1437	2.1E		1106	1423	2.8E		1219	1530	2.4E		1171	1482	2.2E		1121	1427	2.2E		1126	1431	3.1E
	1737	2048	2.2F		1723	2033	3.0F		1822	2130	2.8F		1822	2130	2.8F		1717	2029	2.5F		1725	2035	3.6F

Bay of Fundy Entrance (Grand Manan Channel), 2010

F—Flood, Dir. 032° True E—Ebb, Dir. 212° True

April				May				June																	
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum											
	h	m	knots		h	m	knots		h	m	knots		h	m	knots										
1 Th	0103	0413	3.6E	16 F	0033	0347	3.2E	1 Sa	0111	0427	3.1E	16 Su	0047	0404	3.2E	1 Tu	0207	0528	2.3E	16 W	0210	0527	3.1E		
	0716	1013	3.4F		0652	0949	3.2F		0730	1029	3.0F		0710	1011	3.2F		0829	1129	2.4F		0829	1133	3.3F		
	1326	1628	3.1E		1259	1601	2.8E		1347	1647	2.4E		1325	1627	2.6E		1456	1758	1.8E		1453	1759	2.7E		
	1920	2224	3.5F		1854	2159	3.4F		1935	2236	2.8F		1920	2223	3.1F		2044	2338	2.0F		2055	2351	2.9F		
2 F	0137	0450	3.4E	17 Sa	0107	0421	3.3E	2 Su	0146	0504	2.7E	17 M	0129	0447	3.1E	2 W	0245	0607	2.0E	17 Th	0259	0616	2.9E		
	0753	1049	3.2F		0729	1027	3.2F		0808	1106	2.7F		0754	1055	3.2F		0907	1208	2.2F		0916	1220	3.2F		
	1403	1705	2.7E		1337	1638	2.7E		1427	1726	2.0E		1411	1713	2.5E		1536	1840	1.6E		1542	1850	2.6E		
	1956	2259	3.2F		1932	2237	3.3F		2014	2312	2.4F		2007	2309	3.0F		2127				2147				
3 Sa	0210	0526	3.0E	18 Su	0144	0459	3.1E	3 M	0221	0542	2.4E	18 Tu	0215	0533	2.9E	3 Th		0018	1.8F	18 F		0042	2.7F		
	0831	1126	2.9F		0808	1107	3.1F		0847	1144	2.3F		0840	1142	3.0F		0325	0648	1.8E		0352	0707	2.7E		
	1442	1743	2.3E		1419	1719	2.5E		1509	1808	1.6E		1501	1805	2.3E		0946	1248	2.0F		1005	1310	3.0F		
	2032	2333	2.7F		2014	2319	3.0F		2054	2350	2.0F		2059	2358	2.7F		1619	1926	1.4E		1634	1944	2.5E		
4 Su	0244	0603	2.5E	19 M	0225	0541	2.9E	4 Tu	0258	0623	1.9E	19 W	0305	0625	2.7E	4 F		0103	1.6F	19 Sa		0136	2.5F		
	0909	1204	2.4F		0852	1152	2.9F		0928	1226	2.0F		0931	1234	2.8F		0410	0734	1.5E		0449	0803	2.4E		
	1524	1823	1.8E		1506	1807	2.2E		1556	1856	1.3E		1557	1903	2.2E		1029	1333	1.9F		1058	1404	2.7F		
	2110				2102				2139				2157				1706	2016	1.3E		1730	2042	2.4E		
5 M	0320	0643	2.2F	20 Tu	0311	0631	2.5E	5 W	0340	0711	1.6E	20 Th	0403	0724	2.4E	5 Sa		0154	1.4F	20 Su		0235	2.2F		
	0951	1245	2.0F		0943	1243	2.6F		1014	1313	1.7F		1027	1331	2.6F		0503	0826	1.3E		0552	0903	2.1E		
	1612	1910	1.2E		1603	1906	1.9E		1654	1956	1.0E		1659	2008	2.0E		1116	1423	1.7F		1154	1502	2.5E		
	2153				2159				2235				2301				1757	2112	1.3E		1829	2143	2.2E		
6 Tu	0401	0732	1.5E	21 W	0408	0733	2.2E	6 Th	0433	0811	1.2E	21 F	0509	0830	2.1E	6 Su		0004	0252	1.3F	21 M		0044	0341	2.1F
	1041	1335	1.5F		1042	1344	2.3F		1107	1410	1.4F		1128	1435	2.4F		0606	0924	1.3E		0702	1008	1.9E		
	1719	2017	0.8E		1714	2020	1.6E		1805	2108	0.9E		1808	2117	2.0E		1209	1519	1.7F		1255	1605	2.3F		
	2249				2310				2344								1852	2209	1.4E		1932	2247	2.2E		
7 W	0456	0843	1.1F	22 Th	0520	0849	1.9E	7 F	0547	0923	1.1E	22 Sa	0624	0940	2.0E	7 M		0105	0356	1.4F	22 Tu		0150	0451	2.0F
	1144	1444	1.2F		1151	1459	2.1F		1210	1519	1.3E		1233	1545	2.3F		0715	1025	1.3E		0815	1115	1.8E		
	1903	2151	0.6E		1838	2144	1.6E		1918	2220	1.0E		1916	2225	2.1E		1307	1619	1.7F		1400	1712	2.1F		
																	1947	2306	1.6E		2035	2350	2.2E		
8 Th	0014	0302	0.8F	23 F	0033	0331	1.7F	8 Sa	0102	0351	1.0F	23 Su	0123	0422	2.0F	8 Tu		0205	0501	1.5F	23 W		0255	0600	2.0F
	0629	1014	1.0E		0648	1011	1.9E		0713	1033	1.1E		0740	1048	2.0E		0821	1125	1.4E		0924	1220	1.8E		
	1304	1625	1.1F		1307	1621	2.1F		1314	1631	1.4F		1339	1653	2.4F		1406	1718	1.9F		1505	1817	2.1F		
	2037	2319	0.8E		1957	2302	1.8E		2016	2320	1.2E		2019	2329	2.3E		2040	2359	1.9E		2134				
9 F	0157	0456	0.8F	24 Sa	0155	0457	1.8F	9 Su	0210	0506	1.2F	24 M	0229	0532	2.2F	9 W		0301	0601	1.8F	24 Th		0050	2.3E	
	0816	1133	1.1E		0812	1125	2.1E		0824	1132	1.3E		0848	1151	2.1E		0920	1221	1.6E		0355	0703	2.2F		
	1419	1751	1.3F		1418	1735	2.4F		1413	1730	1.7F		1441	1755	2.5F		1503	1814	2.1F		1027	1320	1.8E		
	2131				2102				2102				2116				2130				1606	1915	2.2F		
10 Sa	0311	0615	1.1F	25 Su	0304	0608	2.2F	10 M	0305	0603	1.5F	25 Tu	0328	0633	2.4F	10 Th		0050	2.2E	25 F		0144	2.4E		
	0923	1229	1.4E		0919	1226	2.4E		0918	1221	1.6E		0948	1248	2.3E		0353	0655	2.2F		0448	0757	2.3F		
	1516	1839	1.7F		1519	1834	2.8F		1504	1818	2.0F		1538	1850	2.7F		1013	1313	1.8E		1121	1415	2.0E		
	2207				2154				2141				2206				1558	1906	2.4F		1701	2007	2.2F		
11 Su	0359	0700	1.5F	26 M	0401	0704	2.6F	11 Tu	0350	0649	1.9F	26 W	0421	0725	2.6F	11 F		0137	2.5E	26 Sa		0234	2.5E		
	1008	1312	1.7E		1015	1318	2.7E		1002	1304	1.8E		1041	1340	2.4E		0442	0744	2.5F		0536	0844	2.5F		
	1559	1915	2.1F		1611	1923	3.1F		1549	1900	2.3F		1629	1938	2.8F		1102	1402	2.1E		1208	1503	2.1E		
	2237				2240				2217				2252				1649	1956	2.6F		1750	2053	2.3F		
12 M	0436	0736	2.0F	27 Tu	0449	0752	2.9F	12 W	0431	0730	2.3F	27 Th	0508	0812	2.8F	12 Sa		0223	2.8E	27 Su		0002	0318	2.5E	
	1044	1348	2.0E		1103	1405	2.9E		1043	1344	2.1E		1130	1427	2.4E		0528	0831	2.8F		0619	0925	2.6F		
	1636	1947	2.5F		1657	2006	3.3F		1631	1940	2.7F		1716	2023	2.8F		1149	1449	2.4E		1250	1547	2.1E		
	2304				2321				2253				2335				1739	2043	2.8F		1835	2134	2.3F		
13 Tu	0510	0808	2.4F	28 W	0533	0834	3.1F	13 Th	0510	0810	2.7F	28 F	0552	0855	2.8F	13 Su		0309	3.0E	28 M		0042	0359	2.5E	
	1117	1421	2.3E		1147	1448	2.9E		1122	1423	2.4E		1214	1512	2.4E		0613	0916	3.1F		0658	1003	2.6F		
	1710	2018	2.9F		1739	2046	3.3F		1712	2019	2.9F		1800	2104	2.7F		1234	1536	2.6E		1328	1627	2.2E		
	2332				2359				2329								1827	2129	3.0F		1915	2211	2.3F		
14 W	0543	0841	2.8E	29 Th	0613	0913	3.2F	14 F	0549	0849	3.0F	29 Sa	0615	0931	2.9E	14 M		0036	0354	3.1E	29				

Bay of Fundy Entrance (Grand Manan Channel), 2010

F—Flood, Dir. 032° True E—Ebb, Dir. 212° True

July				August				September															
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots								
h m	h m	h m		h m	h m	h m		h m	h m	h m		h m	h m	h m									
1 Th	0228	0545	2.2E	16 F	0246	0558	3.2E	1 Su	0309	0616	2.2E	16 M	0353	0658	2.4E	1 W	0403	0701	1.8E	16 Th	0521	0820	1.1E
	0841	1144	2.6F		0855	1159	3.5F		0911	1217	2.8F	☉	0950	1253	2.9F	☉	0957	1305	2.4F		1058	1356	1.5F
	1506	1813	2.0E		1518	1828	3.1E		1530	1842	2.4E		1610	1926	2.6E		1613	1932	2.1E		1715	2052	1.4E
	2106	2358	2.2F		2127				2148				2232				2248				2357		
2 F	0303	0619	2.1E	17 Sa	0332	0643	2.9E	2 M	0347	0651	2.0E	17 Tu	0444	0747	1.9E	2 Th	0501	0759	1.4E	17 F	0659	0949	0.8E
	0914	1218	2.5F		0938	1243	3.3F		0947	1255	2.6F		1035	1338	2.3F		1052	1400	1.9F		1218	1512	1.0F
	1539	1848	2.0E		1602	1914	2.9E		1606	1921	2.2E		1656	2019	2.1E		1711	2038	1.8E		1843	2222	1.2E
	2144				2215				2231				2325				2353						
3 Sa	0340	0654	1.9E	18 Su	0422	0731	2.5E	3 Tu	0432	0734	1.7E	18 W	0548	0848	1.3E	3 F	0624	0926	1.1E	18 Sa	0847	1127	0.8E
	0949	1254	2.4F		1024	1329	2.9F		1029	1338	2.3F		1129	1432	1.7F		1210	1515	1.6F		1404	1710	0.9F
	1614	1927	1.9E	☉	1649	2004	2.6E	☉	1650	2009	2.0E		1755	2125	1.6E		1831	2208	1.6E		2030	2348	1.2E
	2226				2306				2322														
4 Su	0423	0734	1.7E	19 M	0517	0824	2.0E	4 W	0530	0830	1.4E	19 Th	0718	1011	1.0E	4 Sa	0806	1106	1.2E	19 Su	0954	1239	1.2E
☉	1028	1335	2.2F		1114	1419	2.5F		1121	1432	1.9F		1243	1546	1.2F		1347	1651	1.5F		1529	1839	1.2F
	1655	2010	1.8E		1742	2059	2.2E		1746	2112	1.7E		1916	2248	1.4E		2008	2337	1.8E		2143		
	2313																						
5 M	0513	0822	1.5E	20 Tu	0623	0926	1.6E	5 Th	0647	0948	1.1E	20 F	0902	1144	0.9E	5 Su	0927	1226	1.6E	20 M	1037	1329	1.6E
	1113	1422	2.0F		1211	1517	2.0F		1231	1541	1.7F		1420	1729	1.1F		1514	1819	1.8F		1623	1928	1.5F
	1742	2102	1.7E		1843	2205	1.9E		1858	2231	1.6E		2050				2129				2232		
6 Tu	0614	0921	1.3E	21 W	0743	1039	1.3E	6 F	0820	1119	1.2E	21 Sa	1017	1301	1.2E	6 M	1025	1326	2.2E	21 Tu	1108	1406	2.0E
	1207	1518	1.9F		1319	1627	1.7F		1359	1706	1.6F		1547	1857	1.3F		1619	1923	2.4F		1701	2002	1.9F
	1839	2203	1.7E		1954	2317	1.8E		2023	2353	1.8E		2204				2230				2309		
7 W	0727	1031	1.2E	22 Th	0909	1158	1.3E	7 Sa	0942	1239	1.5E	22 Su	1106	1356	1.6E	7 Tu	1111	1415	2.8E	22 W	1135	1438	2.3E
	1312	1623	1.8F		1438	1748	1.5F		1523	1829	1.8F		1647	1952	1.6F		1711	2013	2.9F		1734	2032	2.3F
	1943	2310	1.8E		2108				2140				2256				2320				2340		
8 Th	0844	1143	1.3E	23 F	0333	0649	1.8F	8 Su	0403	0716	2.4F	23 M	0501	0819	2.2F	8 W	0525	0835	3.5F	23 Th	0534	0842	2.8F
	1424	1734	1.8F		1022	1309	1.4E		1042	1342	2.0E		1143	1437	2.0E		1152	1458	3.3E		1159	1506	2.6E
	2051				1553	1903	1.6F		1631	1935	2.3F		1730	2031	2.0F	☉	1756	2056	3.3F	☉	1804	2100	2.6F
					2214				2242				2337										
9 F	0321	0627	2.0F	24 Sa	0433	0750	2.0F	9 M	0458	0809	2.9F	24 Tu	0538	0851	2.5F	9 Th	0607	0915	3.8F	24 F	0603	0910	3.0F
	0953	1251	1.6E		1118	1408	1.7E		1131	1433	2.5E	☉	1213	1512	2.3E		1230	1538	3.6E		1224	1534	2.9E
	1534	1842	2.0F		1655	2001	1.8F	☉	1726	2027	2.7F		1805	2103	2.3F		1838	2137	3.6F		1833	2129	2.8F
	2154				2308				2334														
10 Sa	0420	0727	2.4F	25 Su	0522	0836	2.2E	10 Tu	0546	0855	3.3F	25 W	0610	0918	2.8F	10 F	0647	0953	3.9F	25 Sa	0633	0938	3.2F
	1051	1350	2.0E		1202	1455	1.9E		1214	1518	3.0E		1238	1542	2.5E		1307	1616	3.7E		1250	1601	3.0E
	1637	1942	2.3F	☉	1744	2046	2.0F		1814	2114	3.1F		1836	2132	2.5F		1917	2215	3.6F		1903	2159	3.0F
	2250				2353																		
11 Su	0513	0820	2.8F	26 M	0602	0914	2.5F	11 W	0629	0937	3.7F	26 Th	0639	0945	3.0F	11 Sa	0725	1030	3.9F	26 Su	0703	1008	3.3F
	1142	1442	2.3E		1238	1535	2.2E		1254	1600	3.4E		1303	1609	2.7E		1343	1654	3.6E		1318	1630	3.1E
☉	1733	2035	2.7F		1825	2123	2.2F		1858	2156	3.4F		1906	2200	2.7F		1957	2253	3.5F		1935	2232	3.1F
	2342																						
12 M	0601	0908	3.2F	27 Tu	0638	0946	2.7F	12 Th	0710	1017	3.9F	27 F	0707	1012	3.1F	12 Su	0803	1106	3.6F	27 M	0736	1041	3.2F
	1228	1530	2.7E		1309	1609	2.3E		1333	1640	3.5E		1327	1636	2.8E		1419	1732	3.4E		1348	1702	3.0E
	1823	2123	3.0F		1901	2156	2.4F		1939	2237	3.5F		1935	2229	2.9F		2036	2332	3.2F		2010	2307	3.0F
13 Tu	0646	0952	3.5F	28 W	0710	1015	2.8F	13 F	0750	1055	3.9F	28 Sa	0736	1040	3.2F	13 M	0841	1143	3.2F	28 Tu	0811	1117	3.1F
	1311	1616	3.0E		1337	1641	2.4E		1411	1720	3.5E		1352	1704	2.9E		1456	1811	3.0E		1423	1737	2.9E
	1910	2209	3.2F		1934	2228	2.5F		2021	2317	3.5F		2006	2300	2.9F		2117				2049	2346	2.8F
14 W	0730	1035	3.6F	29 Th	0740	1044	2.9F	14 Sa	0829	1134	3.7F	29 Su	0805	1111	3.2F	14 Tu	0920	1222	2.7F	29 W	0851	1157	2.8F
	1354	1659	3.2E		1403	1710	2.5E		1449	1800	3.4E		1421	1733	2.8E		1535	1854	2.5E		1503	1819	2.6E
	1956	2253	3.3F		2005	2258	2.6F		2102	2357	3.3F		2039	2333	2.8F		2201				2133		
15 Th	0812	1117	3.7F	30 F	0809	1113	2.																

Bay of Fundy Entrance (Grand Manan Channel), 2010

F—Flood, Dir. 032° True E—Ebb, Dir. 212° True

October				November				December															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0448	0749	1.5E	16 Sa	0630	0924	0.8E	1 M	0713	1021	1.8E	16 Tu	0748	1053	1.2E	1 W	0059	0411	2.4F	16 Th	0036	0347	1.6F
	1041	1344	1.9F		1157	1445	1.0F		1314	1613	1.8F		1344	1638	1.1F		1351	1651	2.1F		0716	1038	1.5E
	1653	2023	1.8E		1810	2148	1.1E		1930	2245	2.0E		1959	2307	1.2E		2009	2315	2.1E		1337	1630	1.4F
	2333																				1953	2257	1.2E
2 Sa	0612	0917	1.3E	17 Su	0801	1049	0.9E	2 Tu	0822	1129	2.2E	17 W	0838	1146	1.5E	2 Th	0839	1151	2.5E	17 F	0812	1134	1.7E
	1203	1503	1.6F		1330	1626	0.9F		1427	1729	2.1F		1442	1739	1.4F		1454	1758	2.3F		1436	1734	1.6F
	1818	2152	1.7E		1950	2306	1.1E		2043	2351	2.2E		2058	2359	1.4E		2115				2058	2357	1.3E
3 Su	0053	0403	1.9F	18 M	0152	0521	1.4F	3 W	0243	0558	2.6F	18 Th	0240	0554	1.8F	3 F	0305	0617	2.6F	18 Sa	0236	0547	1.8F
	0746	1049	1.5E		0904	1156	1.2E		0920	1228	2.6E		0920	1231	1.8E		0935	1248	2.7E		0906	1227	1.9E
	1336	1637	1.6F		1447	1751	1.1F		1528	1831	2.5F		1530	1829	1.7F		1552	1856	2.5F		1530	1832	1.9F
	1953	2316	1.9E		2103				2143				2145				2214				2154		
4 M	0211	0528	2.1F	19 Tu	0253	0618	1.7F	4 Th	0339	0652	2.9F	19 F	0328	0639	2.1F	4 Sa	0402	0712	2.7F	19 Su	0334	0643	2.0F
	0859	1203	1.9E		0947	1245	1.5E		1009	1318	2.9E		0958	1312	2.1E		1026	1340	2.8E		0956	1318	2.2E
	1456	1759	2.0F		1540	1843	1.5F		1620	1923	2.8F		1612	1912	2.0F		1644	1949	2.7F		1621	1924	2.2F
	2110				2152				2236				2227				2307				2245		
5 Tu	0317	0633	2.6F	20 W	0339	0657	2.0F	5 F	0430	0740	3.2F	20 Sa	0411	0720	2.4F	5 Su	0454	0801	2.8F	20 M	0429	0735	2.3F
	0956	1300	2.5E		1020	1323	1.9E		1054	1405	3.2E		1034	1350	2.4E		1114	1428	2.9E		1045	1405	2.5E
	1558	1901	2.5F		1620	1920	1.8F		1707	2010	3.1F		1652	1952	2.4F		1731	2036	2.9F		1708	2012	2.6F
	2210				2231				2323				2307			●	2356				2332		
6 W	0411	0725	3.1F	21 Th	0418	0730	2.3F	6 Sa	0515	0823	3.3F	21 Su	0454	0800	2.6F	6 M	0543	0847	2.8F	21 Tu	0520	0824	2.6F
	1043	1349	3.0E		1049	1357	2.3E		1136	1448	3.3E		1111	1428	2.7E		1158	1513	2.9E		1131	1451	2.8E
	1648	1950	2.9F		1655	1953	2.2F	●	1751	2052	3.2F	○	1731	2031	2.7F		1816	2120	2.9F	○	1754	2058	2.9F
	2259				2304								2346										
7 Th	0458	0809	3.5F	22 F	0453	0802	2.6F	7 Su	0559	0904	3.3F	22 M	0535	0840	2.8F	7 Tu	0628	0930	2.7F	22 W	0609	0911	2.8F
	1124	1432	3.4E		1117	1428	2.6E		1216	1529	3.3E		1149	1506	2.9E		1240	1556	2.9E		1217	1535	3.0E
	1733	2034	3.3F	○	1727	2025	2.5F		1833	2133	3.2F		1811	2111	2.9F		1858	2201	2.9F		1838	2142	3.2F
	2343				2336																		
8 F	0541	0849	3.7F	23 Sa	0527	0833	2.9F	8 M	0641	0943	3.2F	23 Tu	0618	0922	3.0F	8 W	0712	1011	2.6F	23 Th	0656	0957	3.0F
	1203	1512	3.6E		1145	1458	2.8E		1255	1610	3.2E		1228	1546	3.0E		1320	1638	2.7E		1302	1620	3.1E
	1814	2114	3.5F		1800	2058	2.8F		1913	2213	3.1F		1851	2153	3.1F		1938	2241	2.8F		1922	2226	3.3F
9 Sa	0025	0328	3.3E	24 Su	0008	0311	2.5E	9 Tu	0132	0432	2.6E	24 W	0108	0409	2.5E	9 Th	0205	0506	2.2E	24 F	0144	0449	2.8E
	0621	0927	3.7F		0601	0906	3.1F		0722	1022	2.9F		0702	1004	3.0F		0754	1050	2.4F		0744	1042	3.1F
	1240	1551	3.6E		1216	1530	3.0E		1333	1650	2.9E		1310	1628	3.0E		1359	1718	2.5E		1348	1705	3.1E
	1854	2153	3.5F		1834	2132	3.0F		1954	2253	2.9F		1934	2236	3.1F		2017	2319	2.6F		2006	2310	3.4F
10 Su	0105	0408	3.2E	25 M	0043	0344	2.6E	10 W	0214	0514	2.3E	25 Th	0152	0454	2.5E	10 F	0245	0547	2.0E	25 Sa	0229	0535	2.9E
	0700	1004	3.6F		0636	0941	3.2F		0803	1101	2.6F		0748	1049	2.9F		0836	1130	2.2F		0831	1129	3.1F
	1317	1630	3.5E		1248	1604	3.1E		1411	1731	2.6E		1354	1712	2.9E		1438	1758	2.2E		1435	1751	3.0E
	1933	2231	3.4F		1910	2208	3.1F		2034	2333	2.6F		2019	2321	3.1F		2055	2357	2.4F		2051	2355	3.4F
11 M	0145	0447	2.9E	26 Tu	0119	0420	2.6E	11 Th	0258	0559	1.9E	26 F	0239	0543	2.4E	11 Sa	0325	0629	1.9E	26 Su	0315	0623	2.8E
	0739	1041	3.3F		0714	1018	3.1F		0846	1142	2.2F		0837	1137	2.8F		0918	1209	2.0F		0921	1216	2.9F
	1353	1708	3.2E		1324	1640	3.0E		1451	1814	2.2E		1442	1801	2.8E		1518	1838	2.0E		1525	1839	2.9E
	2012	2309	3.1F		1949	2248	3.1F		2116				2106				2134				2138		
12 Tu	0226	0527	2.5E	27 W	0159	0500	2.4E	12 F	0345	0647	1.6E	27 Sa	0330	0636	2.3E	12 Su	0405	0712	1.7E	27 M	0403	0713	2.7E
	0818	1118	2.9F		0755	1059	3.0F		0932	1225	1.8F		0931	1229	2.6F		1002	1251	1.8F		1012	1307	2.7F
	1430	1747	2.8E		1404	1721	2.9E		1535	1901	1.8E		1536	1855	2.5E		1559	1920	1.7E		1617	1931	2.6E
	2053	2349	2.7F		2031	2331	2.9F		2201				2158				2213				2227		
13 W	0309	0610	2.0E	28 Th	0245	0545	2.2E	13 Sa	0439	0742	1.3E	28 Su	0426	0735	2.2E	13 M	0447	0757	1.5E	28 Tu	0454	0807	2.6E
	0858	1157	2.4F		0841	1143	2.7F		1025	1314	1.4F		1030	1326	2.4F		1049	1336	1.6F		1107	1402	2.5F
	1508	1830	2.3E		1449	1807	2.6E		1626	1956	1.4E	○	1636	1956	2.3E	○	1647	2006	1.4E	○	1716	2027	2.3E
	2136				2118				2251				2254				2255				2320		
14 Th	0359	0659	1.5E	29 F	0337	0640	2.0E	14 Su	0541	0845	1.1E	29 M	0528	0839	2.1E	14 Tu	0532	0847	1.4E	29 W	0550	0905	2.4E
	0944	1240	1.9F		0934	1235	2.4F		1127	1414	1.2F		1135	1430	2.2F		1141	1428	1.4F		1207	1502	2.2F
	1552	1920	1.8E		1541	1904	2.3E		1730	2059	1.2E		1744	2101	2.1E		1742	2058	1.3E		1822	2129	2.0E
	2226				2213																		

Estes Head, Eastport, Maine, 2010

F—Flood, Dir. 263° True E—Ebb, Dir. 088° True

January				February				March																
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum										
	h	m	knots		h	m	knots		h	m	knots		h	m	knots									
1 F	0520	0754	2.6F	16 Sa	0601	0942	2.2F	1 M	0032	0401	3.2E	16 Tu	0654	0930	2.1F	1 M	0535	0858	3.0F	16 Tu	0549	0926	2.2F	
	1128	1500	3.1E		1201	1544	2.5E		1254	1626	3.3E		1254	1625	2.3E		1143	1514	3.3E		1150	1522	2.4E	
	1754	2035	2.6F		1827	2206	2.1F		1914	2234	2.9F		1914	2139	2.1F		1802	2127	3.0F		1807	2139	2.2F	
2 Sa	0001	0327	2.8E	17 Su	0027	0404	2.2E	2 Tu	0123	0453	3.2E	17 W	0115	0441	2.3E	2 Tu	0009	0340	3.3E	17 W	0009	0340	2.4E	
	0612	0849	2.7F		0641	1020	2.1F		0738	1054	2.9F		0732	0952	2.1F		0626	0950	3.0F		0628	0900	2.1F	
	1220	1552	3.2E		1241	1620	2.4E		1345	1717	3.2E		1332	1653	2.2E		1234	1605	3.3E		1228	1555	2.3E	
	1844	2133	2.7F		1905	2241	2.1F		2005	2325	2.8F		1950	2211	2.2F		1851	2216	2.9F		1844	2108	2.2F	
3 Su	0052	0420	2.9E	18 M	0105	0439	2.2E	3 W	0213	0544	3.1E	18 Th	0154	0509	2.2E	3 W	0059	0431	3.3E	18 Th	0047	0412	2.4E	
	0704	0946	2.8F		0720	0953	2.0F		0831	1150	2.7F		0811	1029	2.1F		0717	1041	2.9F		0705	0924	2.2F	
	1312	1644	3.2E		1320	1654	2.3E		1437	1809	3.0E		1412	1715	2.2E		1323	1655	3.1E		1306	1625	2.3E	
	1936	2233	2.8F		1943	2208	2.0F		2056				2028	2249	2.2F		1940	2305	2.8F		1920	2141	2.3F	
4 M	0144	0512	3.0E	19 Tu	0144	0511	2.1E	4 Th		0021	2.7F	19 F	0235	0532	2.2E	4 Th	0147	0521	3.1E	19 F	0125	0441	2.3E	
	0758	1045	2.7F		0800	1020	2.0F		0926	1253	2.5F		0852	1109	2.1F		0808	1132	2.7F		0744	1001	2.2F	
	1405	1737	3.1E		1400	1724	2.2E		1531	1905	2.7E		1454	1736	2.1E		1413	1746	2.8E		1346	1649	2.2E	
	2027	2333	2.7F		2021	2240	2.1F		2149				2108	2331	2.2F		2029	2356	2.6F		1959	2221	2.3F	
5 Tu	0237	0606	2.9E	20 W	0224	0541	2.1E	5 F		0124	2.4F	20 Sa	0318	0602	2.1E	5 F	0237	0613	2.9E	20 Sa	0206	0508	2.3E	
	0852	1150	2.6F		0841	1058	2.0F		0358	0736	2.7E		0937	1154	2.1F		0900	1227	2.4F		0825	1043	2.2F	
	1459	1831	3.0E		1442	1750	2.1E		1021	1358	2.3F		1539	1812	2.0E		1504	1839	2.5E		1428	1715	2.1E	
	2120				2101	2319	2.1F		1625	2004	2.4E		2153				2121				2040	2304	2.3F	
6 W		0042	2.6F	21 Th	0307	0609	2.0E	6 Sa		0228	2.2F	21 Su		0017	2.2F	6 Sa		0054	2.3F	21 Su	0249	0541	2.3E	
	0330	0702	2.8E		0924	1139	2.0F		0453	0836	2.5E		0405	0647	2.1E		0328	0707	2.6E		0911	1129	2.2F	
	0949	1315	2.5F		1525	1814	2.0E		1119	1501	2.1F		1027	1243	2.0F		0953	1330	2.1F		1515	1753	2.0E	
	1555	1929	2.8E		2143				1723	2105	2.2E		1631	1903	1.9E		1556	1936	2.2E		2127	2351	2.2F	
7 Th		0152	2.5F	22 F		0002	2.1F	7 Su		0328	2.1F	22 M		0108	2.1F	7 Su		0158	2.1F	22 M		0043	2.2F	
	0425	0802	2.7E		0352	0642	2.0E		0550	0936	2.4E		0458	0751	2.1E		0421	0806	2.4E		1002	1219	2.1F	
	1046	1425	2.3F		1011	1225	2.0F		1218	1600	2.0F		1123	1338	2.0F		1049	1432	1.9F		1608	1847	1.9E	
	1652	2030	2.6E		1612	1851	1.9E		1824	2207	2.1E		1728	2017	1.8E		1652	2037	2.0E		2221			
8 F		0255	2.4F	23 Sa		0049	2.1F	8 M		0040	2.0F	23 Tu		0205	2.1F	8 M		0300	1.9F	23 Tu		0043	2.2F	
	0522	0903	2.6E		0439	0731	2.0E		0649	1036	2.3E		0555	0913	2.1E		0516	0906	2.2E		0432	0736	2.1E	
	1146	1527	2.2F		1101	1315	1.9F		1318	1658	2.0F		1225	1438	1.9F		1146	1532	1.8F		1100	1314	2.0F	
	1751	2131	2.4E		1702	1943	1.8E		1926	2307	2.0E		1830	2148	1.9E		1750	2138	1.9E		1706	2014	1.9E	
9 Sa	0009	0354	2.3F	24 Su	0140	020F	2.0F	9 Tu	0138	0523	2.0F	24 W	0046	0305	2.1F	9 Tu	0009	0358	1.9F	24 W	0141	021F	2.1F	
	0620	1003	2.6E		0531	0836	2.0E		0748	1134	2.3E		0657	1028	2.3E		0615	1006	2.1E		0532	0858	2.2E	
	1246	1626	2.2F		1156	1409	1.9F		1415	1753	2.0F		1327	1541	2.0F		1246	1629	1.8F		1202	1416	2.0F	
	1853	2232	2.3E		1758	2055	1.8E		2024				1933	2303	2.1E		1852	2237	1.9E		1809	2136	2.0E	
10 Su	0107	0452	2.2F	25 M	0014	0235	2.0F	10 W		0004	2.1E	25 Th	0148	0410	2.2F	10 W	0108	0454	1.9F	25 Th	0025	0245	2.1F	
	0719	1102	2.5E		0627	0945	2.1E		0234	0616	2.1F		0758	1136	2.5E		0714	1104	2.2E		0635	1010	2.3E	
	1345	1723	2.1F		1254	1506	1.9F		0842	1227	2.4E		1427	1654	2.1F		1343	1724	1.9F		1305	1524	2.0F	
	1953	2332	2.2E		1857	2213	1.9E		1508	1844	2.1F		2034				1950	2333	2.0E		1912	2246	2.2E	
11 M	0204	0548	2.2F	26 Tu	0113	0333	2.1F	11 Th		0054	2.2E	26 F		0008	2.4E	11 Th	0204	0548	2.0F	26 F	0130	0356	2.2E	
	0815	1159	2.5E		0724	1054	2.2E		0325	0705	2.2F		0249	0527	2.3F		0810	1157	2.3E		0738	1117	2.6E	
	1441	1818	2.2F		1353	1606	2.0F		0931	1315	2.5E		0858	1236	2.8E		1436	1815	2.1F		1405	1739	2.2F	
	2050				1957	2325	2.0E		1556	1931	2.2F		2203				1525	1855	2.4F		2043	2013	2.5E	
12 Tu		0027	2.2E	27 W	0212	0434	2.2F	12 F		0139	2.3E	27 Sa		0105	2.7E	12 F		0024	2.1E	27 Sa	0231	0604	2.4F	
	0258	0640	2.2F		0822	1158	2.5E		0412	0751	2.3F		0346	0711	2.6F		0256	0638	2.1F		0839	1217	2.8E	
	0908	1251	2.6E		1451	1713	2.1F		1017	1358	2.5E		0955	1331	3.1E		0901	1246	2.4E		1503	1839	2.5F	
	1533	1908	2.2F		2056				1640	2016	2.3F		2227				1525	1903	2.2F		2111			
13 W		0118	2.2E	28 Th		0027	2.3E	13 Sa		0220	2.3E	28 Su		0158	3.0E	13 Sa		0109	2.3E	28 Su	0328	0703	2.7F	
	0349	0729	2.3F		0310	0540	2.3F		0456	0835	2.3F		0442	0806	2.8F		0344	0724	2.3F		0937	1312	3.0E	
	0956	1339	2.6E		0919	1256	2.8E		1058	1439	2.6E		1050	1423	3.3E		0948	1329	2.5E		1557	1930	2.8F	
	1621	1956	2.2F		1547	1838	2.3F		1721	2059	2.3F		1711	2037	2.9F		1609	1947	2.3F		2205			
14 Th		0203	2.3E	29 F		0124	2.6E	14 Su		0259	2.4E	29 M		0150	2.4E	14 Su		0150	2.4E	29 M	0423	0754	2.9F	
	0436	0815	2.3F		0406	0650	2.5F		0537	0917	2.3F		0346	0711	2.6F		0428	0808	2.3F		1031	1404	3.2E	
	1040	1423	2.6E		1015	1349	3.0E		1138	1517	2.5E		1619	1948	2.7F		1031	1409	2.5E		1651	2019	2.9F	
	1705	2041	2.2F		1641	1957	2.6F		1800	2139	2.2F		2227				1651	2029	2.3F		2257			
15 F		0246	2.2E	30 Sa		0217	2.8E	15 M		0000	0336	2.4E	15 M		0229	2.5E	15 M		0230	3.3E	30 Tu	0515	0844	2.9F
	0519																							

Estes Head, Eastport, Maine, 2010

F—Flood, Dir. 263° True E—Ebb, Dir. 088° True

April				May				June																			
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots												
	h	m		h	m			h	m			h	m														
1 Th	0034	0409	3.2E	16 F	0019	0345	2.5E	1 Sa	0055	0435	2.8E	16 Su	0036	0401	2.6E	1 Tu	0157	0540	2.3E	16 W	0154	0523	2.9E				
	0655	1023	2.7F		0640	0858	2.2F		0720	1053	2.3F		0659	0919	2.3F		0825	1159	1.9F		0819	1045	2.5F				
	1300	1633	2.9E		1241	1600	2.3E		1323	1700	2.4E		1304	1623	2.3E		1426	1803	2.0E		1427	1751	2.6E				
	1915	2244	2.6F		1854	2115	2.3F		1937	2311	2.2F		1915	2137	2.4F		2043	2308	1.8F		2040	2306	2.5F				
2 F	0121	0458	3.0E	17 Sa	0059	0419	2.5E	2 Su	0140	0522	2.6E	17 M	0121	0445	2.6E	2 W	0242	0622	2.2E	17 Th	0247	0616	2.8E				
	0744	1112	2.5F		0720	0938	2.3F		0807	1140	2.1F		0746	1005	2.4F		0911	1134	1.8F		0911	1138	2.5F				
	1348	1722	2.6E		1323	1634	2.2E		1409	1747	2.2E		1352	1709	2.3E		1512	1848	1.9E		1520	1847	2.6E				
	2003	2332	2.4F		1934	2157	2.3F		2024	2357	2.0F		2003	2225	2.4F		2130	2347	1.8F		2136						
3 Sa	0208	0547	2.7E	18 Su	0141	0454	2.4E	3 M	0226	0609	2.4E	18 Tu	0210	0532	2.6E	3 Th	0329	0708	2.0E	18 F	0342	0001	2.4F				
	0833	1203	2.3F		0804	1022	2.3F		0854	1229	1.9F		0836	1055	2.4F		0957	1214	1.8F		0342	0714	2.7E				
	1436	1812	2.3E		1408	1710	2.1E		1456	1835	2.0E		1443	1800	2.3E		1559	1936	1.8E		1006	1235	2.4F				
	2052				2019	2242	2.3F		2113				2055	2316	2.4F		2220				1615	1948	2.6E				
4 Su		0025	2.1F	19 M	0227	0535	2.4E	4 Tu		0050	1.8F	19 W	0302	0626	2.6E	4 F		0034	1.7F	19 Sa	0440	0816	2.6E				
	0256	0638	2.5E		0852	1109	2.3F		0314	0658	2.1E		0929	1147	2.3F		0419	0758	1.9E		0440	0816	2.6E				
	0924	1300	2.0F		1458	1756	2.1E		0944	1325	1.8F		1537	1900	2.3E		1046	1303	1.7F		1102	1434	2.3F				
	1526	1906	2.1E		2109	2331	2.3F		1545	1928	1.8E		2151				1649	2028	1.8E		1712	2050	2.6E				
	2144								2204								2312				2334						
5 M		0126	1.9F	20 Tu	0318	0627	2.3E	5 W		0150	1.7F	20 Th		0011	2.3F	5 Sa		0127	1.6F	20 Su	0311	0627	2.2F				
	0347	0733	2.2E		0944	1200	2.2F		0404	0752	2.0E		0359	0728	2.5E		0511	0850	1.9E		0540	0918	2.5E				
	1017	1401	1.8F		1552	1859	2.0E		1035	1423	1.7F		1125	1244	2.2F		1136	1358	1.7F		1200	1543	2.3F				
	1619	2005	1.9E		2205				1637	2023	1.8E		1634	2005	2.3E		1740	2120	1.9E		1811	2151	2.7E				
	2238								2258				2251														
6 Tu		0228	1.8F	21 W		0024	2.2F	6 Th		0249	1.7F	21 F		0112	2.2F	6 Su		0351	1.6F	21 M	0036	0416	2.3F				
	0440	0832	2.1E		0414	0736	2.3E		0458	0847	1.9E		0458	0834	2.5E		0604	0943	1.9E		0642	1020	2.5E				
	1111	1500	1.7F		1042	1257	2.1F		1128	1518	1.7F		1123	1351	2.2F		1228	1458	1.7F		1259	1644	2.4F				
	1714	2104	1.8E		1650	2014	2.0E		1730	2118	1.8E		1733	2109	2.4E		1833	2213	2.0E		1911	2252	2.7E				
	2335				2306				2353				2353														
7 W		0326	1.7F	22 Th		0124	2.1F	7 F		0344	1.7F	22 Sa		0236	2.1F	7 M		0446	1.7F	22 Tu	0137	0516	2.3F				
	0537	0930	2.0E		0514	0848	2.3E		0553	0942	1.9E		0559	0937	2.5E		0659	1036	1.9E		0744	1121	2.4E				
	1208	1556	1.8F		1142	1400	2.1F		1222	1612	1.8F		1223	1601	2.2F		1320	1708	1.8F		1358	1742	2.4F				
	1812	2201	1.8E		1751	2124	2.2E		1824	2211	1.9E		1833	2211	2.6E		1926	2305	2.1E		2009	2351	2.8E				
8 Th		0033	1.8F	23 F		0009	2.1F	8 Sa		0049	0438	1.8F	23 Su		0055	0434	2.3F	8 Tu		0153	0539	1.8F	23 W		0235	0613	2.3F
	0635	1026	2.0E		0617	0955	2.4E		0649	1035	2.0E		0702	1039	2.6E		0752	1128	2.0E		0843	1219	2.5E				
	1305	1650	1.9F		1244	1518	2.1F		1315	1703	1.9F		1322	1704	2.4F		1410	1758	1.9F		1453	1836	2.4F				
	1909	2256	1.9E		1853	2229	2.4E		1918	2303	2.0E		1932	2312	2.7E		2017	2356	2.2E		2104						
9 F		0129	1.9F	24 Sa		0113	2.2F	9 Su		0143	0530	1.9F	24 M		0155	0535	2.4F	9 W		0244	0628	1.9F	24 Th		0046	2.8E	
	0732	1120	2.1E		0720	1058	2.6E		0743	1126	2.1E		0803	1140	2.6E		0843	1219	2.0E		0938	1313	2.5E				
	1358	1742	2.0F		1344	1723	2.3F		1405	1753	2.0F		1419	1801	2.5F		1459	1842	2.0F		1546	1927	2.4F				
	2002	2347	2.1E		1953	2331	2.7E		2009	2352	2.2E		2029				2106				2156						
10 Sa		0222	2.1F	25 Su		0213	2.4F	10 M		0233	0619	2.0F	25 Tu		0253	0631	2.5F	10 Th		0332	0711	2.0F	25 F		0137	2.8E	
	0824	1209	2.3E		0821	1158	2.8E		0834	1214	2.2E		0900	1236	2.7E		0933	1306	2.2E		1029	1403	2.4E				
	1447	1830	2.1F		1441	1820	2.6F		1453	1840	2.1F		1513	1854	2.6F		1547	1828	2.1F		1636	2016	2.4F				
	2051				2050				2057				2123				2154				2243						
11 Su		0311	2.3E	26 M		0028	2.9E	11 Tu		0038	2.3E	26 W		0103	3.0E	11 F		0129	2.5E	26 Sa		0225	2.8E				
	0653	1043	2.2F		0310	0648	2.6F		0321	0705	2.1F		0347	0723	2.6F		0420	0744	2.1F		0508	0843	2.4F				
	1254	1644	2.4E		0918	1254	2.9E		0921	1259	2.2E		0955	1329	2.7E		1022	1351	2.3E		1115	1450	2.4E				
	1533	1915	2.2F		1535	1912	2.7F		1538	1923	2.2F		1605	1944	2.6F		1634	1906	2.2F		1723	2102	2.3F				
	2136				2144				2142				2214				2241				2327						
12 M		0116	2.4E	27 Tu		0120	3.1E	12 W		0120	2.5E	27 Th		0153	3.0E	12 Sa		0213	2.6E	27 Su		0310	2.7E				
	0356	0737	2.3F		0405	0739	2.8F		0406	0746	2.1F		0438	0813	2.6F		0506	0736	2.2F		0553	0929	2.3F				
	0958	1336	2.4E		1012	1345	3.0E		1007	1340	2.3E		1045	1419	2.6E		1110	1436	2.4E		1157	1534	2.3E				
	1616	1957	2.3F		1626	2001	2.8F		1622	1959	2.2F		1655	2033	2.6F		1721	1948	2.4F		1807	2147	2.2F				
	2219				2235				2227				2302				2328										
13 Tu		0155	2.5E	28 W		0211	3.2E	13 Th		0200	2.5E	28 F		0242	2.9E	13 Su		0258	2.8E	28 M		0353	2.5E				
	0439	0																									

Estes Head, Eastport, Maine, 2010

F—Flood, Dir. 263° True E—Ebb, Dir. 088° True

July				August				September																					
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum															
h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots										
1	Th	0212	0547	2.2E	16	F	0229	0559	3.0E	1	Su	0307	0607	2.0E	16	M	0358	0733	2.5E	1	W	0408	0637	1.8E	16	Th	0529	0914	2.0E
		0838	1100	2.0F			0851	1132	2.7F			0925	1144	2.1F			1015	1353	2.3F			1022	1245	2.0F			1146	1535	1.9F
		1439	1808	2.0E			1500	1829	2.9E			1532	1831	2.0E			1624	2005	2.7E			1634	1918	2.0E			1753	2143	2.2E
		2057	2314	1.9F			2118	2356	2.6F			2152					2250					2259							
2	F	0256	0624	2.1E	17	Sa	0324	0655	2.8E	2	M		0006	1.9F	17	Tu	0455	0835	2.3E	2	Th	0503	0738	1.7E	17	F	0023	0406	1.9F
		0920	1137	2.0F			0944	1235	2.5F			0352	0635	1.9E			1112	1459	2.2F			1117	1339	2.0F			0631	1015	2.0E
		1523	1846	2.0E			1554	1927	2.8E			1009	1229	2.0F			1722	2107	2.5E			1730	2037	2.0E			1247	1632	2.0F
		2143	2356	1.9F			2214					1619	1912	1.9E			2350					2358					1854	2242	2.2E
3	Sa	0342	0703	2.0E	18	Su	0420	0755	2.6E	3	Tu	0441	0720	1.8E	18	W	0556	0939	2.2E	3	F	0602	0911	1.7E	18	Sa	0122	0502	2.0F
		1004	1220	1.9F			1039	1416	2.4F			1058	1318	2.0F			1213	1600	2.1F			1218	1437	2.0F			0732	1113	2.1E
		1609	1931	1.9E			1650	2028	2.7E			1709	2012	1.9E			1823	2209	2.4E			1829	2155	2.1E			1345	1727	2.0F
		2231					2313					2334															1952	2337	2.3E
4	Su		0042	1.8F	19	M	0519	0857	2.4E	4	W	0535	0827	1.7E	19	Th	0701	1041	2.1E	4	Sa	0059	0311	1.9F	19	Su	0216	0554	2.1F
		0430	0748	1.9E			1137	1522	2.3F			1152	1411	1.9F			1314	1659	2.1F			0704	1030	1.9E			0826	1205	2.2E
		1051	1307	1.9F			1748	2130	2.6E			1804	2121	1.9E			1925	2310	2.4E			1321	1539	2.0F			1438	1818	2.2F
		1658	2022	1.9E													0152	0530	2.1F			1930	2304	2.3E			2045		
		2322															0803	1141	2.1E										
5	M	0521	0841	1.8E	20	Tu	0620	1000	2.3E	5	Th	0633	0947	1.7E	20	F	1412	1754	2.1F	5	Su	0805	1138	2.2E	20	M	0306	0643	2.2F
		1141	1359	1.9F			1236	1623	2.2F			1250	1508	1.9F			2023					1421	1647	2.2F			0913	1252	2.3F
		1750	2117	1.9E			1849	2232	2.6E			1901	2229	2.0E								2029					1527	1905	2.3F
6	Tu	0016	0226	1.7F	21	W	0116	0456	2.2F	6	F	0130	0340	1.8F	21	Sa	0247	0623	2.2F	6	M	0256	0539	2.2F	21	Tu	0352	0728	2.3F
		0615	0938	1.8E			0724	1102	2.3E			0733	1059	1.8E			0859	1234	2.2E			0903	1236	2.5E			0956	1334	2.4E
		1234	1452	1.8F			1336	1721	2.2F			1349	1607	2.0F			1506	1845	2.2F			1519	1810	2.4F			1611	1949	2.3F
		1843	2214	2.0E			1949	2332	2.6E			1958	2333	2.3E			2115					2127					2215		
7	W	0111	0321	1.7F	22	Th	0215	0553	2.2F	7	Sa	0227	0443	1.9F	22	Su	0337	0712	2.3F	7	Tu	0351	0715	2.5F	22	W	0434	0811	2.3F
		0710	1038	1.8E			0825	1202	2.3E			0831	1203	2.1E			0947	1322	2.3E			0958	1330	2.9E			1036	1413	2.5E
		1328	1546	1.9F			1434	1817	2.3F			1446	1710	2.1F			1555	1933	2.3F			1614	1929	2.7F			1653	2032	2.3F
		1937	2312	2.1E			2045					2054					2201					2222					2255		
8	Th	0206	0418	1.8F	23	F	0310	0646	2.2F	8	Su	0322	0556	2.1F	23	M	0423	0757	2.3F	8	W	0443	0803	2.8F	23	Th	0513	0852	2.3E
		0806	1137	1.9E			0921	1256	2.3E			0928	1259	2.4E			1029	1404	2.4E			1051	1421	3.1E			1114	1451	2.5E
		1422	1643	2.0F			1528	1908	2.3F			1541	1818	2.4F			1639	2017	2.3F			1707	2021	2.9F			1733	2111	2.3F
		2030					2137					2149					2243					2315					2334		
9	F	0258	0519	1.9F	24	Sa	0401	0736	2.3F	9	M	0416	0727	2.4F	24	Tu	0505	0840	2.3F	9	Th	0534	0850	2.9F	24	F	0551	0928	2.2F
		0901	1233	2.1E			1011	1345	2.3E			1022	1351	2.7E			1108	1444	2.4E			1142	1512	3.3E			1152	1526	2.5E
		1515	1742	2.1F			1617	1956	2.3F			1635	1922	2.6F			1721	2059	2.3F			1759	2112	3.0F			1812	2143	2.2F
		2122					2224					2243					2323												
10	Sa	0350	0623	2.1F	25	Su	0448	0822	2.3F	10	Tu	0507	0814	2.7F	25	W	0544	0921	2.3F	10	F	0624	0939	3.0F	25	Sa	0628	0901	2.2F
		0954	1324	2.3E			1055	1429	2.3E			1115	1442	2.9E			1145	1521	2.4E			1231	1603	3.4E			1230	1559	2.4E
		1606	1838	2.3F			1703	2041	2.3F			1727	2017	2.8F			1800	2139	2.3F			1850	2205	3.0F			1850	2112	2.1F
		2214					2307					2335																	
11	Su	0441	0719	2.3F	26	M	0531	0907	2.3F	11	W	0558	0901	2.8F	26	Th	0621	0958	2.2F	11	Sa	0713	1029	2.9F	26	Su	0704	0926	2.2F
		1046	1413	2.5E			1135	1511	2.3E			1205	1533	3.1E			1221	1556	2.4E			1321	1654	3.3E			1308	1630	2.3E
		1657	1931	2.5F			1745	2125	2.3F			1819	2112	2.9F			1839	2211	2.2F			1942	2258	2.8F			1928	2145	2.1F
		2305					2347																						
12	M	0530	0808	2.5F	27	Tu	0611	0949	2.2F	12	Th	0647	0950	2.9F	27	F	0658	0939	2.1F	12	Su	0803	1120	2.7F	27	M	0742	1003	2.2F
		1137	1503	2.7E			1212	1550	2.3E			1255	1624	3.2E			1258	1629	2.3E			1411	1746	3.1E			1347	1656	2.3E
		1748	2021	2.6F			1826	2205	2.2F			1910	2206	2.9F			1917	2140	2.1F			2034	2355	2.6F			2008	2224	2.1F
13	Tu	0620	0858	2.6F	28	W	0649	1027	2.2F	13	F	0737	1039	2.9F	28	Sa	0734	0956	2.2F	13	M	0855	1221	2.5F	28	Tu	0821	1044	2.2F
		1227	1553	2.8E			1249	1626	2.3E			1345	1715	3.2E			1336	1658	2.3E			1503	1840	2.8E			1429	1723	2.2E
		1838	2113	2.7F			1905	2239	2.1F			2003	2301	2.8F			1955	2213	2.1F			2128					2051	2308	2.1F
14	W	0046	0416	3.2E	29	Th	0104	0442	2.4E	14	Sa	0210	0539	3.1E	29	Su	0811	1032	2.2F	14	Tu	0949	1329	2.2F	29	W	0254	0531	2.0E
		0709	0949	2.7F			0727	1052	2.1F			0827	1130	2.8F			1416	1723	2.2E			1557	1940	2.5E			0906	1129	2.2F
		1317	1644	2.9E			1327	1659	2.2E			1436	1808	3.1E			2035	2252	2.1F			2224					1515	1801	2.1E
		1930	2206	2.8F																									

Estes Head, Eastport, Maine, 2010

F—Flood, Dir. 263° True E—Ebb, Dir. 088° True

October				November				December															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0439	0723	1.8E	16 Sa	0554	0941	1.9E	1 M	0009	0229	2.1F	16 Tu	0055	0442	1.9F	1 W	0047	0415	2.3F	16 Th	0101	0450	1.8F
	1052	1313	2.0F		1213	1601	1.8F		0619	0951	2.3E		0658	1044	2.0E		0657	1034	2.6E		0706	1048	2.0E
	1703	2016	2.1E		1816	2206	2.1E		1238	1501	2.2F		1324	1709	1.9F		1321	1656	2.3F		1335	1721	1.7F
	2331								1845	2220	2.5E		1923	2308	2.1E		1927	2303	2.5E		1933	2312	1.9E
2 Sa	0145	0456	2.0F	17 Su	0044	0429	1.9F	2 Tu	0110	0341	2.2F	17 W	0146	0533	2.0F	2 Th	0145	0525	2.4F	17 F	0152	0542	1.9F
	0538	0856	1.9E		0651	1036	2.0E		0719	1054	2.5E		0750	1135	2.2E		0755	1135	2.8E		0758	1140	2.2E
	1154	1413	2.0F		1310	1654	1.9F		1340	1700	2.3F		1415	1800	2.0F		1420	1758	2.4F		1426	1813	1.8F
	1804	2133	2.2E		1913	2300	2.2E		1946	2322	2.6E		2015	2358	2.1E		2027				2025		
3 Su	0033	0248	2.0F	18 M	0138	0521	2.0F	3 W	0208	0541	2.4F	18 Th	0235	0621	2.1F	3 F	0242	0603	2.6E	18 Sa	0242	0632	2.0F
	0640	1009	2.0E		0744	1128	2.1E		0817	1154	2.8E		0838	1222	2.3E		0852	1233	3.0E		0848	1230	2.3E
	1258	1518	2.1F		1404	1746	2.1F		2045		2.5F		1504	1848	2.1F		1517	1854	2.5F		1516	1901	1.9F
	1906	2241	2.4E		2007	2351	2.2E						2104				2124				2116		
4 M	0134	0356	2.1F	19 Tu	0229	0610	2.1F	4 Th	0303	0639	2.6F	19 F	0321	0707	2.2F	4 Sa	0337	0717	2.6F	19 Su	0331	0716	2.0F
	0741	1115	2.3E		0833	1216	2.3E		0912	1249	3.0E		0925	1306	2.4E		0946	1326	3.1E		0936	1315	2.4E
	1359	1630	2.2F		1453	1834	2.2F		1535	1908	2.7F		1550	1932	2.1F		1611	1947	2.6F		1604	1944	2.0F
	2007	2344	2.6E		2056				2142				2151				2219				2205		
5 Tu	0232	0558	2.3F	20 W	0315	0656	2.2F	5 F	0357	0730	2.8F	20 Sa	0406	0749	2.2F	5 Su	0429	0807	2.6F	20 M	0418	0751	2.1F
	0839	1214	2.7E		0918	1300	2.4E		1005	1342	3.2E		1010	1347	2.5E		1038	1417	3.1E		1023	1359	2.5E
	1458	1824	2.5F		1539	1920	2.3F		1629	2000	2.8F		1635	2014	2.1F		1703	2037	2.6F		1650	2022	2.1F
	2105				2141				2236				2235				2310				2253		
6 W	0327	0656	2.6F	21 Th	0359	0740	2.3F	6 Sa	0449	0820	2.8F	21 Su	0449	0824	2.1F	6 M	0520	0857	2.6F	21 Tu	0504	0735	2.2F
	0934	1309	3.0E		1001	1341	2.5E		1057	1433	3.2E		1053	1427	2.5E		1127	1507	3.0E		1109	1442	2.6E
	1554	1921	2.8F		1623	2003	2.3F		1720	2050	2.8F		1718	2049	2.1F		1752	2127	2.5F		1735	2004	2.2F
	2201				2224				2327				2319				2358				2339		
7 Th	0420	0746	2.8F	22 F	0440	0821	2.3F	7 Su	0539	0911	2.7F	22 M	0531	0800	2.2F	7 Tu	0609	0946	2.4F	22 W	0549	0815	2.3F
	1027	1400	3.2E		1042	1419	2.5E		1146	1524	3.2E		1135	1506	2.5E		1214	1555	2.8E		1155	1525	2.7E
	1647	2012	2.9F		1705	2043	2.2F		1811	2142	2.7F		1800	2022	2.1F		1839	2215	2.4F		1820	2044	2.3F
	2255				2305																		
8 F	0225	0511	3.2E	23 Sa	0238	0520	2.3E	8 M	0017	0349	2.8E	23 Tu	0002	0326	2.2E	8 W	0044	0421	2.4E	23 Th	0025	0349	2.4E
	0834	1118	3.3E		0856	1123	2.5E		0628	1001	2.6F		0613	0835	2.2F		0655	1034	2.3F		0635	0900	2.4F
	1739	2103	2.9F		1745	2116	2.1F		1234	1614	3.0E		1218	1546	2.5E		1258	1641	2.7E		1241	1610	2.8E
	2346				2345				1859	2232	2.5F		1842	2100	2.2F		1924	2301	2.3F		1905	2129	2.4F
9 Sa	0316	0601	3.1E	24 Su	0314	0559	2.3E	9 Tu	0105	0440	2.6E	24 W	0046	0406	2.2E	9 Th	0128	0506	2.3E	24 F	0112	0435	2.5E
	0924	1208	3.3E		0828	1202	2.5E		0717	1051	2.4F		0655	0916	2.3F		0741	1119	2.1F		0723	0947	2.5F
	1830	2154	2.8F		1532	1825	2.1F		1322	1703	2.8E		1301	1626	2.5E		1342	1725	2.5E		1329	1656	2.8E
					2045				1948	2322	2.3F		1925	2143	2.3F		2009	2346	2.1F		1953	2217	2.5F
10 Su	0036	0408	3.0E	25 M	0025	0349	2.2E	10 W	0152	0529	2.4E	25 Th	0131	0448	2.2E	10 F	0212	0550	2.2E	25 Sa	0200	0522	2.5E
	0650	1015	2.8F		0637	0858	2.2F		0806	1141	2.2F		0740	1002	2.3F		0827	1202	2.0F		0812	1037	2.5F
	1257	1633	3.2E		1242	1606	2.4E		1409	1751	2.6E		1347	1708	2.5E		1427	1809	2.3E		1419	1744	2.8E
	1920	2246	2.7F		1904	2120	2.1F		2037				2011	2230	2.3F		2054				2042	2306	2.5F
11 M	0126	0459	2.8E	26 Tu	0106	0421	2.1E	11 Th	0013	0013	2.1F	26 F	0218	0532	2.2E	11 Sa	0256	0630	2.0F	26 Su	0251	0613	2.6E
	0740	1106	2.6F		0717	0937	2.2F		0241	0619	2.2E		0829	1050	2.3F		0914	1157	1.8F		0905	1128	2.5F
	1346	1724	3.0E		1323	1639	2.4E		0856	1234	2.0F		1436	1755	2.5E		1513	1854	2.1E		1511	1837	2.7E
	2011	2340	2.4F		1945	2201	2.2F		1458	1842	2.3E		2101	2319	2.3F		2140				2134	2358	2.5F
12 Tu	0216	0550	2.5E	27 W	0149	0453	2.0E	12 F	0107	0107	2.0F	27 Sa	0309	0624	2.2E	12 Su	0342	0721	1.8F	27 M	0343	0710	2.6E
	0831	1202	2.3F		0759	1021	2.2F		0330	0711	2.0E		0922	1141	2.3F		1003	1223	1.7F		1001	1223	2.4F
	1436	1816	2.7E		1406	1714	2.3E		0947	1331	1.8F		1528	1850	2.5E		1601	1943	2.0E		1607	1937	2.6E
	2103				2030	2246	2.2F		1548	1935	2.2E		2153				2228				2228		
13 W	0308	0645	2.3E	28 Th	0235	0530	2.0E	13 Sa	0203	0203	1.8F	28 Su	0403	0725	2.3E	13 M	0430	0811	1.9E	28 Tu	0438	0811	2.6E
	0923	1303	2.1F		0845	1107	2.2F		0420	0806	1.9E		1018	1237	2.3F		1053	1314	1.7F		1059	1326	2.3F
	1528	1912	2.4E		1453	1756	2.3E		1040	1429	1.8F		1624	1953	2.4E		1652	2034	1.9E		1705	2039	2.5E
	2156				2118	2335	2.2F		1640	2030	2.0E		2249				2317				2325		
14 Th	0138	0456	2.0F	29 F	0325	0620	2.0E	14 Su	0258	0258	1.8F	29 M	0459	0829	2.3E	14 Tu	0521	0903	1.9E	29 W	0536	0914	2.6E
	0744																						

Bucksport, Penobscot Bay, Maine, 2010

F—Flood, Dir. 292° True E—Ebb, Dir. 113° True

January				February				March																					
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum															
h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	h	m	knots													
1	F	0504	0842	2.8F	16	Sa	0555	0906	2.3F	1	M	0633	1000	3.1F	16	Tu	0641	1014	2.2F	1	M	0525	0845	3.2F	16	Tu	0541	0859	2.3F
		1046	1453	2.8E			1113	1522	2.3E			1214	1611	3.0E			1210	1623	2.1E			1103	1457	3.0E			1102	1510	2.1E
		1746	2111	2.8F			1828	2132	2.3F			1902	2227	3.1F			1900	2238	2.2F			1752	2111	3.2F			1756	2122	2.3F
		2320					2340															2330					2321		
2	Sa	0556	0932	2.9F	17	Su	0630	0953	2.2F	2	Tu	0725	1053	3.1F	17	W	0717	1101	2.1F	2	Tu	0616	0936	3.2F	17	W	0615	0946	2.2F
		1139	1543	2.9E			1154	1606	2.2E			1306	1702	3.0E			1252	1706	1.9E			1155	1547	3.0E			1144	1554	2.0E
		1834	2201	2.9F			1858	2219	2.2F			1951	2319	3.1F			1934	2325	2.1F			1839	2201	3.2F			1829	2209	2.2F
3	Su	0012	0409	2.6E	18	M	0020	0429	1.9E	3	W	0133	0529	2.9E	18	Th	0113	0529	1.9E	3	W	0019	0413	3.0E	18	Th	0003	0416	2.1E
		0648	1024	2.9F			0705	1041	2.1F			0819	1144	3.0F			0756	1149	2.0F			0706	1028	3.1F			0651	1034	2.1F
		1232	1635	2.9E			1235	1651	2.1E			1356	1753	2.8E			1335	1750	1.8E			1245	1638	2.9E			1226	1638	1.9E
		1923	2253	2.9F			1931	2307	2.1F			2042					2012					1926	2252	3.1F			1904	2256	2.1F
4	M	0104	0501	2.7E	19	Tu	0101	0514	1.9E	4	Th	0223	0620	2.8E	19	F	0157	0613	1.8E	4	Th	0108	0504	3.0E	19	F	0045	0501	2.0E
		0742	1117	2.9F			0743	1129	2.0F			0917	1236	2.8F			0840	1236	1.9F			0757	1119	3.0F			0730	1122	2.1F
		1324	1726	2.9E			1318	1735	1.9E			1448	1845	2.6E			1420	1552	1.3E			1334	1729	2.7E			1310	1723	1.8E
		2014	2344	2.9F			2007	2354	2.0F			2137					1641†	1.2E				2015	2343	2.9F			1943	2343	2.0F
5	Tu	0156	0553	2.7E	20	W	0143	0558	1.8E	5	F	0315	0714	2.6E	20	Sa	0243	0419	1.4E	5	F	0155	0554	2.8E	20	Sa	0129	0545	2.0E
		0838	1209	2.9F			0825	1217	1.9F			1018	1329	2.6F			0507	0700	1.7E			0852	1211	2.8F			0814	1210	2.0F
		1417	1817	2.8E			1402	1819	1.8E			1542	1941	2.3E			0929	1326†	1.8F			2108	1819	2.5E			1355	1808	1.7E
		2108					2047					2234					1022	1419†	1.7F								2027		
6	W	0248	0645	2.6E	21	Th	0227	0643	1.7E	6	Sa	0408	0812	2.4E	21	Su	0332	0507	1.4E	6	Sa	0244	0646	2.7F	21	Su	0215	0632	1.9E
		0940	1302	2.8F			0912	1305	1.8F			1121	1423	2.4F			0603	0754	1.7E			0950	1302	2.5F			0903	1259	1.9F
		1512	1911	2.6E			1448	1619	1.2E			1636	2039	2.1E			0754	1419†	1.7F			1513	1913	2.2E			1444	1616	1.3E
		2205					1707†	1.1E			2334						1022	0242	1.8F			2205					1707†	1.2E	
7	Th	0343	0742	2.6E	22	F	0314	0734	1.6E	7	Su	0502	0910	2.3E	22	M	0424	0556	1.3E	7	Su	0335	0742	2.5F	22	M	0305	0725	1.8E
		1042	1356	2.6F			1002	1356	1.7F			1227	1517	2.3F			0652	1.2E				1052	1356	2.3F			0958	1351	1.9F
		1608	2009	2.4E			1537	1705	1.2E			1734	2136	2.0E			0851	1512†	1.8F			1605	2011	2.0E			1536	1706	1.2E
		2302					1806†	1.1E									1119	0335	1.9F			2305					1759†	1.1E	
8	F	0438	0840	2.5E	23	Sa	0403	0828	1.6E	8	M	0037	0342	2.3F	23	Tu	0519	0946	1.9E	8	M	0428	0841	2.1E	23	Tu	0359	0823	1.9E
		1146	1450	2.5F			1055	1448	1.7F			1335	1610	2.2F			1220	1605	1.9F			1156	1450	2.1F			1056	1445	1.9F
		1705	2107	2.3E			1628	1753	1.1E			1841	2229	1.9E			1752	1914	0.9E			1700	2108	1.9E			1632	1758	1.1E
							1858†	1.0E									1953†	0.9E									1844†	1.0E	
9	Sa	0002	0315	2.6F	24	Su	0454	0621	1.2E	9	Tu	0144	0434	2.2F	24	W	0033	0428	2.0F	9	Tu	0008	0314	2.1F	24	W	0456	0920	2.0E
		0534	0936	2.5E			0621	0716	1.1E			0703	1057	2.2E			0618	1038	2.1E			0522	0937	2.1E			1157	1539	2.1F
		1253	1544	2.4F			0716	1.1E				1437	1703	2.1F			1324	1658	2.1F			1304	1543	2.0F			1730	2148	1.8E
		1807	2201	2.2E			0922	1.7E				2018	2322	1.9E			1853	2304	1.9E			1758	2203	1.8E					
10	Su	0104	0408	2.5F	25	M	0002	0403	1.9F	10	W	0244	0526	2.2F	25	Th	0137	0521	2.3F	10	W	0115	0407	2.1F	25	Th	0014	0403	2.2F
		0634	1030	2.4E			0548	0717	1.1E			0807	1149	2.2E			0719	1132	2.3E			0621	1029	2.0E			0555	1014	2.2E
		1359	1637	2.3F			0755	1.1E				1530	1755	2.1F			1425	1751	2.4F			1407	1635	2.0F			1300	1632	2.3F
		1919	2254	2.1E			1013	1.9E				2110					1954	2358	2.2E			1906	2254	1.8E			1831	2241	2.1E
11	M	0206	0501	2.4F	26	Tu	0100	0455	2.0F	11	Th	0335	0618	2.2F	26	F	0238	0614	2.5F	11	Th	0217	0459	2.1F	26	F	0120	0456	2.4F
		0737	1122	2.4E			0645	1104	2.1E			0853	1241	2.2E			0819	1226	2.6E			0724	1120	2.0E			0658	1108	2.4E
		1458	1730	2.3F			1350	1724	2.0F			1617	1845	2.2F			1521	1843	2.7F			1459	1726	2.0F			1401	1725	2.5F
		2034	2347	2.1E			1918	2329	1.8E			2133					2052					2016	2345	1.9E			1933	2334	2.3E
12	Tu	0303	0553	2.4F	27	W	0159	0547	2.2F	12	F	0420	0707	2.3F	27	Sa	0336	0706	2.8F	12	F	0309	0550	2.1F	27	Sa	0223	0550	2.6F
		0832	1215	2.4E			0743	1157	2.3E			0931	1328	2.2E			0916	1318	2.8E			1544	1817	2.1F			0800	1202	2.6E
		1551	1822	2.3F			1448	1817	2.3F			1657	1933	2.3F			1613	1933	2.9F			2050					1458	1817	2.7F
		2123					2017					2159					2146										2031		
13	W	0353	0644	2.4F	28	Th	0256	0639	2.5F	13	Sa	0459	0754	2.3F	28	Su	0431</												

Bucksport, Penobscot Bay, Maine, 2010

F—Flood, Dir. 292° True E—Ebb, Dir. 113° True

July				August				September																
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots									
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m									
1 Th	0130	0546	2.0E	16 F	0150	0552	2.8E	1 Su	0229	0646	1.9F	16 M	0316	0714	2.4E	1 W	0337	0503	1.2E	16 Th	0443	0845	2.0E	
	0829	1203	2.1F		0838	1211	2.9F		0913	1308	1.9F		1005	1329	2.7F		0610	1.0E			1146	1452	2.3F	
	1357	1810	1.8E		1420	1819	2.7E		1454	1913	1.7E		1542	1944	2.5E		0759	1.4E			1705	2115	2.2E	
	2045				2107				2144				2250				1420†	1.7F						
2 F	0214	0631	1.9E	17 Sa	0244	0644	2.6E	2 M	0317	0444	1.1E	17 Tu	0412	0812	2.2E	2 Th	0430	0552	1.1E	17 F	0038	0321	2.2F	
	0911	1250	2.0F		0933	1302	2.8F		0538	1.0E		1105	1424	2.5F		0659	0.9E				0544	0941	1.9E	
	1442	1857	1.7E		1513	1913	2.6E		0737	1.5E		1637	2044	2.4E		0856	1.4E				1254	1545	2.2F	
	2133				2209				1000	1358†	1.8F		2356			1110	1513†	1.8F			1806	2208	2.1E	
3 Sa	0301	0720	1.7E	18 Su	0339	0740	2.5E	3 Tu	0407	0530	1.1E	18 W	0510	0911	2.1E	3 F	0526	0645	1.0E	18 Sa	0143	0413	2.1F	
	0956	1340	1.9F		1030	1355	2.7F		0634	1.0E		1208	1518	2.4F		0739	0.9E				0710	1034	1.9E	
	1529	1948	1.7E		1608	2011	2.6E		0832	1.5E		1735	2140	2.4E		0950	1.6E				1358	1637	2.2F	
	2224				2312				1049	1450†	1.7F					1208	1605†	1.9F			1915	2259	2.1E	
4 Su	0350	0514	1.0E	19 M	0436	0838	2.3E	4 W	0459	0619	1.0E	19 Th	0104	0347	2.3F	4 Sa	0056	0434	2.0F	19 Su	0238	0504	2.2F	
	0558	0.9E			1128	1450	2.7F		0722	0.9E		0616	1006	2.1E		0625	1041	1.8E			0824	1124	2.0E	
	0813	1.6E			1704	2109	2.5E		0925	1.5E		1315	1611	2.4F		1309	1658	2.1F			1452	1728	2.2F	
	1042	1430†	1.9F						1141	1541†	1.8F		1840	2234	2.3E		1851	2308	2.2E		2014	2350	2.1E	
5 M	0440	0257	1.8F	20 Tu	0016	0319	2.5F	5 Th	0026	0410	1.8F	20 F	0209	0440	2.2F	5 Su	0156	0527	2.2F	20 M	0324	0555	2.2F	
	0559	0.9E			0535	0935	2.3E		0554	0.9E		0749	1059	2.0E		0725	1133	2.0E			0852	1215	2.0E	
	0653	0.9E			1229	1543	2.6F		0804	0.8E		1419	1704	2.3F		1410	1750	2.4F			1538	1819	2.3F	
	0906	1.6E			1802	2204	2.5E		1016	1.6E		1951	2326	2.3E		1951					2052			
	1129	1521†	1.8F						1236	1633†	1.9F													
6 Tu	0008	0348	1.8F	21 W	0124	0412	2.4F	6 F	0126	0502	1.9F	21 Sa	0306	0532	2.2F	6 M	0252	0619	2.5F	21 Tu	0404	0644	2.3F	
	0532	0648	0.9E		0640	1029	2.2E		0652	1107	1.7E		0853	1152	2.0E		0823	1226	2.3E			0914	1302	2.1E
	0740	0.8E			1333	1636	2.5F		1334	1725	2.1F		1514	1756	2.3F		1507	1842	2.7F			1617	1907	2.3F
	0956	1.6E			1905	2257	2.5E		1917	2334	2.1E		2045				2047				2127			
	1219	1611†	1.9F																					
7 W	0104	0439	1.8F	22 Th	0228	0505	2.4F	7 Sa	0224	0554	2.1F	22 Su	0355	0623	2.3F	7 Tu	0343	0709	2.8F	22 W	0439	0731	2.3F	
	0626	1046	1.6E		0755	1122	2.1E		0750	1200	1.9E		0931	1243	2.1E		0917	1318	2.6E			0946	1347	2.2E
	1312	1702	1.9E		1434	1729	2.5F		1432	1817	2.3F		1602	1846	2.4F		1602	1932	2.9F			1653	1954	2.4F
	1851	2312	1.9E		2007	2351	2.4E		2013				2121				2141				2204			
8 Th	0200	0531	1.9F	23 F	0325	0558	2.4F	8 Su	0317	0645	2.4F	23 M	0438	0712	2.3F	8 W	0433	0757	3.0F	23 Th	0510	0816	2.4F	
	0722	1136	1.7E		0859	1216	2.1E		0846	1252	2.1E		0951	1330	2.1E		1009	1407	2.8E			1023	1429	2.2E
	1406	1753	2.1F		1529	1821	2.5F		1526	1907	2.5F		1644	1934	2.4F		1655	2021	3.1F			1727	2039	2.3F
	1946				2058				2108				2156				2235				2243			
9 F	0003	0622	2.1E	24 Sa	0416	0649	2.4F	9 M	0409	0735	2.6F	24 Tu	0514	0758	2.4F	9 Th	0522	0846	3.1F	24 F	0540	0901	2.3F	
	0817	1228	1.8E		0943	1307	2.1E		0939	1342	2.4E		1020	1414	2.1E		1100	1456	3.0E			1102	1512	2.1E
	1458	1844	2.2F		1619	1911	2.5F		1620	1956	2.8F		1720	2020	2.4F		1748	2111	3.2F			1801	2125	2.2F
	2038				2140				2201				2232				2327				2324			
10 Sa	0054	0712	2.3E	25 Su	0502	0738	2.4F	10 Tu	0459	0823	2.8F	25 W	0546	0844	2.4F	10 F	0610	0936	3.2F	10 Sa	0612	0947	2.2F	
	0910	1318	2.0E		1016	1355	2.1E		1032	1431	2.6E		1055	1458	2.1E		1151	1547	3.1E			1142	1556	2.1E
	1549	1933	2.4F		1704	1959	2.5F		1713	2045	2.9F		1754	2106	2.3F		1839	2202	3.1F			1836	2213	2.1F
	2130				2219				2254				2311											
11 Su	0143	0800	2.5F	26 M	0542	0825	2.4F	11 W	0547	0912	3.0F	26 Th	0614	0930	2.3F	11 Sa	0018	0412	2.9E	26 Su	0006	0419	1.9E	
	1002	1407	2.2E		1049	1440	2.1E		1124	1521	2.8E		1133	1541	2.1E		1241	1638	3.0E			0647	1035	2.1F
	1640	2021	2.6F		1743	2045	2.4F		1805	2135	3.0F		1827	2153	2.2F		1930	2255	3.0F			1224	1641	2.0E
	2221				2258				2347				2352									1913	2301	2.0F
12 M	0231	0848	2.6F	27 Tu	0616	0911	2.3F	12 Th	0635	1002	3.0F	27 F	0645	1017	2.2F	12 Su	0109	0504	2.8E	27 M	0049	0504	1.8E	
	1054	1455	2.3E		1126	1525	2.1E		1215	1612	2.9E		1213	1626	2.0E		1330	1730	2.9E			0724	1123	1.9F
	1732	2110	2.7F		1818	2133	2.3F		1857	2227	3.0F		1902	2241	2.1F		2024	2347	2.9F			1307	1726	1.9E
	2314				2338																	1954	2349	1.9F
13 Tu	0610	0938	2.7F	28 W	0646	0958	2.3F	13 F	0039	0437	2.9E	28 Sa	0033	0447	1.9E	13 M	0159	0555	2.6E	28 Tu	0134	0303	1.2E	
	1146	1545	2.5E		1204	1610	2.0E		0722	1054	3.0F		0718	1104	2.1F		0841	1211	2.8F			0351	1.1E	
	1823	2200	2.8F		1854	2221	2.2F		1305	1703	2.9E		1254	1710	1.9E		1421	1822	2.7E			0549	1.6E	
									1950	2320	3.0F		1940	2328	2.0F		2123					0806	1211	1.8F
14 W	0006	0411	2.8E	29 Th	0019	0432	2.1																	

Bucksport, Penobscot Bay, Maine, 2010

F—Flood, Dir. 292° True E—Ebb, Dir. 113° True

October				November				December															
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots								
h m	h m	h m		h m	h m	h m		h m	h m	h m		h m	h m	h m									
1 F	0406	0828	1.8F	16 Sa	0506	0913	1.8E	1 M	0540	0953	2.1E	16 Tu	0609	1022	1.9E	1 W	0616	1022	2.5E	16 Th	0616	1036	1.9E
	1046	1446	1.8F		1222	1517	2.1F		1232	1607	2.3F		1335	1629	2.0F		1319	1635	2.6F		1336	1648	1.9F
	1629	1801	1.2E		1725	2139	2.0E		1806	2218	2.3E		1832	2244	1.9E		1846	2246	2.4E		1843	2259	1.7E
		1845†	1.2E																				
2 Sa	0503	0924	1.7E	17 Su	0103	0344	2.1F	2 Tu	0103	0433	2.5F	17 W	0148	0453	2.1F	2 Th	0137	0500	2.7F	17 F	0141	0512	2.0F
	1146	1539	2.0F		0603	1005	1.9E		0639	1045	2.4E		0700	1110	2.0E		0715	1114	2.7E		0708	1125	1.9E
	1727	2150	2.0E		1325	1608	2.1F		1336	1700	2.5F		1425	1719	2.0F		1421	1729	2.7F		1428	1740	2.0F
					1823	2229	2.0E		1908	2310	2.5E		1926	2333	1.9E		1949	2340	2.5E		1937	2349	1.7E
3 Su	0029	0408	2.1F	18 M	0157	0435	2.1F	3 W	0200	0525	2.7F	18 Th	0232	0543	2.1F	3 F	0233	0553	2.8F	18 Sa	0230	0602	2.1F
	0602	1017	1.9E		0702	1054	1.9E		0738	1137	2.6E		0749	1158	2.0E		0812	1208	2.8E		0759	1215	2.0E
	1250	1632	2.2F		1420	1659	2.1F		1435	1753	2.7F		1508	1810	2.1F		1518	1822	2.8F		1515	1830	2.1F
	1828	2242	2.2E		1921	2318	2.0E		2008				2016				2047				2029		
4 M	0129	0500	2.4F	19 Tu	0243	0525	2.2F	4 Th		0003	2.6E	19 F		0022	1.9E	4 Sa		0034	2.5E	19 Su		0039	1.8E
	0702	1109	2.2E		0752	1143	2.0E		0254	0617	2.9F		0313	0633	2.2E		0327	0645	2.9F		0316	0652	2.2F
	1352	1725	2.5F		1505	1750	2.2F		0833	1230	2.8E		0835	1247	2.1F		0905	1301	2.9E		0847	1304	2.1E
	1929	2335	2.4E		2011				1531	1845	2.9F		1549	1859	2.2F		1612	1913	2.9F		1559	1919	2.2F
									2104				2101				2140				2117		
5 Tu	0226	0552	2.6F	20 W		0007	2.0E	5 F		0056	2.7E	20 Sa		0110	1.9E	5 Su		0126	2.5E	20 M		0128	1.9E
	0801	1201	2.5E		0321	0614	2.2F		0346	0708	3.0F		0352	0720	2.2F		0420	0735	2.9F		0401	0740	2.3F
	1451	1817	2.7F		0832	1231	2.1E	●	0925	1322	3.0E		0918	1333	2.2E	●	0955	1352	2.9E		0935	1351	2.3E
	2028				1545	1839	2.2F		1624	1935	3.0F		1629	1946	2.3F		1704	2002	2.9F		1643	2006	2.3F
					2053				2156				2146				2230				2205		
6 W	0318	0643	2.6E	21 Th		0054	2.0E	6 Sa		0146	2.7E	21 Su		0155	1.9E	6 M		0216	2.5E	21 Tu		0214	2.0E
	0855	1254	2.8E		0357	0702	2.3F		0437	0757	3.1F		0432	0806	2.3F		0510	0824	2.9F		0446	0826	2.3F
	1545	1908	3.0F		0911	1317	2.2E		1014	1412	3.0E	○	1002	1417	2.2E		1043	1440	2.8E		1022	1437	2.4E
	2122				1622	1927	2.3F		1716	2024	3.1F		1709	2032	2.3F		1753	2051	2.8F		1727	2053	2.4F
					2134				2247				2231				2318				2254		
7 Th	0408	0732	3.1F	22 F		0139	2.1E	7 Su		0236	2.7E	22 M		0240	1.9E	7 Tu		0305	2.4E	22 W		0300	2.0E
	0946	1344	3.0E		0431	0748	2.3F		0526	0846	3.0F		0513	0852	2.2F		0558	0913	2.8F		0532	0914	2.4F
	1639	1958	3.1F	○	0950	1401	2.2E		1103	1501	3.0E		1047	1502	2.2E		1130	1529	2.7E		1111	1523	2.4E
	2215				1658	2012	2.3F		1805	2114	3.0F		1749	2119	2.2F		1838	2141	2.7F		1810	2142	2.4F
					2215				2337				2317								2343		
8 F	0208	0529	2.9E	23 Sa		0223	2.0E	8 M		0326	2.6E	23 Tu		0325	1.9E	8 W		0354	2.3E	23 Th		0348	2.1E
	0458	0821	3.2F		0505	0833	2.3F		0615	0936	2.9F		0554	0940	2.2F		0644	1003	2.6F		0618	1003	2.4F
	1037	1433	3.1E		1031	1444	2.2E		1152	1551	2.9E		1133	1548	2.2E		1215	1619	2.6E		1200	1612	2.5E
	1730	2047	3.2F		1734	2058	2.3F		1853	2205	2.8F		1830	2208	2.2F		1921	2231	2.5F		1854	2232	2.5F
	2307				2257																		
9 Sa	0258	0547	2.9E	24 Su		0306	2.0E	9 Tu		0417	2.5E	24 W		0413	1.9E	9 Th		0444	2.2E	24 F		0437	2.2E
	0547	0910	3.1F		0541	0919	2.2F		0703	1028	2.7F		0637	1029	2.2F		0729	1054	2.4F		0706	1054	2.4F
	1127	1523	3.1E		1113	1528	2.2E		1239	1642	2.7E		1220	1636	2.2E		1259	1707	2.4E		1250	1701	2.5E
	1821	2138	3.1F		1811	2145	2.2F		1942	2257	2.6F		1913	2258	2.2F		2005	2321	2.4F		1940	2322	2.5F
	2357				2341																		
10 Su	0348	0635	2.8E	25 M		0351	1.9E	10 W		0508	2.3E	25 Th		0501	1.9E	10 F		0532	2.1E	25 Sa		0526	2.2E
	0635	1001	3.0F		0619	1007	2.1E		0752	1120	2.5F		0722	1119	2.2E		0815	1144	2.3F		0756	1144	2.5F
	1216	1614	3.0E		1157	1614	2.1E		1326	1733	2.5E		1308	1724	2.2E		1343	1755	2.2E		1340	1749	2.5E
	1911	2230	2.9F		1850	2234	2.1F		2032	2348	2.5F		2000	2347	2.2F		2050				2030		
11 M	0047	0440	2.6E	26 Tu		0438	1.8E	11 Th		0558	2.1E	26 F		0549	1.9E	11 Sa		0610	2.3F	26 Su		0611	2.6F
	0724	1053	2.9F		0658	1056	2.0F		0844	1210	2.4F		0813	1209	2.2F		0213	0620	1.9E		0212	0616	2.3E
	1304	1706	2.8E		1242	1700	2.0E		1413	1823	2.3E		1358	1813	2.2E		0905	1233	2.1F		0852	1235	2.5F
	2002	2322	2.8F		1932	2323	2.0F		2127				2051				1428	1843	2.0E		1433	1840	2.4E
12 Tu	0135	0531	2.4E	27 W		0525	1.7E	12 F		0638	2.3F	27 Sa		0637	2.2F	12 Su		0659	2.1F	27 M		0610	2.6F
	0816	1145	2.7F		0741	1145	1.9F		0246	0649	1.9E		0231	0640	1.9E		0259	0710	1.8E		0304	0709	2.3E
	1353	1757	2.6E		1329	1747	2.0E		0942	1302	2.2F		0909	1300	2.2F		0958	1323	2.0F		0952	1328	2.5F
	2058				2018				1502	1915	2.1E		1452	1905	2.2E		1516	1934	1.9E		1528	1935	2.3E
									2														

Portsmouth Harbor Entrance, N.H., 2010

F—Flood, Dir. 342° True E—Ebb, Dir. 194° True

January				February				March															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0034	0259	1.5E	16 Sa	0122	0339	1.3E	1 M	0155	0421	1.7E	16 Tu	0210	0431	1.4E	1 M	0043	0311	1.7E	16 Tu	0054	0318	1.5E
	0626	0843	1.4F		0721	0927	1.1F		0759	1011	1.4F		0825	1028	1.1F		0650	0902	1.3F		0712	0916	1.1F
	1240	1526	1.9E		1332	1602	1.5E		1414	1649	1.8E		1425	1652	1.5E		1308	1539	1.8E		1315	1539	1.5E
	1918	2123	1.2F		2000	2208	1.0F		2034	2242	1.3F		2047	2251	1.1F		1921	2130	1.3F		1930	2134	1.1F
2 Sa	0125	0350	1.6E	17 Su	0205	0420	1.3E	2 Tu	0245	0513	1.7E	17 W	0247	0514	1.4E	2 Tu	0132	0402	1.8E	17 W	0131	0400	1.5E
	0718	0936	1.4F		0808	1012	1.1F		0854	1105	1.3F		0908	1113	1.1F		0744	0956	1.3F		0755	0959	1.1F
	1332	1617	1.9E		1414	1642	1.5E		1508	1740	1.8E		1505	1736	1.5E		1401	1629	1.8E		1356	1622	1.5E
	2007	2214	1.2F		2042	2246	1.0F		2124	2332	1.3F		2126	2332	1.1F		2010	2219	1.3F		2009	2215	1.2F
3 Su	0215	0441	1.6E	18 M	0246	0503	1.3E	3 W	0335	0606	1.7E	18 Th	0322	0559	1.5E	3 W	0222	0453	1.8E	18 Th	0206	0443	1.6E
	0813	1028	1.4F		0854	1057	1.1F		0951	1159	1.3F		0953	1158	1.1F		0839	1049	1.3F		0837	1043	1.1F
	1426	1709	1.9E		1455	1724	1.5E		1603	1833	1.7E		1547	1822	1.4E		1453	1719	1.7E		1437	1706	1.5E
	2058	2305	1.3F		2124	2327	1.1F		2215				2207				2059	2308	1.3F		2048	2258	1.2F
4 M	0306	0533	1.6E	19 Tu	0326	0546	1.3E	4 Th	0427	0659	1.6E	19 F	0358	0645	1.5E	4 Th	0311	0545	1.7E	19 F	0240	0528	1.6E
	0909	1122	1.4F		0940	1142	1.1F		1048	1253	1.2F		1039	1244	1.1F		0934	1142	1.2F		0921	1129	1.1F
	1521	1801	1.8E		1536	1807	1.4E		1659	1925	1.6E		1631	1909	1.4E		1546	1810	1.6E		1519	1752	1.4E
	2148	2356	1.3F		2205				2307				2248				2149	2357	1.3F		2128	2343	1.2F
5 Tu	0358	0627	1.6E	20 W	0406	0631	1.3E	5 F	0522	0753	1.6E	20 Sa	0436	0733	1.5E	5 F	0402	0637	1.7E	20 Sa	0315	0615	1.6E
	1007	1216	1.3F		1026	1227	1.0F		1146	1347	1.1F		1127	1331	1.0F		1029	1235	1.1F		1007	1215	1.1F
	1618	1854	1.7E		1618	1853	1.4E		1757	2018	1.4E		1719	1958	1.3E		1640	1902	1.5E		1603	1841	1.4E
	2240				2247				0000	0203	1.2F		0000	0203	1.2F		2241				2210		
6 W	0452	0721	1.6E	21 Th	0445	0717	1.3E	6 Sa	0617	0849	1.5E	21 Su	0521	0823	1.5E	6 Sa	0455	0730	1.6E	21 Su	0356	0705	1.6E
	1106	1311	1.2F		1113	1313	1.0F		1245	1443	1.0F		1218	1420	1.0F		1125	1327	1.0F		1056	1303	1.1F
	1717	1948	1.6E		1703	1939	1.4E		1855	2113	1.3E		1813	2048	1.3E		1735	1954	1.4E		1652	1930	1.4E
	2333				2329				0054	0255	1.1F		0020	0235	1.1F		2335				2258		
7 Th	0548	0816	1.6E	22 F	0525	0804	1.4E	7 Su	0714	0947	1.4E	22 M	0614	0915	1.5E	7 Su	0551	0823	1.5E	22 M	0445	0756	1.6E
	1206	1407	1.1F		1202	1400	1.0F		1344	1544	0.9F		1312	1512	1.0F		1222	1421	0.9F		1149	1353	1.1F
	1817	2043	1.5E		1752	2027	1.3E		1952	2209	1.2E		1910	2141	1.3E		1831	2047	1.3E		1747	2022	1.3E
									0150	0350	1.0F		0113	0327	1.1F		0029	0228	1.1F		2350		
8 F	0026	0230	1.2F	23 Sa	0608	0853	1.4E	8 M	0811	1048	1.4E	23 Tu	0714	1010	1.5E	8 M	0647	0919	1.4E	23 Tu	0545	0849	1.5E
	0644	0913	1.5E		1252	1449	0.9F		1442	1657	0.8F		1409	1607	0.9F		1318	1517	0.8F		1244	1445	1.0F
	1306	1505	1.0F		1844	2117	1.3E		2049	2306	1.2E		2010	2236	1.3E		1926	2141	1.2E		1846	2116	1.3E
	1917	2139	1.4E						0245	0447	1.0F		0210	0422	1.1F		0125	0322	1.0F		0048	0301	1.2F
9 Sa	0741	1012	1.5E	24 Su	0654	0944	1.4E	9 Tu	0906	1158	1.4E	24 W	0818	1106	1.5E	9 Tu	0743	1016	1.3E	24 W	0651	0945	1.5E
	1407	1608	0.9F		1344	1541	0.9F		1537	1933	0.9F		1505	1703	1.0F		1414	1620	0.8F		1341	1540	1.0F
	2017	2236	1.3E		1939	2209	1.3E		2143				2109	2332	1.3E		1713	1908	0.8F		1946	2212	1.3E
									0002	0223	1.2E		0308	0518	1.2F		1807†	1807	0.8F		1807†	1807	0.8F
10 Su	0215	0419	1.1F	25 M	0746	1037	1.4E	10 W	0340	0542	1.0F	25 Th	0921	1202	1.6E	10 W	0221	0419	0.9F	25 Th	0148	0358	1.1F
	0837	1114	1.5E		1438	1635	0.9F		1000	1358	1.4E		1559	1758	1.0F		0838	1115	1.3E		0759	1042	1.5E
	1506	1717	0.9F		2036	2302	1.3E		1629	2023	0.9F		2206				1508	1901	0.8F		1438	1637	1.0F
	1813	1852†	0.9F						2234						2206		2114	2332	1.1E		2046	2309	1.4E
11 M	0310	0514	1.1F	26 Tu	0237	0449	1.1F	11 Th	0432	0635	1.0F	26 F	0405	0614	1.4E	11 Th	0316	0515	0.9F	26 F	0249	0456	1.2F
	0932	1219	1.5E		1532	1729	0.9F		1050	1445	1.4E		1022	1258	1.7E		0931	1208	1.3E		0904	1139	1.6E
	1602	1956	0.9F		2133	2356	1.3E		1717	2105	0.9F		1652	1853	1.1F		1558	1947	0.8F		1533	1734	1.1F
	2209								2322				2300		2204				2143				
12 Tu	0403	0608	1.1F	27 W	0330	0542	1.2F	12 F	0522	0726	1.0F	27 Sa	0501	0710	1.3F	12 F	0408	0609	0.9F	27 Sa	0349	0555	1.2F
	1025	1415	1.5E		1625	1823	1.0F		1137	1416	1.4E		1119	1354	1.7E		1021	1252	1.3E		1005	1237	1.6E
	1655	2048	0.9F		2228				1802	2025	0.9F		1742	1947	1.2F		1644	1856	0.9F		1626	1829	1.1F
	2301								0007	0228	1.3E		0308	0518	1.2F		2250				2238		
13 W	0455	0701	1.1F	28 Th	0423	0636	1.3F	13 Sa	0609	0815	1.0F	28 Su	0556	0807	1.3F	13 Sa	0457	0659	1.0F	28 Su	0446	0653	1.2F
	1115	1503	1.5E		1037	1320	1.7E		1221	1452	1.4E		1214	1447	1.8E		1107	1334	1.3E		1103	1333	1.7E
	1744	2133	1.0F		1716	1916	1.1F		1845	2055	1.0F		1832	2039	1.2F		1728	1935	0.9F		1717	1923	1.2F
	2350				2322				0050	0309	1.3E		0028	0218	1.6E		2334				2330		
14 Th	0545	0752	1.3E	29 F	0516	0730	1.3F	14 Su	0656	0901	1.1F	29 M	0501	0710	1.3F	14 Su	0544	0747	1.0F	29 M	0519	0751	1.7E
	1203	1453	1.5E		1133	1414	1.8E		1304	1530	1.5E		1312	1512	1.0F		1152	1416	1.4E		1159	1427	1.7E
	1831	2207	1.0F		1806	2010	1.1F		1926	2132	1.0F		1910	2141	1.3E		1810	2014	1.0F		1806	2015	1.3F
									0131	0350	1.4E		0113	0327	1.1F		0015	0237	1.4E		0020	0253	1.8E
15 F	0633	0840	1.4F	30 Sa	0610	0824	1.4F	15 M	0741	0945	1.1F	30 Tu	0629	0832	1.0F	15 M	0629	0832	1.0F	30 Tu	0636	0847	1.3F
	1249	1525	1.5E		1227																		

Portsmouth Harbor Entrance, N.H., 2010

F—Flood, Dir. 342° True E—Ebb, Dir. 194° True

April				May				June																				
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum														
	h	m	knots		h	m	knots		h	m	knots		h	m	knots													
1 Th	0159	0433	1.8E	16 F	0127	0414	1.7E	1 Sa	0225	0502	1.7E	16 Su	0137	0435	1.8E	1 Tu	0338	0611	1.5E	16 W	0302	0555	1.8E					
	0822	1034	1.2F		0809	1015	1.1F		0856	1109	1.1F		0828	1036	1.2F		1011	1218	1.0F		0943	1152	1.2F		1549	1820	1.6E	
	1436	1657	1.6E		1410	1638	1.5E		1506	1723	1.4E		1431	1700	1.5E		1618	1833	1.3E		1643	1914	1.6E		2153			
	2034	2242	1.3F		2011	2226	1.3F		2101	2307	1.2F		2025	2246	1.3F		2220											
2 F	0248	0523	1.7E	17 Sa	0204	0500	1.7E	2 Su	0314	0550	1.6E	17 M	0223	0525	1.8E	2 W		0021	1.0F	17 Th		0008	1.3F		0358	0648	1.8E	
	0916	1125	1.2F		0853	1101	1.2F		0947	1157	1.0F		0916	1124	1.2F		0426	0656	1.4E		1035	1243	1.3F		1127	1334	1.2F	
	1527	1747	1.5E		1453	1725	1.5E		1556	1812	1.3E		1519	1750	1.5E		1058	1301	1.0F		1643	1914	1.6E		2252			
	2125	2331	1.3F		2053	2313	1.3F		2152	2356	1.1F		2115	2337	1.3F		1705	1920	1.2E									
3 Sa	0338	0614	1.6E	18 Su	0243	0549	1.7E	3 M	0404	0639	1.5E	18 Tu	0313	0616	1.8E	3 Th		0109	1.0F	18 F		0102	1.3F		0459	0741	1.7E	
	1009	1217	1.1F		0940	1149	1.2F		1038	1244	1.0F		1006	1214	1.2F		0514	0742	1.3E		1121	1334	1.2F		1221	1334	1.2F	
	1619	1837	1.4E		1540	1814	1.4E		1646	1901	1.3E		1610	1842	1.5E		1145	1344	1.0F		1739	2009	1.6E		2353			
	2216				2139				2245				2210				1753	2008	1.2E									
4 Su		0021	1.2F	19 M		0001	1.3F	4 Tu		0046	1.1F	19 W		0029	1.3F	4 F	0004	0157	0.9F	19 Sa		0157	1.2F		0603	0828	1.3E	
	0430	0705	1.5E		0329	0639	1.7E		0455	0727	1.4E		0409	0709	1.7E		0603	0828	1.3E		0602	0836	1.6E		1231	1428	0.9F	
	1103	1307	1.0F		1030	1238	1.1F		1129	1330	0.9F		1059	1306	1.2F		1231	1428	0.9F		1836	2106	1.5E		1840	2055	1.2E	
	1712	1928	1.3E		1630	1905	1.4E		1737	1951	1.2E		1705	1936	1.5E													
	2310				2230				2339				2309															
5 M		0111	1.1F	20 Tu		0051	1.3F	5 W		0136	1.0F	20 Th		0122	1.3F	5 Sa	0056	0247	0.9F	20 Su		0255	1.1F		0653	0915	1.2E	
	0523	0756	1.4E		0423	0731	1.7E		0547	0815	1.3E		0512	0803	1.7E		0653	0915	1.2E		0705	0933	1.5E		1317	1514	0.9F	
	1157	1357	0.9F		1123	1329	1.1F		1219	1417	0.9F		1153	1357	1.2F		1317	1514	0.9F		1316	1520	1.2F		1926	2143	1.2E	
	1805	2019	1.2E		1726	1958	1.4E		1828	2041	1.2E		1802	2031	1.5E		1926	2143	1.2E		1934	2204	1.5E					
6 Tu	0005	0202	1.0F	21 W		0143	1.2F	6 Th		0033	0.9F	21 F		0010	0.9F	6 Su	0148	0338	0.8F	21 M		0356	1.0F		0743	1004	1.2E	
	0618	0848	1.3E		0526	0825	1.6E		0639	0904	1.2E		0618	0859	1.6E		0743	1004	1.2E		0808	1030	1.4E		1403	1601	0.9F	
	1250	1448	0.8F		1218	1421	1.1F		1308	1505	0.9F		1247	1451	1.2F		1403	1601	0.9F		1411	1616	1.2F		2011	2232	1.2E	
	1858	2112	1.2E		1824	2053	1.4E		1917	2131	1.1E		1901	2128	1.5E		2011	2232	1.2E		2031	2303	1.5E					
7 W	0100	0254	0.9F	22 Th		0028	1.2F	7 F		0127	0.8F	22 Sa		0112	1.1F	7 M	0238	0429	0.8F	22 Tu		0500	1.0F		0834	1053	1.2E	
	0713	0940	1.3E		0633	0921	1.6E		0731	0953	1.2E		0723	0956	1.5E		0834	1053	1.2E		0909	1128	1.4E		1449	1648	1.0F	
	1343	1542	0.8F		1314	1516	1.1F		1356	1554	0.9F		1343	1547	1.1F		1449	1648	1.0F		1507	1712	1.2F		2055	2320	1.3E	
	1951	2205	1.1E		1924	2150	1.4E		2006	2221	1.1E		1959	2226	1.5E		2055	2320	1.3E		2128							
8 Th	0155	0349	0.9F	23 F		0130	1.1F	8 Sa		0221	0.8F	23 Su		0215	1.1F	8 Tu	0328	0520	0.8F	23 W		0004	1.6E		0924	1142	1.2E	
	0806	1033	1.2E		0741	1019	1.6E		0822	1042	1.2E		0827	1054	1.5E		0924	1142	1.2E		1007	1226	1.4E		1533	1734	1.0F	
	1434	1637	0.8F		1410	1612	1.1F		1444	1642	0.9F		1438	1643	1.2F		1533	1734	1.0F		1601	1807	1.2F		2138			
	2042	2258	1.1E		2023	2248	1.5E		2053	2310	1.2E		2056	2325	1.6E		2138				2223							
9 F	0250	0445	0.8F	24 Sa		0232	1.1F	9 Su		0312	0.8F	24 M		0316	1.0F	9 W		0009	1.4E	24 Th		0105	1.6E		0415	0609	0.9F	
	0858	1122	1.2E		0846	1117	1.5E		0912	1130	1.2E		0929	1152	1.5E		0415	0609	0.9F		0452	0838	1.0F		1013	1231	1.2E	
	1522	1726	0.8F		1506	1709	1.1F		1529	1728	0.9F		1532	1738	1.2F		1013	1231	1.2E		1101	1323	1.4E		1617	1821	1.1F	
	2130	2347	1.2E		2120	2346	1.5E		2137	2357	1.2E		2151				1617	1821	1.1F		1653	1900	1.2F		2220			
10 Sa	0342	0538	0.9F	25 Su		0333	1.1F	10 M		0400	0.9F	25 Tu		0414	1.6E	10 Th		0057	1.5E	25 F		0206	1.6E		0501	0657	0.9F	
	0948	1209	1.2E		0948	1214	1.6E		1000	1217	1.2E		1027	1249	1.5E		0501	0657	0.9F		0544	0931	1.0F		1101	1320	1.3E	
	1608	1810	0.9F		1559	1804	1.2F		1613	1812	1.0F		1625	1832	1.2F		1101	1320	1.3E		1153	1417	1.4E		1659	1908	1.2F	
	2216				2214				2219				2244				1659	1908	1.2F		1744	1953	1.2F		2303			
11 Su		0034	1.2E	26 M		0043	1.6E	11 Tu		0043	1.3E	26 W		0122	1.7E	11 F		0146	1.6E	26 Sa		0257	1.6E		0546	0746	1.0F	
	0431	0628	0.9F		0431	0636	1.1F		0446	0642	0.9F		0510	0724	1.1F		0546	0746	1.0F		0635	1015	1.0F		1148	1409	1.4E	
	1035	1254	1.3E		1046	1311	1.6E		1047	1304	1.3E		1123	1344	1.5E		1148	1409	1.4E		1243	1505	1.4E		1742	1955	1.2F	
	1651	1852	1.0F		1651	1858	1.2F		1655	1856	1.1F		1716	1925	1.2F		1742	1955	1.2F		1835	2044	1.2F		2346			
	2258				2307				2259				2336				2346											
12 M		0119	1.3E	27 Tu		0140	1.7E	12 W		0130	1.4E	27 Th		0218	1.7E	12 Sa		0235	1.7E	27 Su		0338	1.6E		0632	0834	1.1F	
	0516	0715	0.9F		0526	0736	1.2F		0531	0729	1.0F		0603	0827	1.1F		0632	0834										

Portsmouth Harbor Entrance, N.H., 2010

F—Flood, Dir. 342° True E—Ebb, Dir. 194° True

July				August				September																		
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum												
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m											
1 Th	0355	0624	1.4E	16 F	0347	0626	1.8E	1 Su	0451	0721	1.3E	16 M	0528	0751	1.5E	1 W	0000	0200	1.0F	16 Th	0052	0251	0.9F			
	1024	1227	1.0F		1010	1219	1.3F		1113	1316	1.1F		0528	0751	1.5E		0554	0826	1.3E		0702	0917	1.2E			
	1630	1848	1.3E		1620	1853	1.6E		1711	1945	1.3E		1131	1336	1.2F		1202	1414	1.1F		1259	1457	1.0F	1259	1457	1.0F
	2242				2235				2346				1746	2020	1.6E		1751	2052	1.4E		1918	2151	1.4E	1918	2151	1.4E
2 F	0440	0708	1.4E	17 Sa	0445	0720	1.7E	2 M	0537	0808	1.3E	17 Tu	0016	0215	1.0F	2 Th	0051	0250	0.9F	17 F	0149	0352	0.8F			
	1108	1309	1.0F		1102	1310	1.3F		1156	1400	1.0F		0627	0845	1.4E		0648	0918	1.2E		0758	1015	1.2E	0758	1015	1.2E
	1714	1933	1.3E		1715	1947	1.6E		1752	2033	1.3E		1226	1428	1.2F		1252	1504	1.1F		1357	1555	1.0F	1357	1555	1.0F
	2332				2335				2346				1845	2117	1.5E		1847	2145	1.4E		2015	2254	1.3E	2015	2254	1.3E
3 Sa	0526	0754	1.3E	18 Su	0545	0814	1.6E	3 Tu	0627	0856	1.2E	18 W	0115	0313	0.9F	3 F	0145	0342	0.9F	18 Sa	0243	0639	0.8F			
	1152	1352	1.0F		1155	1401	1.2F		1241	1447	1.0F		0725	0942	1.3E		0744	1011	1.3E		0852	1113	1.2E	0852	1113	1.2E
	1758	2020	1.2E		1811	2043	1.6E		1837	2122	1.3E		1322	1523	1.1F		1346	1558	1.1F		1453	1654	0.9F	1453	1654	0.9F
													1943	2218	1.4E		1949	2239	1.5E		2110					
4 Su	0022	0214	0.9F	19 M	0036	0235	1.1F	4 W	0126	0320	0.9F	19 Th	0214	0419	0.8F	4 Sa	0240	0437	0.9F	19 Su	0335	0729	0.9F			
	0614	0840	1.3E		0646	0909	1.5E		0720	0947	1.2E		0823	1040	1.2E		0841	1106	1.3E		0943	1209	1.2E	0943	1209	1.2E
	1237	1436	1.0F		1250	1454	1.2F		1328	1536	1.0F		1419	1620	1.0F		1443	1653	1.1F		1548	1750	0.9F	1548	1750	0.9F
	1841	2107	1.2E		1909	2141	1.5E		1926	2214	1.4E		2041	2323	1.4E		2052	2335	1.5E		2202					
5 M	0112	0303	0.9F	20 Tu	0136	0335	1.0F	5 Th	0218	0413	0.9F	20 F	0312	0708	0.9F	5 Su	0333	0532	1.0F	20 M	0424	0657	0.9F			
	0704	0929	1.2E		0747	1006	1.4E		0815	1039	1.2E		0919	1139	1.2E		0938	1201	1.4E		1032	1259	1.3E	1032	1259	1.3E
	1322	1522	1.0F		1346	1549	1.1F		1417	1627	1.1F		1516	1719	1.0F		1540	1748	1.2F		1639	1843	0.9F	1639	1843	0.9F
	1925	2156	1.3E		2007	2241	1.5E		2019	2307	1.4E		2137				2152				2251			2251		
6 Tu	0202	0354	0.8F	21 W	0237	0440	0.9F	6 F	0311	0506	0.9F	21 Sa	0405	0131	1.4E	6 M	0425	0625	1.1F	21 Tu	0509	0721	0.9F			
	0756	1019	1.2E		0847	1104	1.3E		0910	1132	1.3E		1012	1238	1.2E		1031	1256	1.5E		1117	1343	1.3E	1117	1343	1.3E
	1408	1610	1.0F		1442	1646	1.1F		1509	1719	1.1F		1610	1815	1.0F		1635	1844	1.2F		1727	1933	1.0F	1727	1933	1.0F
	2010	2246	1.3E		2105	2344	1.5E		2116				2230				2250				2337			2337		
7 W	0253	0445	0.8F	22 Th	0336	0557	0.9F	7 Sa	0402	0559	0.9F	22 Su	0455	0848	0.9F	7 Tu	0515	0718	1.2F	22 W	0552	0759	1.0F			
	0848	1109	1.2E		0944	1203	1.3E		1004	1225	1.3E		1102	1332	1.3E		1123	1350	1.6E		1159	1424	1.4E	1159	1424	1.4E
	1454	1659	1.0F		1538	1743	1.1F		1601	1812	1.2F		1702	1909	1.0F		1729	1939	1.3F		1814	2019	1.0F	1814	2019	1.0F
	2057	2336	1.4E		2201				2212				2319				2346									
8 Th	0343	0537	0.9F	23 F	0431	0826	0.9F	8 Su	0452	0651	1.0F	23 M	0542	0923	1.0F	8 W	0603	0810	1.2F	23 Th	0633	0838	1.1F			
	0941	1200	1.2E		1038	1301	1.3E		1056	1319	1.4E		1149	1417	1.3E		1213	1444	1.7E		1240	1504	1.4E	1240	1504	1.4E
	1541	1748	1.1F		1631	1838	1.1F		1653	1905	1.3F		1751	2000	1.0F		1823	2034	1.3F		1858	2102	1.1F	1858	2102	1.1F
	2145				2254				2306																	
9 F	0028	0218	1.5E	24 Sa	0522	0915	1.0F	9 M	0541	0743	1.1F	24 Tu	0626	0844	1.0F	9 Th	0652	0901	1.3F	24 F	0714	0918	1.1F			
	0431	0627	0.9F		1129	1356	1.3E		1147	1412	1.5E		1233	1457	1.4E		1303	1535	1.8E		1318	1545	1.5E	1318	1545	1.5E
	1032	1251	1.3E		1723	1931	1.1F		1745	1958	1.3F		1839	2047	1.1F		1917	2128	1.3F		1941	2145	1.1F	1941	2145	1.1F
	1627	1838	1.2F		2344																					
10 Sa	0519	0718	1.0F	25 Su	0611	0956	1.0F	10 Tu	0629	0835	1.2F	25 W	0708	0918	1.0F	10 F	0741	0951	1.4F	25 Sa	0754	0958	1.1F			
	1121	1343	1.4E		1217	1443	1.3E		1236	1504	1.6E		1315	1536	1.4E		1352	1626	1.8E		1354	1626	1.5E	1354	1626	1.5E
	1715	1928	1.3F		1813	2023	1.1F		1838	2052	1.4F		1925	2131	1.1F		2011	2222	1.3F		2024	2228	1.1F	2024	2228	1.1F
	2324																									
11 Su	0211	0408	1.7E	26 M	0031	0316	1.5E	11 W	0053	0332	1.8E	26 Th	0132	0356	1.5E	11 Sa	0226	0452	1.7E	26 Su	0225	0448	1.4E			
	0606	0808	1.1F		0657	0943	1.0F		0717	0925	1.3F		0750	0955	1.1F		0830	1040	1.4F		0833	1040	1.2F	0833	1040	1.2F
	1210	1434	1.5E		1303	1526	1.4E		1326	1555	1.7E		1355	1617	1.4E		1442	1717	1.8E		1428	1710	1.6E	1428	1710	1.6E
	1803	2020	1.3F		1902	2111	1.1F		1931	2145	1.4F		2010	2214	1.1F		2106	2315	1.3F		2107	2312	1.1F	2107	2312	1.1F
12 M	0015	0302	1.8E	27 Tu	0117	0350	1.5E	12 Th	0146	0422	1.8E	27 F	0213	0437	1.5E	12 Su	0319	0543	1.6E	27 M	0306	0533	1.4E			
	0654	0859	1.2F		0741	0956	1.0F		0806	1015	1.3F		0831	1034	1.1F		0921	1130	1.3F		0913	1124	1.2F	0913	1124	1.2F
	1259	1525	1.6E		1347	1606	1.4E		1415	1646	1.7E		1433	1658	1.5E		1533	1810	1.7E		1502	1755	1.6E	1502	1755	1.6E
	1854	2111	1.4F		1951	2157	1.1F		2026	2238	1.4F		2054	2257	1.1F		2201				2152	2357	1.1F	2152	2357	1.1F
13 Tu	0106	0352	1.8E	28 W	0200	0428	1.5E	13 F	0239	0513	1.8E	28 Sa	0254	0519	1.4E	13 M	0413	0635	1.5E	28 Tu	0348	0620	1.4E			
	0742	0948	1.2F		0824	1032	1.1F		0855	1104	1.3F		0911	1115	1.1F		0955	1209	1.2F		0955	1209	1.2F	0955	1209	1.2F
	1348	1615	1.6E		1430	1648	1.4E		1504	1738	1.7E		1509	1741	1.5E		1626	1903	1.7E		1540	1843	1.5E	1540	1843	1.5E
	1946	2203	1.4F		2038	2242	1.1F		2122	2332	1.3F		2139	2342	1.1F		2258				2238			2238		
14 W	0158	0442	1.9E	29 Th	0242	0509	1.5E	14 Sa	0333	0605	1.7E	29 Su	0335	0603	1.4E	14 Tu	0509									

Portsmouth Harbor Entrance, N.H., 2010

F—Flood, Dir. 342° True E—Ebb, Dir. 194° True

October				November				December															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0020	0222	1.0F	16 Sa	0119	0320	0.8F	1 M	0140	0343	1.1F	16 Tu	0223	0423	0.9F	1 W	0206	0412	1.2F	16 Th	0231	0429	0.9F
	0620	0851	1.3E		0729	0946	1.2E		0750	1018	1.4E		0835	1054	1.2E		0822	1053	1.6E		0840	1103	1.2E
	1223	1437	1.1F		1333	1528	0.9F		1402	1607	1.1F		1454	1648	0.8F		1445	1646	1.1F		1511	1703	0.8F
	1819	2118	1.5E		1946	2215	1.3E		2012	2247	1.5E		2055	2313	1.2E		2056	2320	1.5E		2108	2323	1.2E
2 Sa	0114	0315	1.0F	17 Su	0211	0416	0.8F	2 Tu	0234	0439	1.1F	17 W	0310	0510	0.9F	2 Th	0301	0508	1.2F	17 F	0317	0516	1.0F
	0717	0946	1.3E		0821	1041	1.2E		0847	1116	1.5E		0921	1141	1.2E		0919	1152	1.6E		0924	1150	1.3E
	1321	1532	1.1F		1429	1625	0.9F		1503	1706	1.1F		1544	1739	0.8F		1545	1747	1.1F		1600	1752	0.8F
	1925	2214	1.5E		2039	2306	1.2E		2115	2344	1.5E		2144				2157				2157		
3 Su	0209	0410	1.0F	18 M	0301	0508	0.9F	3 W	0328	0534	1.2F	18 Th	0355	0555	1.0F	3 F	0355	0602	1.2F	18 Sa	0401	0602	1.0F
	0815	1042	1.4E		0911	1133	1.2E		0943	1213	1.6E		1004	1227	1.3E		1015	1250	1.7E		1007	1238	1.4E
	1421	1629	1.1F		1523	1721	0.9F		1602	1806	1.1F		1631	1827	0.9F		1642	1849	1.1F		1646	1840	0.9F
	2031	2311	1.5E		2130	2354	1.2E		2216				2232				2254				2245		
4 M	0304	0505	1.1F	19 Tu	0348	0553	0.9F	4 Th	0421	0640	1.6E	19 F	0438	0639	1.0F	4 Sa	0448	0656	1.3F	19 Su	0444	0649	1.1F
	0912	1138	1.4E		0958	1220	1.2E		1037	1309	1.7E		1045	1313	1.4E		1108	1347	1.7E		1108	1327	1.5E
	1521	1727	1.2F		1613	1813	0.9F		1658	1904	1.2F		1717	1913	0.9F		1737	1951	1.1F		1731	1928	0.9F
	2134				2219				2313				2318				2349				2332		
5 Tu	0357	0600	1.1F	20 W	0433	0636	1.0F	5 F	0512	0720	1.3F	20 Sa	0520	0723	1.1F	5 Su	0540	0749	1.3F	20 M	0527	0736	1.2F
	1007	1234	1.6E		1042	1305	1.3E		1129	1405	1.8E		1125	1358	1.5E		1201	1442	1.8E		1131	1415	1.6E
	1618	1824	1.2F		1701	1901	0.9F		1753	2003	1.2F		1800	1959	1.0F		1830	2052	1.1F		1815	2015	1.0F
	2233				2305																		
6 W	0448	0653	1.2F	21 Th	0516	0718	1.0F	6 Sa	0602	0812	1.3F	21 Su	0601	0807	1.1F	6 M	0631	0841	1.3F	21 Tu	0610	0824	1.2F
	1100	1330	1.7E		1123	1348	1.4E		1220	1458	1.8E		1203	1443	1.6E		1252	1533	1.8E		1214	1503	1.7E
	1714	1921	1.2F		1746	1947	1.0F		1847	2100	1.2F		1843	2045	1.0F		1922	2146	1.1F		1900	2102	1.1F
	2330				2349																		
7 Th	0537	0745	1.3F	22 F	0557	0800	1.1F	7 Su	0653	0903	1.3F	22 M	0641	0852	1.2F	7 Tu	0723	0932	1.3F	22 W	0654	0912	1.3F
	1151	1424	1.8E		1202	1431	1.5E		1311	1549	1.8E		1241	1528	1.6E		1342	1620	1.7E		1259	1551	1.8E
	1808	2018	1.3F		1829	2031	1.0F		1940	2153	1.2F		1927	2130	1.1F		2012	2232	1.1F		1945	2150	1.1F
8 F	0024	0250	1.7E	23 Sa	0032	0251	1.4E	8 M	0152	0411	1.5E	23 Tu	0129	0351	1.4E	8 W	0221	0439	1.4E	23 Th	0147	0414	1.5E
	0627	0836	1.3F		0637	0842	1.1F		0744	0953	1.3F		0723	0938	1.2F		0814	1022	1.2F		0742	1001	1.3F
	1241	1516	1.8E		1239	1513	1.5E		1401	1658	1.8E		1321	1615	1.7E		1431	1707	1.6E		1346	1639	1.8E
	1902	2113	1.3F		1912	2115	1.1F		2032	2245	1.1F		2011	2216	1.1F		2101	2317	1.1F		2030	2238	1.2F
9 Sa	0118	0341	1.7E	24 Su	0115	0334	1.4E	9 Tu	0243	0500	1.5E	24 W	0212	0438	1.4E	9 Th	0310	0527	1.4E	24 F	0233	0503	1.5E
	0716	0926	1.4F		0717	0924	1.2F		0835	1043	1.3F		0806	1025	1.3F		0906	1112	1.2F		0832	1051	1.3F
	1331	1607	1.8E		1315	1556	1.6E		1451	1728	1.7E		1403	1702	1.7E		1519	1753	1.6E		1436	1729	1.8E
	1956	2206	1.3F		1955	2159	1.1F		2124	2335	1.1F		2056	2303	1.2F		2149				2118	2326	1.2F
10 Su	0210	0431	1.6E	25 M	0156	0419	1.4E	10 W	0333	0550	1.4E	25 Th	0257	0527	1.4E	10 F	0358	0615	1.3E	25 Sa	0321	0554	1.6E
	0806	1016	1.3F		0756	1008	1.2F		0928	1134	1.2F		0853	1114	1.3F		0958	1202	1.1F		0925	1143	1.3F
	1420	1657	1.8E		1351	1641	1.6E		1542	1818	1.6E		1449	1752	1.7E		1607	1839	1.5E		1529	1821	1.8E
	2049	2259	1.2F		2038	2243	1.1F		2215				2143	2351	1.2F		2237				2206		
11 M	0302	0522	1.5E	26 Tu	0238	0504	1.4E	11 Th	0424	0641	1.3E	26 F	0344	0617	1.5E	11 Sa	0043	0100	1.0F	26 Su	0016	0130	1.3F
	0857	1106	1.3F		0837	1053	1.2F		1022	1225	1.1F		0944	1205	1.3F		1051	1251	1.0F		1022	1236	1.3F
	1511	1749	1.7E		1428	1727	1.7E		1634	1908	1.5E		1541	1843	1.7E		1657	1925	1.4E		1626	1914	1.7E
	2143	2351	1.1F		2123	2329	1.1F		2306				2233				2324				2257		
12 Tu	0354	0613	1.5E	27 W	0322	0552	1.4E	12 F	0516	0732	1.3E	27 Sa	0435	0710	1.5E	12 Su	0534	0751	1.2E	27 M	0505	0741	1.6E
	0950	1156	1.2F		0921	1140	1.2F		1116	1315	1.0F		1040	1257	1.3F		1144	1340	0.9F		1122	1330	1.2F
	1604	1841	1.6E		1509	1816	1.6E		1727	1957	1.4E		1639	1936	1.7E		1746	2011	1.3E		1728	2007	1.6E
	2238				2210				2357				2324				2350				2350		
13 W	0448	0705	1.4E	28 Th	0408	0642	1.4E	13 Sa	0607	0822	1.2E	28 Su	0530	0803	1.5E	13 M	0011	0210	1.0F	28 Tu	0158	0345	1.3F
	1044	1247	1.2F		1008	1229	1.2F		1211	1407	0.9F		1140	1350	1.2F		1237	1429	0.9F		1223	1426	1.1F
	1658	1933	1.5E		1557	1907	1.6E		1820	2046	1.3E		1742	2030	1.6E		1836	2058	1.2E		1831	2103	1.6E
	2332				2259																		
14 Th	0542	0757	1.3E	29 F	0459	0733	1.4E	14 Su	0046	0246	0.9F	29 M	0017	0223	1.2F	14 Tu	0058	0255	1.0F	29 W	0044	0250	1.2F
	1140	1339	1.1F		1102	1320	1.2F		1307	1459	0.9F		0627	0859	1.5E		0708	0926	1.2E		0700	0933	1.6E
	1754	2026	1.4E		1654	1959	1.6E		1912	2135	1.2E		1241	1446	1.1F		1329	1520	0.8F		1324	1524	1.1F
					2351								1848	2126	1.6E		1927	2146	1.2E		1935	2159	1.5E
15 F	0026	0226	0.9F	30 Sa	0156	0156	1.1F	15 M	0135	0335	0.9F	30 Tu	0111	0317	1.2F	15 W	0144	0342	0.9F	30 Th	0139	0345	1.2F
	0636	0851	1.2E		0555	0827	1.4E		0747	1004	1.2E		0725	0955	1.5E		0755	1015	1.2E		0758	1031	1.6E
	1236	1432																					

Boston Harbor (Deer Island Light), Massachusetts, 2010

F—Flood, Dir. 254° True E—Ebb, Dir. 111° True

January				February				March																					
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum															
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m														
1	F	0456	0739	1.5F	16	Sa	0536	0853	1.2F	1	M	0620	0921	1.5F	16	Tu	0631	0925	1.2F	1	M	0509	0819	1.5F	16	Tu	0527	0840	1.2F
		1044	1424	1.5E			1120	1542	1.3E			1208	1558	1.5E			1210	1543	1.1E			1059	1454	1.6E			1108	1519	1.2E
		1728	2019	1.5F			1800	2117	1.2F			1844	2149	1.5F			1847	2121	1.3F			1731	2043	1.6F			1740	2050	1.3F
		2317					2348															2327					2328		
2	Sa	0547	0827	1.5F	17	Su	0617	0928	1.1F	2	Tu	0711	1012	1.4F	17	W	0711	0931	1.2F	2	Tu	0559	0907	1.5F	17	W	0605	0900	1.2F
		1134	1512	1.4E			1158	1620	1.2E			1258	1654	1.4E			1248	1546	1.1E			1149	1542	1.5E			1144	1505	1.1E
		1817	2108	1.4F			1839	2149	1.2F			1934	2239	1.5F			1925	2145	1.3F			1820	2129	1.6F			1817	2051	1.3F
3	Su	0007	0346	1.3E	18	M	0025	0442	1.1E	3	W	0128	0532	1.4E	18	Th	0110	0406	1.1E	3	W	0015	0412	1.6E	18	Th	0004	0318	1.2E
		0639	0918	1.4F			0658	0946	1.1F			0805	1108	1.3F			0752	1006	1.2F			0650	0956	1.5F			0644	0906	1.2F
		1225	1606	1.4E			1237	1648	1.1E			1350	1758	1.3E			1328	1614	1.1E			1238	1634	1.4E			1302	1517	1.1E
		1908	2159	1.4F			1918	2153	1.2F			2027	2334	1.3F			2007	2224	1.3F			1909	2216	1.5F			1855	2118	1.4F
4	M	0057	0450	1.3E	19	Tu	0102	0507	1.0E	4	Th	0219	0635	1.3E	19	F	0150	0439	1.2E	4	Th	0103	0506	1.5E	19	F	0041	0338	1.2E
		0731	1014	1.3F			0740	0957	1.1F			0900	1208	1.2F			0839	1048	1.2F			0740	1046	1.4F			0726	0940	1.3F
		1317	1714	1.3E			1316	1624	1.0E			1445	1905	1.2E			1411	1652	1.1E			1328	1732	1.3E			1302	1546	1.1E
		1959	2257	1.3F			1959	2217	1.2F			2120					2051	2308	1.3F			1959	2306	1.4F			1937	2156	1.4F
5	Tu	0150	0559	1.2E	20	W	0142	0444	1.0E	5	F	0312	0739	1.3E	20	Sa	0235	0521	1.2E	5	F	0152	0606	1.4E	20	Sa	0122	0412	1.2E
		0828	1123	1.2F			0825	1035	1.1F		☉	0312	0739	1.3E			0928	1134	1.2F			0833	1141	1.2F			0810	1022	1.3F
		1411	1826	1.2E			1358	1651	1.0E			0958	1313	1.1F			1459	1738	1.0E			1421	1837	1.2E			1345	1625	1.1E
		2053					2041	2256	1.2F			1543	2009	1.1E			2141	2356	1.3F			2051					2022	2240	1.4F
6	W	0244	0705	1.2E	21	Th	0224	0516	1.0E	6	Sa	0409	0841	1.2E	21	Su	0323	0611	1.1E	6	Sa	0244	0709	1.3E	21	Su	0206	0454	1.2E
		0925	1235	1.1F			0911	1119	1.1F			1058	1417	1.0F		☉	1020	1225	1.1F			0930	1242	1.1F			0859	1108	1.2F
		1508	1933	1.2E			1444	1729	1.0E			1645	2110	1.1E			1552	1832	1.0E			1517	1941	1.1E			1432	1711	1.0E
		2149					2128	2341	1.2F			2318					2237					2148					2114	2328	1.3F
7	Th	0340	0807	1.2E	22	F	0310	0600	1.0E	7	Su	0509	0941	1.3E	22	M	0417	0711	1.1E	7	Su	0339	0812	1.2E	22	M	0254	0544	1.2E
		1024	1342	1.0F			1000	1207	1.1F			1200	1519	1.0F			1117	1321	1.1F			1029	1346	1.0F			0952	1158	1.1F
	☉	1608	2036	1.1E			1533	1816	1.0E			1749	2209	1.1E			1650	1938	0.9E		☉	1617	2043	1.0E			1526	1807	1.0E
		2248					2218										2335					2247					2210		
8	F	0439	0908	1.2E	23	Sa	0400	0652	1.1E	8	M	0610	1038	1.3E	23	Tu	0515	0823	1.1E	8	M	0437	0913	1.2E	23	Tu	0349	0643	1.1E
		1126	1446	1.0F			1053	1300	1.1F			1300	1619	1.0F			1214	1422	1.1F			1129	1449	0.9F			1049	1253	1.1F
		1710	2136	1.1E		☉	1627	1912	0.9E			1855	2306	1.1E			1752	2103	1.0E			1720	2142	1.0E		☉	1624	1913	0.9E
		2346					2310															2349					2310		
9	Sa	0538	1006	1.3E	24	Su	0453	0753	1.1E	9	Tu	0710	1132	1.3E	24	W	0617	1037	1.2E	9	Tu	0538	1011	1.2E	24	W	0448	0758	1.1E
		1227	1546	1.0F			1149	1356	1.1F			1359	1715	1.0F			1312	1542	1.1F			1230	1550	0.9F			1148	1355	1.0F
		1813	2233	1.2E			1724	2017	0.9E			2009	2359	1.2E			1856	2315	1.1E			1824	2239	1.1E			1728	2154	1.0E
10	Su	0044	0410	1.1F	25	M	0006	0220	1.2F	10	W	0214	0535	1.0F	25	Th	0133	0404	1.2F	10	W	0050	0413	0.9F	25	Th	0010	0221	1.1F
		0638	1101	1.4E			0550	0908	1.1E			0808	1224	1.4E			0718	1138	1.3E			0639	1106	1.3E			0551	1019	1.2E
		1325	1643	1.1F			1244	1459	1.1F			1450	1806	1.1F			1409	1718	1.2F			1329	1647	1.0F			1247	1534	1.1F
		1917	2328	1.2E			1823	2141	1.0E			2111					1956					1936	2333	1.2E			1831	2255	1.1E
11	M	0141	0505	1.1F	26	Tu	0101	0321	1.2F	11	Th	0306	0625	1.1F	26	F	0230	0538	1.3F	11	Th	0149	0508	1.0F	26	F	0111	0407	1.1F
		0735	1154	1.4E			0647	1056	1.2E			0900	1312	1.4E			0817	1231	1.4E			0739	1158	1.3E			0654	1119	1.3F
		1420	1737	1.1F			1340	1618	1.1F			1537	1853	1.2F			1502	1816	1.4F			1420	1738	1.0F			1343	1659	1.2F
		2018					1922	2331	1.1E			2145					2053					2049					1933	2350	1.3E
12	Tu	0234	0556	1.1F	27	W	0158	0431	1.2F	12	F	0351	0710	1.1F	27	Sa	0326	0637	1.4F	12	F	0240	0558	1.0F	27	Sa	0210	0524	1.2F
		0829	1244	1.5E			0744	1155	1.3E			0943	1357	1.4E			0914	1320	1.5E			0832	1246	1.3E			0755	1213	1.4E
		1510	1827	1.2F			1433	1736	1.2F			1618	1936	1.2F			1553	1908	1.5F			1508	1825	1.1F			1439	1756	1.3F
		2111					2020					2217					2147					2118					2030		
13	W	0323	0645	1.2F	28	Th	0251	0546	1.3F	13	Sa	0434	0753	1.2F	28	Su	0419	0729	1.5F	13	Sa	0328	0645	1.1F	28	Su	0306	0621	1.3F
		0918	1332	1.5E			0840</																						

Boston Harbor (Deer Island Light), Massachusetts, 2010

F—Flood, Dir. 254° True E—Ebb, Dir. 111° True

April				May				June																			
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots												
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m												
1 Th	0628	0937	1.6E	16 F	0619	0843	1.3F	1 Sa	0655	1007	1.3F	16 Su	0640	0902	1.3F	1 Tu	0808	1123	1.1F	16 W	0112	0436	1.3E	0758	1031	1.3F	
	1217	1616	1.4E		1158	1455	1.1E		1244	1653	1.3E		1221	1519	1.1E		1356	1816	1.1E		1344	1715	1.1E		2021	2246	1.2F
	1844	2154	1.5F		1829	2053	1.4F		1910	2221	1.3F		1854	2114	1.3F		2027	2338	1.1F								
2 F	0038	0445	1.5E	17 Sa	0016	0318	1.3E	2 Su	0101	0519	1.4E	17 M	0039	0345	1.3E	2 W	0210	0639	1.2E	17 Th	0204	0538	1.2E	0850	1128	1.2F	
	0718	1026	1.4F		0701	0918	1.3F		0744	1057	1.2F		0728	0945	1.3F		0856	1211	1.1F		0850	1128	1.2F		1437	1842	1.1E
	1306	1711	1.3E		1240	1528	1.1E		1333	1748	1.2E		1309	1603	1.1E		1443	1908	1.1E		1437	1842	1.1E		2117	2349	1.1F
	1933	2241	1.4F		1912	2133	1.4F		2000	2311	1.2F		1944	2201	1.3F		2118				2117	2349	1.1F				
3 Sa	0126	0541	1.4E	18 Su	0058	0353	1.3E	3 M	0149	0615	1.3E	18 Tu	0127	0431	1.2E	3 Th	0258	0731	1.1E	18 F	0258	0708	1.2E	0943	1244	1.2F	
	0809	1118	1.2F		0748	1000	1.3F		0836	1149	1.1F		0818	1033	1.2F		0943	1259	1.1F	18 Sa	0943	1244	1.2F	1532	1951	1.2E	
	1357	1811	1.2E		1325	1608	1.1E		1424	1845	1.1E		1359	1654	1.1E		1531	2000	1.0E	18 Su	1531	1951	1.2E	2214			
	2026	2333	1.2F		2001	2218	1.3F		2052				2038	2251	1.2F		2208			18 Mo	2214						
4 Su	0216	0642	1.3E	19 M	0144	0437	1.2E	4 Tu	0239	0711	1.2E	19 W	0218	0524	1.2E	4 Th	0347	0823	1.0E	19 F	0347	0819	1.1E	0355	0819	1.1E	
	0901	1215	1.1F		0838	1047	1.2F		0928	1244	1.0F		0910	1124	1.2F		0437	0823	1.0E		0437	0819	1.1E	0355	0819	1.1E	
	1450	1913	1.1E		1414	1656	1.0E		1516	1942	1.1E		1452	1755	1.0E	4 F	0530	1006	1.0E	19 Sa	0530	1006	1.0E	1039	1353	1.1F	
	2120				2053	2306	1.3F		2148				2132	2346	1.1F	4 Su	0620	2052	1.0E	19 Mo	0620	2052	1.0E	1628	2054	1.2E	
5 M	0308	0742	1.2E	20 Tu	0234	0528	1.2E	5 W	0331	0808	1.1E	20 Th	0313	0629	1.1E	5 Sa	0438	0915	1.0E	20 Su	0438	0915	1.0E	0454	0921	1.1E	
	0959	1315	1.0F		0930	1138	1.2F		1020	1340	1.0F		1005	1223	1.1F		0530	0915	1.0E		0530	0915	1.0E	0454	0921	1.1E	
	1547	2013	1.0E		1507	1753	1.0E	5 Mo	1609	2038	1.0E	20 Tu	1549	2007	1.0E		0709	2144	1.0E		0709	2144	1.0E	0454	0921	1.1E	
	2218				2150				2242			20 W	2231			2351				2351			0725	2153	1.2E		
6 Tu	0404	0842	1.2E	21 W	0328	0628	1.1E	6 Th	0425	0904	1.1E	21 F	0411	0836	1.1E	6 Su	0530	1006	1.0E	21 M	0530	1006	1.0E	0554	1019	1.2E	
	1056	1416	0.9F		1027	1233	1.1F		1113	1436	1.0F		1101	1356	1.1F		1210	1527	1.1F		1210	1527	1.1F	1231	1555	1.1F	
	1646	2112	1.0E	21 Mo	1605	1903	1.0E		1703	2133	1.0E		1648	2114	1.1E		1759	2233	1.0E		1759	2233	1.0E	1823	2249	1.3E	
	2317				2249				2339				2331							21 Tu	0041	0355	1.0F	0109	0428	1.1F	
7 W	0503	0939	1.2E	22 Th	0428	0752	1.1E	7 F	0521	0958	1.1E	22 Sa	0511	0940	1.1E	7 M	0622	1055	1.0E	22 Tu	0622	1055	1.0E	0654	1116	1.2E	
	1153	1516	0.9F		1123	1338	1.0F		1207	1529	1.0F		1159	1516	1.1F		1259	1614	1.1F		1259	1614	1.1F	1328	1651	1.2F	
	1746	2208	1.1E		1707	2134	1.0E		1757	2226	1.1E		1747	2213	1.2E		1848	2320	1.1E		1848	2320	1.1E	1920	2344	1.4E	
8 Th	0017	0338	0.9F	23 F	0205	0507	1.1F	8 Sa	0032	0353	0.9F	23 Su	0031	0347	1.1F	8 Tu	0131	0443	1.0F	23 W	0131	0443	1.0F	0205	0524	1.1F	
	0602	1035	1.2E		0530	1000	1.1E		0615	1049	1.1E		0613	1039	1.2E		0713	1141	1.0E		0713	1141	1.0E	0753	1209	1.3E	
	1250	1611	1.0F		1222	1532	1.1F		1257	1620	1.0F		1255	1617	1.2F		1348	1658	1.1F		1348	1658	1.1F	1421	1745	1.2F	
	1845	2302	1.1E		1809	2234	1.2E		1849	2316	1.1E		1845	2309	1.3E		1936				1936			2014			
9 F	0112	0434	0.9F	24 Sa	0051	0403	1.1F	9 Su	0125	0444	1.0F	24 M	0129	0447	1.1F	9 W	0221	0530	1.1F	24 Th	0221	0530	1.1F	0259	0617	1.2F	
	0700	1126	1.2E		0633	1059	1.2E		0708	1138	1.1E		0713	1134	1.3E		0803	1225	1.0E		0803	1225	1.0E	0850	1301	1.3E	
	1341	1703	1.0F		1319	1638	1.2F		1344	1707	1.1F		1350	1712	1.2F		1435	1739	1.2F		1435	1739	1.2F	1513	1837	1.2F	
	1941	2353	1.2E		1909	2329	1.3E		1937				1942				2024				2024			2107			
10 Sa	0206	0525	1.0F	25 Su	0149	0507	1.2F	10 M	0213	0531	1.0F	25 Tu	0224	0543	1.2F	10 Th	0309	0615	1.1F	25 F	0309	0615	1.1F	0350	0708	1.2F	
	0753	1215	1.2E		0734	1153	1.3E		0757	1223	1.1E		0811	1226	1.3E		0852	1306	1.0E		0852	1306	1.0E	0942	1351	1.3E	
	1429	1750	1.1F		1413	1735	1.3F		1429	1752	1.2F		1442	1805	1.3F		1521	1816	1.3F		1521	1816	1.3F	1604	1926	1.2F	
	2028				2006				2022				2036				2111				2111			2157			
11 Su	0253	0611	1.1F	26 M	0245	0602	1.3F	11 Tu	0300	0616	1.1F	26 W	0318	0635	1.3F	11 Th	0357	0656	1.2F	26 Sa	0357	0656	1.2F	0439	0757	1.2F	
	0841	1300	1.2E		0832	1244	1.4E		0843	1306	1.1E		0907	1317	1.4E		0940	1341	1.1E		0940	1341	1.1E	1031	1440	1.3E	
	1511	1833	1.2F		1506	1826	1.4F		1513	1833	1.2F		1533	1855	1.3F		1610	1852	1.3F		1610	1852	1.3F	1653	2014	1.2F	
	2108				2100				2104				2128				2158			26 Su	2158			2244			
12 M	0337	0655	1.1F	27 Tu	0338	0654	1.4F	12 W	0343	0657	1.2F	27 Th	0409	0725	1.3F	12 Sa	0443	0736	1.3F	27 Su	0443	0736	1.3F	0526	0844	1.2F	
	0923	1341	1.2E		0926	1334	1.5E		0927	1344	1.1E		0959	1407	1.4E		1028	1406	1.1E		1028	1406	1.1E	1117	1527	1.3E	
	1551	1913	1.2F		1557	1915	1.5F		1556	1909	1.3F		1623	1944	1.4F		1658	1932	1.3F		1658	1932	1.3F	1740	2100	1.2F	
	2145				2151				2146			12 Mo	2217			2245				27 Tu	2245			2329			
13 Tu	0418	0734	1.2F	28 W	0428	0743	1.4F	13 Th	0428	07																	

Cape Cod Canal (RR. Bridge), Massachusetts, 2010

F—Flood, Dir. 070° True E—Ebb, Dir. 250° True

January				February				March																					
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum															
h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	h	m	knots													
1 F	0310	0608	4.4F	4.6E	16 Sa	0353	0654	4.0F	4.1E	1 M	0431	0731	4.8F	4.9E	16 Tu	0437	0736	4.2F	4.3E	1 M	0323	0626	4.8F	4.9E	16 Tu	0335	0637	4.2F	4.4E
	0920	1227	5.0E	4.8F		1004	1300	4.5E	4.3F		1044	1347	5.2E	5.0F		1054	1352	4.5E	4.3F		0939	1238	5.2E	5.0F		0954	1247	4.5E	4.3F
	1537	1844	4.8F			1615	1924	4.3F			1657	2002	5.0F			1658	1958	4.3F			1549	1855	5.0F			1556	1856	4.3F	
	2212					2247					2326					2324					2215					2217			
		0059	4.7E				0126	4.2E				0215	5.0E				0213	4.3E				0105	5.0E				0107	4.4E	
2 Sa	0359	0657	4.5F		17 Su	0429	0727	4.0F	4.0E	2 Tu	0519	0819	4.8F	4.8E	17 W	0511	0809	4.2F	4.2E	2 Tu	0410	0713	4.9F	4.9E	17 W	0409	0709	4.3F	4.3E
	1009	1316	5.1E			1041	1339	4.5E	4.5E		1135	1436	5.2E	5.0E		1129	1431	4.5E	4.5E		1029	1326	5.2E	5.0E		1030	1325	4.5E	4.5E
	1625	1932	4.9F			1651	1955	4.2F	4.2F		1745	2049	4.9F	4.9F		1733	2031	4.2F	4.2F		1636	1940	5.0F	5.0F		1630	1927	4.3F	4.3F
	2300					2322					2356					2356					2259					2249			
3 Su	0448	0746	4.6F	4.8E	18 M	0504	0801	4.0F	4.0E	3 W	0608	0909	4.7F	4.7E	18 Th	0547	0845	4.1F	4.1E	3 W	0457	0800	4.9F	4.9E	18 Th	0443	0743	4.3F	4.3E
	1059	1405	5.1E			1118	1418	4.5E	4.5E		1226	1525	5.0E	5.0E		1206	1511	4.3E	4.3E		1118	1414	5.1E	5.1E		1106	1404	4.5E	4.5E
	1715	2021	4.9F			1726	2028	4.2F	4.2F		1834	2137	4.7F	4.7F		1809	2106	4.1F	4.1F		1723	2025	4.8F	4.8F		1704	2001	4.2F	4.2F
	2349					2358					1926	2228	4.4F	4.4F		1933	2230	3.8F	3.8F		2344					2321			
4 M	0539	0836	4.6F	4.8E	19 Tu	0541	0836	4.0F	4.0E	4 Th	0700	1000	4.5F	4.5E	19 F	0626	0924	4.0F	4.0E	4 Th	0544	0847	4.7F	4.7E	19 F	0519	0819	4.3F	4.3E
	1150	1456	5.1E			1155	1459	4.4E	4.4E		1322	1617	4.7E	4.7E		1247	1554	4.2E	4.2E		1209	1502	4.9E	4.9E		1144	1445	4.4E	4.4E
	1805	2111	4.8F			1802	2102	4.1F	4.1F		1926	2228	4.4F	4.4F		1848	2146	4.0F	4.0F		1810	2110	4.6F	4.6F		1741	2037	4.1F	4.1F
		0237	4.8E				0243	4.2E				0353	4.7E				0332	4.2E				0238	5.0E				0222	4.4E	
5 Tu	0631	0929	4.5F	4.7E	20 W	0619	0914	3.9F	3.9E	5 F	0754	1056	4.2F	4.2E	20 Sa	0709	1009	3.9F	3.9E	5 F	0633	0936	4.5F	4.5E	20 Sa	0559	0900	4.2F	4.2E
	1245	1548	4.9E			1234	1540	4.3E	4.3E		1422	1712	4.4E	4.4E		1334	1642	4.0E	4.0E		1302	1552	4.6E	4.6E		1226	1529	4.2E	4.2E
	1857	2203	4.7F			1840	2140	4.0F	4.0F		2021	2322	4.1F	4.1F		1933	2230	3.8F	3.8F		1859	2157	4.3F	4.3F		1822	2117	4.0F	4.0F
		0328	4.7E				0323	4.1E				0445	4.5E				0417	4.1E				0325	4.8E				0303	4.4E	
6 W	0131	0420	4.6E	4.6E	21 Th	0110	0406	4.0E	4.0E	6 Sa	0247	0540	4.3E	4.3E	21 Su	0150	0506	4.0E	4.0E	6 Sa	0119	0415	4.5E	4.5E	21 Su	0033	0348	4.3E	4.3E
	0725	1024	4.3F	4.3E		0659	0955	3.8F	3.8E		0854	1159	4.0F	4.0E		0800	1100	3.8F	3.8E		0725	1029	4.2F	4.2E		0643	0945	4.1F	4.1E
	1343	1642	4.7E	4.7E		1316	1625	4.1E	4.1E		1527	1811	4.0E	4.0E		1431	1735	3.8E	3.8E		1359	1645	4.2E	4.2E		1315	1617	4.0E	4.0E
	1952	2257	4.5F			1922	2221	3.9F	3.9E		2121					2025	2322	3.6F	3.6E		1952	2249	3.9F	3.9E		1908	2203	3.8F	3.8E
7 Th	0225	0515	4.5E	4.5E	22 F	0150	0452	3.9E	3.9E	7 Su	0347	0639	4.1E	4.1E	22 M	0243	0601	3.9E	3.9E	7 Su	0212	0509	4.3E	4.3E	22 M	0118	0438	4.2E	4.2E
	0823	1124	4.2F	4.2F		0745	1041	3.7F	3.7E		0958	1311	3.8F	3.8E		0858	1200	3.7F	3.7E		0822	1128	3.9F	3.9E		0734	1037	4.0F	4.0E
	1445	1739	4.4E	4.4E		1405	1714	3.9E	3.9E		1636	1914	3.8E	3.8E		1539	1835	3.7E	3.7E		1502	1742	3.9E	3.9E		1413	1712	3.8E	3.8E
	2050	2356	4.2F			2008	2307	3.7F	3.7E		2226					2127					2050	2349	3.6F	3.6E		2002	2257	3.6F	3.6E
8 F	0322	0612	4.3E	4.3E	23 Sa	0236	0541	3.9E	3.9E	8 M	0449	0741	4.0E	4.0E	23 Tu	0347	0701	4.0E	4.0E	8 M	0311	0607	4.0E	4.0E	23 Tu	0214	0534	4.1E	4.1E
	0925	1229	4.0F	4.0E		0836	1134	3.6F	3.6E		1105	1430	3.7F	3.7E		1004	1309	3.7F	3.7E		0925	1238	3.7F	3.7E		0834	1138	3.9F	3.9E
	1552	1840	4.2E			1503	1807	3.8E	3.8E		1743	2019	3.6E	3.6E		1652	1939	3.7E	3.7E		1609	1844	3.6E	3.6E		1520	1812	3.8E	3.8E
	2151					2100	2359	3.6F	3.6E		2333					2235					2155					2106			
9 Sa	0421	0712	4.2E	4.0F	24 Su	0328	0636	3.9E	3.9E	9 Tu	0550	0843	4.0E	4.0E	24 W	0456	0805	4.1E	4.1E	9 Tu	0416	0709	3.9E	3.9E	24 W	0321	0636	4.1E	4.1E
	1030	1341	3.9F	3.9E		0934	1233	3.6F	3.7E		1209	1541	3.8F	3.8E		1113	1421	3.9F	3.9E		1032	1358	3.6F	3.6E		0941	1248	3.9F	3.9E
	1700	1942	4.0E			1609	1905	3.7E	3.7E		1844	2121	3.6E	3.6E		1800	2043	3.9E	3.9E		1715	1949	3.5E	3.5E		1631	1917	3.8E	3.8E
	2255					2159					2344					2344					2303					2216			
10 Su	0520	0812	4.2E	3.8F	25 M	0426	0733	3.9E	3.9E	10 W	0647	0941	4.1E	4.1E	25 Th	0602	0906	4.4E	4.4E	10 W	0520	0812	3.8E	3.8E	25 Th	0433	0741	4.2E	4.2E
	1134	1454	3.9F	3.9E		1037	1339	3.7F	3.7E		1306	1637	3.9F	3.9E		1218	1529	4.2F	4.2E		1137	1511	3.7F	3.7E		1050	1400	4.0F	4.0E
	1805	2045	3.9E			1717	2006	3.7E	3.7E		1938	2216	3.8E	3.8E		1900	2143	4.2E	4.2E		1815	2051	3.5E	3.5E		1737	2021	4.0E	4.0E
	2358					2303					2333					2335					2303					2325			
11 M	0617	0910	4.2E	3.7F	26 Tu	0527	0832	4.1E	4.1E	11 Th	0738	1032	4.2E	4.2E	26 F	0702	1004	4.6E	4.6E	11 Th	0619	0911	3.9E	3.9E	26 F	0542	0844	4.4E	4.4E
	1234	1559	4.0F	4.0E		1141	1446	3.9F	3.9E		1355	1722	4.1F	4.1E		1317	1628	4.5F	4.5E		1235	1607	3.8F	3.8E		1156	1508	4.2F	4.2E
	1905	2144	3.9E			1823	2107	3.9E	3.9E		2024	2303	3.9E	3.9E		1954	2238	4.5E	4.5E		1907	2146	3.7E	3.7E		1836	2121	4.3E	4.3E
		0313	3.7F				0202	3.6F				0446	3.7F				0347	4.0F				0326	3.4F				0224	3.8F	
12 Tu	0710	1005	4.3E	3.8F	27 W	0626	0930	4.4E	4.4E	12 F	0823	1117	4.3E	4.3E	27 Sa	0757	1059	4.9E	4.9E	12 F	0711	1003	4.1E	4.1E	27 Sa	0644	0943	4.6E	4.6E
	1328	1654	4.1F	4.1E		1241	1550	4.1F	4.1E																				

Cape Cod Canal (RR. Bridge), Massachusetts, 2010

F—Flood, Dir. 070° True E—Ebb, Dir. 250° True

April				May				June																					
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum															
h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots										
1	Th	0435	0740	4.8F	16	F	0417	0719	4.4F	1	Sa	0500	0807	4.6F	16	Su	0436	0741	4.5F	1	Tu	0608	0914	4.1F	16	W	0557	0903	4.7F
		1101	1352	4.9E			1046	1339	4.4E			1134	1417	4.4E			1113	1403	4.4E			1248	1526	4.0E			1235	1524	4.5E
		1700	1959	4.6F			1638	1933	4.2F			1722	2019	4.1F			1659	1954	4.1F			1828	2122	3.7F			1823	2119	4.3F
		2316					2250					2334					2306												
2	F	0521	0826	4.7F	17	Sa	0456	0758	4.4F	2	Su	0546	0852	4.4F	17	M	0522	0827	4.5F	2	W	0652	0957	4.0F	17	Th	0649	0955	4.6F
		1151	1439	4.7E			1127	1422	4.3E			1223	1504	4.2E			1201	1451	4.3E			1334	1613	3.9E			1328	1616	4.5E
		1745	2043	4.4F			1718	2013	4.1F			1808	2103	3.9F			1746	2041	4.1F			1915	2208	3.6F			1918	2214	4.2F
							2327										2353												
3	Sa	0000	0259	4.7E	18	Su	0538	0841	4.3F	3	M	0019	0321	4.4E	18	Tu	0611	0917	4.5F	3	Th	0739	1043	3.8F	18	F	0744	1050	4.5F
		0608	0913	4.5F			1212	1508	4.2E			0633	0939	4.1F			1252	1542	4.2E			1422	1702	3.8E			1422	1711	4.4E
		1242	1528	4.4E			1802	2056	4.0F			1314	1553	4.0E			1838	2132	4.0F			2005	2258	3.5F			2016	2313	4.1F
		1833	2129	4.1F								1856	2150	3.7F															
4	Su	0047	0347	4.5E	19	M	0009	0326	4.4E	4	Tu	0108	0410	4.2E	19	W	0045	0400	4.6E	4	F	0221	0520	4.0E	19	Sa	0232	0534	4.6E
		0658	1003	4.2F			0625	0929	4.3F			0722	1029	3.9F			0704	1010	4.4F			0828	1132	3.7F			0842	1149	4.4F
		1337	1619	4.1E			1304	1558	4.1E			1407	1644	3.8E			1348	1636	4.2E			1511	1753	3.7E			1519	1809	4.4E
		1923	2218	3.7F			1851	2145	3.9F			1948	2241	3.5F			1934	2229	3.9F			2058	2351	3.4F			2117		
5	M	0139	0439	4.2E	20	Tu	0058	0417	4.3E	5	W	0202	0502	4.0E	20	Th	0144	0456	4.5E	5	Sa	0317	0613	3.9E	20	Su	0338	0633	4.4E
		0752	1058	3.9F			0718	1023	4.2F			0815	1123	3.7F			0802	1109	4.3F			0920	1224	3.6F			0943	1250	4.2F
		1436	1713	3.8E			1402	1654	4.0E			1502	1738	3.6E			1447	1734	4.2E			1602	1845	3.7E			1617	1907	4.4E
		2019	2314	3.4F			1948	2241	3.7F			2045	2339	3.3F			2036	2331	3.9F			2152					2220		
6	Tu	0237	0534	4.0E	21	W	0156	0514	4.3E	6	Th	0301	0557	3.9E	21	F	0249	0555	4.4E	6	Su	0415	0707	3.8E	21	M	0445	0735	4.3E
		0850	1202	3.7F			0817	1124	4.1F			0911	1222	3.6F			0903	1211	4.3F			1013	1318	3.6F			1045	1354	4.1F
		1538	1812	3.6E			1505	1753	3.9E			1557	1834	3.6E			1547	1833	4.2E			1652	1938	3.8E			1714	2006	4.4E
		2122					2051	2345	3.7F			2144					2140					2247					2322		
7	W	0340	0634	3.8E	22	Th	0304	0615	4.3E	7	F	0402	0654	3.8E	22	Sa	0357	0657	4.4E	7	M	0512	0801	3.8E	22	Tu	0550	0836	4.2E
		0953	1313	3.6F			0922	1230	4.1F			1009	1322	3.6F			1006	1316	4.2F			1107	1411	3.6F			1147	1457	4.1F
		1639	1913	3.5E			1610	1856	4.0E			1652	1930	3.6E			1646	1933	4.3E			1741	2030	3.9E			1810	2104	4.4E
		2227					2159					2242					2244					2340							
8	Th	0444	0735	3.8E	23	F	0415	0719	4.3E	8	Sa	0502	0751	3.8E	23	Su	0504	0758	4.4E	8	Tu	0608	0854	4.0E	23	W	0652	0935	4.2E
		1056	1423	3.6F			1029	1339	4.1F			1105	1419	3.6F			1109	1420	4.3F			1159	1502	3.7F			1246	1556	4.0F
		1737	2013	3.6E			1713	1958	4.1E			1742	2023	3.8E			1742	2032	4.4E			1828	2120	4.1E			1903	2158	4.5E
		2328					2305					2337					2345												
9	F	0544	0833	3.9E	24	Sa	0523	0821	4.4E	9	Su	0557	0844	3.9E	24	M	0608	0858	4.4E	9	W	0700	0945	4.0E	24	Th	0749	1030	4.2E
		1154	1520	3.7F			1133	1445	4.3F			1157	1509	3.7F			1209	1519	4.3F			1249	1550	3.8F			1340	1649	4.0F
		1828	2107	3.7E			1810	2057	4.4E			1829	2113	3.9E			1836	2127	4.6E			1912	2208	4.2E			1953	2250	4.6E
10	Sa	0022	0337	3.5F	25	Su	0007	0311	4.1F	10	M	0026	0332	3.7F	25	Tu	0042	0352	4.3F	10	Th	0118	0422	4.0F	25	F	0210	0528	4.3F
		0637	0926	4.0E			0626	0921	4.6E			0648	0934	4.0E			0707	0955	4.5E			0749	1034	4.1E			0842	1121	4.2E
		1244	1606	3.8F			1233	1544	4.4F			1245	1553	3.8F			1306	1614	4.3F			1337	1636	3.9F			1430	1737	4.0F
		1914	2155	3.9E			1903	2152	4.6E			1912	2159	4.1E			1926	2220	4.7E			1955	2254	4.4E			2041	2338	4.6E
11	Su	0108	0420	3.8F	26	M	0103	0410	4.4F	11	Tu	0111	0416	3.9F	26	W	0135	0447	4.5F	11	F	0203	0508	4.2F	26	Sa	0257	0615	4.4F
		0725	1014	4.1E			0723	1016	4.7E			0735	1021	4.1E			0803	1048	4.5E			0837	1122	4.2E			0930	1208	4.2E
		1329	1644	4.0F			1328	1636	4.6F			1330	1634	4.0F			1358	1704	4.3F			1423	1721	4.0F			1516	1820	4.0F
		1955	2238	4.1E			1952	2243	4.8E			1953	2243	4.3E			2014	2309	4.8E			2038	2340	4.6E			2125		
12	M	0150	0458	3.9F	27	Tu	0155	0503	4.6F	12	W	0153	0457	4.1F	27	Th	0225	0538	4.5F	12	Sa	0248	0554	4.4F	27	Su	0341	0656	4.4F
		0809	1057	4.3E			0817	1108	4.8E			0819	1106	4.3E			0855	1138	4.5E			0924	1209	4.3E			1015	1252	4.2E
		1410	1718	4.1F			1419	1725	4.6F			1412	1712	4.0F			1447	1751	4.3F			1509	1806	4.2F			1559	1859	4.0F
		2033	2319	4.3E			2038	2332	4.9E			2031	2325	4.4E			2100	2357	4.8E			2120					2208		
13	Tu	0228	0533	4.1F	28	W	0243	0551	4.7F	13	Th	0233	0537	4.2F	28	F	0312	0625	4.6F	13	Su	0333	0639	4.5F	28	M	0423	0734	4.3F
		0849	1138	4.4E			0908	115																					

Cape Cod Canal (RR. Bridge), Massachusetts, 2010

F—Flood, Dir. 070° True E—Ebb, Dir. 250° True

July				August				September																							
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum																	
h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots												
1 Th	0011	0313	4.3E	16 F	0018	0322	5.0E	1 Su	0104	0408	4.1E	16 M	0154	0446	4.5E	1 W	0212	0514	3.7E	16 Th	0345	0622	3.7E	17 F	0452	0727	3.6E				
	0621	0924	4.1F		0630	0934	4.7F		0706	1005	3.9F		0754	1054	4.2F		0804	1100	3.5F		0934	1237	3.4F		1043	1356	3.4F				
	1257	1541	4.0E		1302	1553	4.7E		1334	1633	4.0E		1418	1713	4.5E		1421	1738	3.9E		1552	1846	4.0E		1657	1950	4.0E				
	1840	2134	3.8F		1856	2155	4.5F		1928	2225	3.7F		2025	2330	4.2F		2035	2336	3.7F		2208				2315	0134	3.8F				
2 F	0055	0357	4.2E	17 Sa	0114	0415	4.8E	2 M	0150	0455	3.9E	17 Tu	0259	0545	4.2E	2 Th	0316	0612	3.6E	17 F	0452	0727	3.6E	18 Sa	0553	0831	3.6E	19 Su	0647	0926	3.8E
	0702	1004	3.9F		0723	1027	4.6F		0750	1049	3.7F		0854	1155	3.9F		0903	1159	3.4F		1146	1506	3.5F		1241	1600	3.7F				
	1339	1625	3.9E		1354	1646	4.6E		1418	1721	3.9E		1517	1812	4.3E		1522	1837	3.9E		1657	1950	4.0E		1852	2144	4.1E				
	1924	2218	3.7F		1952	2252	4.3F		2017	2314	3.6F		2129				2138				2315										
3 Sa	0141	0443	4.1E	18 Su	0214	0510	4.6E	3 Tu	0245	0547	3.8E	18 W	0407	0647	3.9E	3 F	0426	0714	3.6E	18 Sa	0553	0831	3.6E	19 Su	0647	0926	3.8E				
	0746	1047	3.8F		0819	1122	4.3F		0840	1138	3.6F		0959	1304	3.7F		1009	1305	3.4F		1146	1506	3.5F		1241	1600	3.7F				
	1423	1712	3.9E		1449	1741	4.5E		1507	1814	3.8E		1620	1914	4.1E		1629	1939	4.0E		1758	2050	4.0E		1852	2144	4.1E				
	2011	2306	3.6F		2052	2354	4.2F		2112				2236				2245				1758	2050	4.0E		1852	2144	4.1E				
4 Su	0231	0532	3.9E	19 M	0319	0609	4.3E	4 W	0347	0643	3.7E	19 Th	0515	0753	3.8E	4 Sa	0533	0816	3.8E	19 Su	0647	0926	3.8E								
	0833	1133	3.7F		0918	1223	4.1F		0936	1234	3.5F		1107	1419	3.6F		1116	1414	3.6F		1241	1600	3.7F								
	1509	1802	3.8E		1547	1840	4.4E		1603	1910	3.8E		1723	2017	4.1E		1734	2040	4.2E		1852	2144	4.1E								
	2103	2358	3.5F		2155				2212				2342				2350				1852	2144	4.1E								
5 M	0327	0625	3.8E	20 Tu	0426	0711	4.1E	5 Th	0454	0742	3.6E	20 F	0619	0856	3.7E	5 Su	0632	0916	4.0E	20 M	0733	1014	4.0E								
	0924	1224	3.6F		1022	1329	3.9F		1038	1336	3.5F		1211	1528	3.6F		1219	1518	3.9F		1327	1644	3.8F								
	1559	1854	3.8E		1647	1940	4.3E		1703	2008	4.0E		1823	2117	4.2E		1835	2137	4.5E		1939	2231	4.3E								
	2157				2300				2315												1939	2231	4.3E								
6 Tu	0427	0720	3.7E	21 W	0534	0814	4.0E	6 F	0558	0842	3.8E	21 Sa	0715	0954	3.8E	6 M	0726	1011	4.4E	21 Tu	0814	1056	4.1E								
	1019	1319	3.6F		1126	1437	3.8F		1141	1439	3.6F		1306	1624	3.7F		1315	1616	4.2F		1408	1719	4.0F								
	1651	1948	3.9E		1746	2041	4.3E		1801	2106	4.2E		1916	2211	4.3E		1930	2231	4.8E		2022	2312	4.4E								
	2254																				2022	2312	4.4E								
7 W	0154	0456	3.6F	22 Th	0003	0326	4.0F	7 Sa	0016	0323	4.0F	22 Su	0134	0501	4.1F	7 Tu	0142	0451	4.6F	22 W	0228	0542	4.2F								
	0528	0816	3.7E		0637	0916	3.9E		0657	0940	4.0E		0803	1043	4.0E		0815	1102	4.6E		0851	1135	4.3E								
	1115	1415	3.6F		1228	1542	3.8F		1241	1540	3.8F		1354	1709	3.9F		1406	1708	4.5F		1444	1751	4.1F								
	1743	2042	4.0E		1843	2139	4.3E		1857	2201	4.5E		2004	2258	4.4E		2022	2322	5.0E		2101	2352	4.5E								
8 Th	0253	0556	3.7F	23 F	0101	0427	4.1F	8 Su	0112	0421	4.3F	23 M	0219	0541	4.2F	8 W	0233	0540	4.8F	23 Th	0304	0611	4.2F								
	0627	0911	3.8E		0735	1013	3.9E		0750	1034	4.2E		0846	1126	4.1E		0901	1151	4.9E		0926	1212	4.4E								
	1212	1511	3.7F		1324	1638	3.8F		1336	1635	4.1F		1436	1747	4.0F		1455	1757	4.8F		1519	1822	4.2F								
	1834	2135	4.2E		1935	2232	4.4E		1949	2253	4.7E		2047	2340	4.5E		2112				2139										
9 F	0045	0350	4.0F	24 Sa	0154	0519	4.2F	9 M	0204	0513	4.6F	24 Tu	0258	0614	4.2F	9 Th	0321	0626	4.9F	24 F	0339	0640	4.2F								
	0722	1005	4.0E		0826	1104	4.0E		0840	1125	4.5E		0925	1205	4.2E		0946	1238	5.0E		0959	1248	4.4E								
	1306	1605	3.8F		1414	1725	3.9F		1427	1727	4.4F		1513	1819	4.1F		1542	1845	4.9F		1552	1853	4.2F								
	1923	2226	4.4E		2023	2319	4.5E		2040	2344	5.0E		2127				2202				2215										
10 Sa	0136	0443	4.2F	25 Su	0241	0602	4.3F	10 Tu	0254	0602	4.8F	25 W	0335	0644	4.5E	10 F	0409	0712	5.0F	25 Sa	0412	0710	4.5E								
	0814	1057	4.2E		0912	1150	4.1E		0927	1214	4.7E		1000	1242	4.3E		1031	1324	5.1E		1031	1325	4.4E								
	1358	1656	4.0F		1458	1806	3.9F		1516	1816	4.6F		1548	1850	4.1F		1630	1933	4.9F		1626	1926	4.2F								
	2011	2316	4.7E		2107				2129				2204				2251				2251										
11 Su	0226	0533	4.5F	26 M	0003	0326	4.0F	11 W	0033	0333	5.1E	26 Th	0409	0713	4.2F	11 Sa	0456	0757	4.9F	26 Su	0447	0743	4.1F								
	0903	1147	4.4E		0323	0639	4.3F		0343	0649	4.9F		0409	0713	4.2F		1116	1412	5.0E		1103	1403	4.4E								
	1447	1745	4.2F		0953	1231	4.1E		1013	1302	4.9E		1034	1319	4.3E		1718	2021	4.8F		1702	2002	4.2F								
	2059				1538	1842	4.0F		1604	1904	4.7F		1622	1921	4.1F		2343				2328										
12 M	0314	0621	4.7F	27 Tu	0401	0712	4.3F	12 Th	0430	0735	5.0F	27 F	0443	0743	4.2F	12 Su	0544	0844	4.7F	27 M	0523	0818	4.0F								
	0950	1236	4.5E		1031	1310	4.2E		1058	1349	4.9E		1107	1356	4.3E		1203	1500	4.9E		1136	1444	4.3E								
	1536	1834	4.4F		1615	1915	4.0F		1652	1952	4.8F		1656	1954	4.1F		1808	2111	4.7F		1740	2040	4.1F								
	2146				2228				2308				2316								1740	2040	4.1F								
13 Tu	0402	0709	4.8F	28 W	0438	0744	4.2F	13 F	0518	0822	4.9F	28 Sa	0517	0815	4.1F	13 M	0634	0933	4.4F	28 Tu	0602	0856	3.9F								
	1037	1324	4.7E		1108	1348	4.2E		1145	1437	4.9E		1140	1434	4.3E		1253	1551	4.7E		1212	1527	4.2E								
	1624	1922	4.5F		1651	1949	4.0F		1741	2042	4.7F		1731	2029	4.1F		1900	2205	4.4F		1822	2124	4.0F								
	2235				2305								2353								1822	2124	4.0F								
14 W	0450	0756	4.9F	29 Th	0513	0815	4.5E	14 Sa	0608	0910	4.8F	29 Su	0553	0849	4.0F	14 Tu	0728	1026	4.0F	29 W	0646	0941	3.7F								
	1124	1412	4.7E		1143	1427	4.2E		1233	1527	4.8E		1213	1514	4.2E		1347	1645	4.4E		1255	1615	4.1E								
	1713	2011	4.6F		1727	2024	4.0F		1832	2133	4.6F		1809	2108	4.0F		1958	2305	4.1F		1911	2214	3.9F								
	2325				2343																1911	2214	3.9F								
15 Th	0539	0844	4.8F	30 F	0549	0849	4.1F	15 Su	0659	1000	4.5F	30 M	0631	0927	3.9F	15 W	0828	1126	3.7F	30 Th	0738	1032	3.6F								
	1212	1502	4.7E		1218	1507	4.1E		1323	1618	4.7E		1249	1557	4.1E		1447	1744	4.2E		1347	1710	4.0E								
	1803	2102	4.5F		1805	2101	3.9F		1926	2228	4.4F		1851	2150	3.9F		2101				2007	2312	3.8F								
						</																									

Cape Cod Canal (RR. Bridge), Massachusetts, 2010

F—Flood, Dir. 070° True E—Ebb, Dir. 250° True

October				November				December															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0254	0547	3.7E	16 Sa	0420	0655	3.6E	1 M	0441	0727	4.1E	16 Tu	0525	0805	3.6F	1 W	0509	0800	4.4E	16 Th	0524	0811	3.5F
	0839	1133	3.5F		1010	1318	3.3F		1032	1330	3.8F		1121	1430	3.5F		1111	1415	4.1F		1124	1427	3.5F
	1452	1810	4.0E		1624	1916	3.9E		1650	1950	4.3E		1741	2027	3.9E		1735	2027	4.4E		1753	2036	3.8E
	2112				2237				2300				2341				2336				2343		
2 Sa		0018	3.8F	17 Su	0206	0206	3.7F	2 Tu	0209	0209	4.2F	17 W	0256	0256	3.7F	2 Th	0244	0244	4.2F	17 F	0248	0248	3.6F
	0403	0649	3.7E		0518	0755	3.6E		0538	0826	4.3E		0612	0856	3.9E		0605	0857	4.5E		0613	0903	4.0E
	0947	1241	3.5F		1112	1427	3.4F		1135	1437	4.1F		1211	1521	3.6F		1211	1519	4.3F		1216	1522	3.7F
	1603	1913	4.1E		1725	2015	3.9E		1754	2050	4.5E		1833	2118	4.0E		1838	2126	4.5E		1847	2129	3.9E
3 Su		0128	3.9F	18 M	0304	0304	3.8F	3 W	0309	0309	4.4F	18 Th	0341	0341	3.8F	3 F	0343	0343	4.3F	18 Sa	0338	0338	3.7F
	0508	0752	3.9E		0610	0850	3.8E		0632	0922	4.5E		0656	0943	4.1E		0657	0952	4.7E		0659	0952	4.1E
	1055	1352	3.7F		1206	1523	3.6F		1232	1537	4.3F		1257	1606	3.8F		1307	1618	4.5F		1305	1611	3.9F
	1712	2015	4.3E		1820	2109	4.0E		1854	2147	4.7E		1921	2205	4.1E		1936	2221	4.5E		1937	2219	4.0E
4 M		0235	4.1F	19 Tu	0351	0351	3.9F	4 Th	0404	0404	4.5F	19 F	0421	0421	3.9F	4 Sa	0436	0436	4.3F	19 Su	0424	0424	3.8F
	0606	0852	4.2E		0656	0938	4.0E		0722	1015	4.8E		0738	1027	4.2E		0748	1044	4.8E		0743	1039	4.3E
	1157	1458	4.0F		1253	1607	3.8F		1325	1632	4.6F		1339	1646	4.0F		1400	1712	4.6F		1350	1657	4.1F
	1814	2114	4.5E		1909	2157	4.1E		1949	2240	4.8E		2005	2250	4.2E		2030	2314	4.5E		2024	2306	4.1E
5 Tu	0025	0335	4.4F	20 W	0429	0429	4.0F	5 F	0455	0455	4.6F	20 Sa	0459	0459	4.0F	5 Su	0526	0526	4.4F	20 M	0508	0508	3.9F
	0659	0947	4.5E		0737	1021	4.1E		0809	1104	4.9E		0816	1109	4.4E		0835	1133	4.9E		0824	1124	4.5E
	1254	1556	4.3F		1334	1645	4.0F		1415	1723	4.8F		1419	1724	4.2F		1449	1802	4.7F		1434	1740	4.3F
	1911	2209	4.8E		1953	2240	4.3E		2041	2331	4.8E		2048	2333	4.2E		2121				2109	2352	4.2E
6 W	0119	0428	4.6F	21 Th	0503	0503	4.1F	6 Sa	0542	0542	4.6F	21 Su	0536	0536	4.0F	6 M	0526	0526	4.4F	21 Tu	0550	0550	4.1F
	0748	1038	4.8E		0815	1102	4.3E		0855	1152	5.0E		0853	1150	4.5E		0922	1221	4.9E		0905	1209	4.6E
	1345	1649	4.6F		1413	1720	4.1F		1504	1812	4.8F		1458	1802	4.3F		1536	1848	4.7F		1517	1823	4.4F
	2005	2301	5.0E		2034	2321	4.3E		2132				2130				2210				2153		
7 Th	0211	0517	4.8F	22 F	0535	0535	4.1F	7 Su	0620	0620	4.8E	22 M	0616	0616	4.3E	7 Tu	0613	0613	4.1F	22 W	0638	0638	4.3E
	0834	1127	5.0E		0851	1140	4.4E		0940	1239	5.0E		0930	1232	4.6E		0922	1221	4.9E		0946	1253	4.8E
	1434	1739	4.8F		1449	1753	4.2F		1551	1859	4.8F		1538	1841	4.4F		1622	1933	4.6F		1600	1906	4.6F
	2056	2350	5.1E		2113				2222				2211				2257				2237		
8 F	0259	0603	4.9F	23 Sa	0607	0607	4.1F	8 M	0713	0713	4.5F	23 Tu	0652	0652	4.1F	8 W	0644	0644	4.1F	23 Th	0716	0716	4.2F
	0920	1214	5.1E		0925	1218	4.5E		1025	1325	5.0E		1007	1314	4.6E		1051	1352	4.7E		1029	1338	4.8E
	1522	1827	4.9F		1524	1827	4.3F		1638	1945	4.7F		1618	1922	4.4F		1706	2015	4.5F		1645	1950	4.6F
	2146				2151				2312				2254				2343				2321		
9 Sa		0039	5.1E	24 Su	0640	0640	4.4E	9 Tu	0757	0757	4.3F	24 W	0733	0733	4.1F	9 Th	0722	0722	4.3E	24 F	0802	0802	4.3F
	0347	0648	4.8F		0959	1257	4.5E		1111	1412	4.8E		1046	1357	4.6E		1136	1437	4.6E		1114	1425	4.9E
	1004	1301	5.1E		1600	1902	4.3F		1725	2032	4.5F		1700	2005	4.4F		1750	2058	4.3F		1731	2036	4.6F
	1609	1914	4.9F		2230								2338										
10 Su		0127	5.0E	25 M	0715	0715	4.3E	10 W	0843	0843	4.1F	25 Th	0816	0816	4.0F	10 F	0808	0808	4.1E	25 Sa	0850	0850	4.3F
	0434	0733	4.7F		1032	1337	4.5E		1158	1500	4.6E		1128	1443	4.6E		1221	1523	4.4E		1203	1514	4.8E
	1049	1347	5.0E		1637	1939	4.3F		1813	2121	4.3F		1746	2051	4.4F		1835	2141	4.1F		1819	2124	4.6F
	1656	2001	4.8F		2309																		
11 M	0215	0819	4.5F	26 Tu	0752	0752	4.0F	11 Th	0932	0932	3.8F	26 F	0904	0904	4.0F	11 Sa	0854	0854	4.0E	26 Su	0941	0941	4.2F
	0521	0819	4.5F		1107	1418	4.4E		1248	1550	4.4E		1216	1533	4.5E		1310	1610	4.2E		1256	1606	4.7E
	1135	1435	4.9E		1717	2020	4.3F		1903	2211	4.1F		1835	2141	4.3F		1920	2225	3.9F		1911	2215	4.5F
	1745	2050	4.6F		2352																		
12 Tu	0019	0305	4.5E	27 W	0833	0833	3.9F	12 F	0925	0925	3.6F	27 Sa	0907	0907	3.9F	12 Su	0842	0842	3.9E	27 M	0936	0936	4.2F
	0610	0907	4.2F		1146	1503	4.4E		1343	1642	4.1E		1311	1626	4.5E		1401	1700	4.0E		1355	1701	4.6E
	1224	1525	4.6E		1802	2105	4.2F		1957	2306	3.9F		1930	2235	4.3F		2008	2313	3.8F		2006	2311	4.4F
	1836	2142	4.4F																				
13 W	0115	0358	4.2E	28 Th	0335	0335	4.0E	13 Sa	0519	0519	3.7E	28 Su	0503	0503	4.1E	13 M	0532	0532	3.8E	28 Tu	0534	0534	4.4E
	0703	0958	3.9F		0626	0919	3.8F		0827	1122	3.4F		0801	1055	3.9F		0837	1132	3.4F		0839	1137	4.1F
	1317	1617	4.4E		1231	1552	4.3E		1442	1738	4.0E		1413	1723	4.4E		1457	1752	3.9E		1500	1759	4.4E
	1931	2239	4.1F		1851	2156	4.1F		2053				2028	2335	4.2F		2100				2106		
14 Th	0215	0453	3.9E	29 F	0427	0427	3.9E	14 Su	0615	0615	3.6E	29 M	0601	0601	4.1E	14 Tu	0624	0624	3.7E	29 W	0633	0633	4.3E
	0801	1056	3.6F		0719	1012	3.7F		0926	1225	3.3F		0903	1159	3.9F		0933	1229	3.4F		0942	1243	4.0F
	1415	1714	4.1E		1326	1647	4.2E		1543	1835	3.8E		1520	1824	4.3E		1556	1846	3.8E		1609	1901	4.3E
	2031	2344	3.8F		1947	2253	4.0F		2151				2130				2154				2209		
15 F	0318	0553	3.7E	30 Sa	0525	0525	3.8E	15 M	0711	0711	3.7E	30 Tu	0700	0700	4.2E	15 W	0718	0718	3.7E	30 Th	0733	0733	4.4E
	0904	1203	3.3F		0820	1113	3.6F		1026	1330	3.3F		1008	1307	3.9F		1029	1328	3.4F		1047	1354	4.1F
	1519																						

Quonset Point, Narragansett Bay, Rhode Island, 2010

F—Flood, Dir. 021° True E—Ebb, Dir. 200° True

January				February				March															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0111	0546	0.4F	16 Sa	0152	0611	0.3F	1 M	0244	0712	0.4F	16 Tu	0304	0653	0.3F	1 M	0141	0602	0.4F	16 Tu	0157	0548	0.3F
	0757	1041	0.5E		0830	1125	0.5E		0922	1157	0.5E		0914	1210	0.4E		0813	1050	0.6E		0806	1103	0.5E
	1419	1817	0.4F		1431	1832	0.3F		1524	1942	0.4F		1510	1903	0.3F		1411	1828	0.4F		1357	1755	0.3F
	2021	2257	0.5E		2051	2343	0.5E		2147				2130				2036	2313	0.6E		2020	2325	0.5E
2 Sa	0201	0635	0.4F	17 Su	0239	0646	0.3F	2 Tu	0336	0809	0.4F	17 W	0740	*	0.4E	2 Tu	0234	0653	0.4F	17 W	0240	0626	0.3F
	0848	1128	0.5E		0908	1206	0.5E		1013	1247	0.5E		1245	0.4E			0903	1136	0.5E		0843	1135	0.4E
	1508	1909	0.4F		1509	1908	0.3F		1601	2039	0.3F		1947				1450	1919	0.4F		1435	1829	0.3F
	2113	2347	0.5E		2130				2239								2127				2056	2358	0.5E
3 Su	0254	0730	0.4F	18 M		0026	0.4E	3 W	0426	0907	0.3F	18 Th	0108	0.4E	3 W		0002	0.6E	18 Th	0319	0710	0.3F	
	0940	1217	0.5E		0727	*			1105	1338	0.5E		0832	*		0325	0749	0.3F		0923	1209	0.4E	
	1551	2005	0.4F		1246	0.4E			1639	2134	0.3F		1322	0.4E		0952	1224	0.5E				*	
	2206				1948				2332				1812	*		1529	2015	0.3F					
4 M		0039	0.5E	19 Tu		0108	0.4E	4 Th	0207	0.5E	19 F	0145	0.4E	4 Th		0053	0.5E	19 F			0033	0.4E	
	0346	0829	0.3F		0816	0.4E			0609	*		0925	*		0412	0846	0.3F				0802	*	
	1032	1308	0.5E		1324	0.4E			0701	*		1400	0.4E		1042	1314	0.5E				1248	0.4E	
	1631	2101	0.3F		2033	*			1003	0.3F		1843	*		1609	2112	0.3F				1750	*	
	2300								1158	1428†	0.4E		2000†	*		2310					1850†	*	
5 Tu		0133	0.5E	20 W		0147	0.4E	5 F	0027	0.4E	20 Sa	0223	0.4E	5 F		0146	0.5E	20 Sa			0113	0.4E	
	0438	0927	0.3F		0906	0.4E			0646	*		1017	*		0545	*		0545	*		0858	*	
	1126	1400	0.5E		1359	0.4E			0752	*		1441	0.4E		0642	*		0642	*		1332	0.4E	
	1712	2156	0.3F		2120	*			1059	*		1927	*		0941	0.3F		0941	0.3F		1818	*	
	2354								1516†	0.4E		2036†	*		1132	1404†	0.4E		1132	1404†	0.4E	1935†	*
6 W		0226	0.5E	21 Th		0222	0.4E	6 Sa	0123	0.4E	21 Su	0303	0.4E	6 Sa	0004	0238	0.4E	21 Su			0157	0.4E	
	0536	1023	0.3F		0956	0.4E			0735	*		1112	*		0619	*		0619	*		0953	*	
	1221	1450	0.5E		1433	0.4E			0837	*		1525	0.4E		0737	*		0737	*		1418	0.4E	
		1854	*		1914	*			1154	*		2328	*		1037	*		1037	*		1858	*	
		1940†	*		2014†	*			1608†	0.4E					1454†	0.4E		1454†	0.4E		2010†	*	
7 Th	0050	0318	0.5E	22 F	0254	0.3E	7 Su	0220	0.3F	22 M	0350	0.3E	7 Su	0329	0.4E	7 Su	0329	0.4E	22 M			0243	0.4E
	0812	1120	0.3F		1046	*			0453	0.3E		1206	*		0703	*		0703	*		1049	*	
	1316	1540	0.4E		1508	0.3E			1247	*		1617	0.4E		0824	*		0824	*		1506	0.4E	
	1902	2346	0.3F		2006	*			1714	0.3E					1131	*		1131	*		1955	*	
					2051†	*									1544†	0.3E		1544†	0.3E		2039†	*	
8 F	0146	0413	0.4E	23 Sa	0330	0.3E	8 M	0112	*	23 Tu	0024	*	8 M	0425	0.3E	8 M	0425	0.3E	23 Tu			0332	0.4E
	0943	1215	0.3F		1138	*		0613	0.3E		0453	0.3E		0801	*		0801	*		1145	*		*
	1410	1636	0.4E		1550	0.3E		1337	*		1259	*		0904	*		0904	*		1558	0.4E		
	2020				2351	*		1832	0.3E		1727	0.3E		1224	*		1224	*		1924			
														1644	0.3E		1644	0.3E					
9 Sa		0039	0.3F	24 Su	0416	0.3E	9 Tu	0203	*	24 W	0117	*	9 Tu	0049	*	9 Tu	0049	*	24 W			0005	0.3F
	0243	0523	0.4E		1229	*		0718	0.4E		0628	0.3E		0541	0.3E		0541	0.3E		0203	0432	0.4E	
	1042	1308	0.3F		1644	0.3E		1430	*		1353	0.3F		1312	*		1312	*		0938	1239	0.3F	
	1506	1748	0.3E					1933	0.4E		1848	0.4E		1804	0.3E		1804	0.3E		1432	1703	0.4E	
	2127										2207									2043			
10 Su		0132	0.3F	25 M	0042	*	10 W	0258	*	25 Th	0214	0.3F	10 W	0135	*	10 W	0135	*	25 Th			0059	0.3F
	0344	0639	0.4E		0528	0.3E		0809	0.4E		0737	0.4E		0653	0.3E		0653	0.3E		0305	0555	0.4E	
		1400	*		1320	*		1526	*		1454	0.3F		1358	*		1358	*		1034	1333	0.3F	
		1857	0.4E		1801	0.3E		2023	0.4E		1703	0.4E		1912	0.3E		1912	0.3E		1537	1824	0.4E	
											2304									2154			
11 M		0227	0.3F	26 Tu	0135	*	11 Th	0352	0.3F	26 F	0319	0.3F	11 Th	0221	*	11 Th	0221	*	26 F			0155	0.3F
	0448	0738	0.4E		0704	0.3E		0855	0.5E		0828	0.5E		0746	0.4E		0746	0.4E		0412	0711	0.4E	
		1458	*		1415	*		1616	*		1556	0.3F		1447	*		1447	*		1115	1430	0.3F	
		1952	0.4E		1913	0.4E		2111	0.4E		1803	0.4E		2005	0.4E		2005	0.4E		1643	1931	0.5E	
											2357									2256			
12 Tu		0327	0.3F	27 W	0235	*	12 F	0006	0.435	27 Sa	0420	0.4F	12 F	0311	*	12 F	0311	*	27 Sa			0256	0.3F
	0544	0829	0.4E		0800	0.4E		0646	0.938		0916	0.5E		0831	0.4E		0831	0.4E		0516	0806	0.5E	
		1556	*		1151	0.3F		1246	1.655		1650	0.4F		1538	*		1538	*		1150	1531	0.4F	
		2042	0.4E		1723	0.4E		1905	2.156		2135	0.6E		2051	0.4E		2051	0.4E		1743	2026	0.5E	
		2339			2317															2350			
13 W		0421	0.3F	28 Th	0341	0.3F	13 Sa	0049	0.510	28 Su	0513	0.4F	13 Sa	0359	*	13 Sa	0359	*	28 Su			0400	0.4F
	0631	0916	0.5E		0849	0.4E		0724	1.020		1004	0.5E		0913	0.4E		0913	0.4E		0613	0855	0.5E	
	1245	1644	0.3F		1233	0.3F		1320	1.727		1739	0.4F		1214	0.3F		1214	0.3F		1224	1628	0.4F	
	1846	2129	0.5E		1821	0.5E		1944	2.238														

Quonset Point, Narragansett Bay, Rhode Island, 2010

F—Flood, Dir. 021° True E—Ebb, Dir. 200° True

July				August				September																					
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum															
h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots															
1	Th	0145	0907	0.4E	16	F	0443	0925	0.3F	1	Su	0223	0654	0.4E	16	M	0023	0250	0.4E	1	W	0305	0757	0.4E	16	Th	0414	0805	0.3E
		1409	2129	0.4E			1124	1358	0.5E			0804	0947	*			1255	1523†	0.4E			0857	1102	*			0910	1227†	*
							1705	2152	0.3F			1446†	1446†	0.3E			0022	0250	0.4E			1102	1528†	0.3E			0910	1227†	*
2	F	0225	0949	0.4E	17	Sa	0528	1020	0.3F	2	M	0739	0843	0.3E	17	Tu	0341	0737	0.4E	2	Th	0351	1158	0.3E	17	F	0526	1316	0.3E
		1450	1905	0.3E			1219	1450	0.5E			1036	1036	*			0341	0737	0.4E			1158	1620	0.3E			1316	1821	0.3E
		1905	1942†	*			1809	2249	0.3F			1517†	1517†	0.3E			1154	1154	0.3F			1620	1620	0.4E			1821	1821	0.3E
3	Sa	0301	1031	0.3E	18	Su	0046	0312	0.4E	3	Tu	0333	0843	0.3E	18	W	0022	0439	0.3E	3	F	0035	0451	0.3E	18	Sa	0140	0644	0.3E
		1525	2303	0.3E			0721	0721	*			1128	1128	*			0820	1248	0.3F			1251	1403	*			1403	1921	0.4E
							1116	1116	0.3F			1555	1555	0.3E			1453	1735	0.3E			1741	1741	0.3E			1921	1921	0.4E
4	Su	0334	1115	0.3E	19	M	0141	0404	0.4E	4	W	0008	0418	0.3E	19	Th	0114	0556	0.3E	4	Sa	0126	0612	0.3E	19	Su	0228	0742	0.4E
		1559	2351	0.3E			0733	1212	0.3F			1220	1220	*			1012	1340	0.3F			1344	1344	*			1454	2008	0.4E
							1413	1644	0.4E			1652	1652	*			1555	1850	0.3E			1908	1908	0.3E			2008	2008	0.4E
5	M	0411	1200	0.3E	20	Tu	0237	0508	0.4E	5	Th	0058	0526	0.3E	20	F	0206	0706	0.4E	5	Su	0222	0430	0.3F	20	M	0320	0830	0.4E
		1647		*			0854	1306	0.3F			1310	1310	*			1041	1434	0.3F			1704	1704	0.4E			1544	2052	0.4E
							1514	1802	0.4E			1843	1843	0.3E			1655	1945	0.4E			2347	2347	0.4E			2052	2052	0.4E
6	Tu	0037	0506	*	21	W	0336	0624	0.4E	6	F	0149	0648	0.3E	21	Sa	0303	0800	0.4E	6	M	0323	0533	0.3F	21	Tu	0406	0622	0.3F
		1245	1846	*			0957	1400	0.3F			1404	1404	*			1115	1531	0.3F			1802	1802	0.5E			1219	1627	0.3F
							1619	1911	0.4E			1943	1943	0.3E			1747	2033	0.4E			2050	2050	0.5E			1839	2133	0.5E
7	W	0123	0631	0.3E	22	Th	0231	0726	0.4E	7	Sa	0247	0747	0.4E	22	Su	0016	0605	0.3F	7	Tu	0421	0628	0.4F	22	W	0026	0700	0.3F
		1331	1937	0.3E			1043	1500	0.3F			1057	1057	0.3F			1153	1620	0.3F			1223	1223	0.4F			1259	1703	0.3F
							1720	2006	0.4E			1728	1728	0.4E			1830	2117	0.5E			1855	1855	0.5E			1917	2213	0.5E
8	Th	0214	0728	0.3E	23	F	0031	0536	0.3F	8	Su	0011	0553	0.3F	23	M	0031	0649	0.3F	8	W	0512	0719	0.6E	23	Th	0102	0734	0.3F
		1426	2016	0.3E			1125	1559	0.3F			1146	1146	0.3F			1234	1659	0.3F			1314	1314	0.4F			1341	1736	0.3F
							1812	2054	0.5E			1823	1823	0.5E			1909	2200	0.5E			1945	1945	0.6E			1954	2250	0.5E
9	F	0314	0814	0.4E	24	Sa	0050	0627	0.3F	9	M	0049	0647	0.3F	24	Tu	0101	0729	0.3F	9	Th	0600	0809	0.6E	24	F	0139	0807	0.3F
		1533	2054	0.4E			1206	1647	0.3F			1234	1234	0.4F			1317	1732	0.3F			1407	1407	0.4F			1424	1811	0.3F
							1857	2140	0.5E			1913	1913	0.5E			1947	2240	0.5E			2035	2035	0.6E			2030	2324	0.5E
10	Sa	0414	0859	0.4E	25	Su	0104	0712	0.3F	10	Tu	0129	0737	0.4F	25	W	0136	0807	0.3F	10	F	0650	0859	0.6E	25	Sa	0218	0842	0.3F
		1203	1842	0.3F			1249	1727	0.3F			1325	1325	0.4F			1402	1804	0.3F			1459	1459	0.4F			1505	1851	0.3F
							1937	2224	0.5E			2002	2002	0.5E			2024	2319	0.5E			2125	2125	0.5E			2108	2358	0.4E
11	Su	0108	0704	0.3F	26	M	0134	0755	0.3F	11	W	0212	0828	0.4F	26	Th	0214	0843	0.3F	11	Sa	0745	0950	0.5E	26	Su	0649	1223	0.4E
		1249	1931	0.5E			1335	1802	0.3F			1417	1417	0.4F			1447	1840	0.3F			1549	1549	0.3F			1940	1940	*
							2016	2306	0.5E			2053	2053	0.6E			2101	2357	0.5E			2216	2216	0.6E			2216	2216	*
12	M	0152	0755	0.3F	27	Tu	0211	0837	0.3F	12	Th	0254	0919	0.4F	27	F	0252	0918	0.3F	12	Su	0047	0348	0.5E	27	M	0035	0740	0.4E
		1338	2020	0.5E			1422	1836	0.3F			1510	1510	0.4F			0918	1221	0.5E			1043	1043	0.3F			0740	1300	0.4E
							2055	2348	0.5E			2144	2144	0.4F			0918	1221	0.5E			1636	1636	0.3F			2034	2034	*
13	Tu	0237	0846	0.4F	28	W	0249	0917	0.3F	13	F	0335	1010	0.5E	28	Sa	0033	0725	0.4E	13	M	0543	0650	0.5E	28	Tu	0115	0604	0.4E
		1429	2110	0.5E			1508	1915	0.3F			1600	1600	0.3F			1259	2011	0.4E			0940	0940	0.3F			0722	1340†	0.4E
							2133					2236	2236	0.3F			2011	2011	*			1138	1138	0.5E			0843	1340†	0.4E
14	W	0321	0938	0.4F	29	Th	0029	0733	0.5E	14	Sa	0415	1103	0.5E	29	Su	0110	0600	0.4E	14	Tu	0745	0745	0.4E	29	W	0158	0639	0.4E
		1521	2202	0.3F			1253	2000	0.4E			1651	1651	0.3F			0702	0815	*			1037	1037	0.3F			0758	0942	*
							2000	*				2329	2329	0.3F			0911	1335†	0.4E			1235	1235	0.4E			0942	1423†	0.4E
15	Th	0402	1030	0.5E	30	F	0110	0816	0.4E	15	Su	0201	0608	0.5E	30	M	0147	0627	0.4E	15	W	0705	0705	0.4E	30	Th	0243	1040	0.4E
		1612	2255	0.3F			1336	2049	0.4E			1000	1000	0.3F			0749	0911	*			1134	1134	*			1508	2318	*
							2049	*				1158	1158	0.5E			0911	1410†	0.4E			1558†	1558†	0.3E			2318	2318	*
							1414†	0.4E																					

Time meridian 75° W. 0000 is midnight

Pollock Rip Channel, Massachusetts, 2010

F—Flood, Dir. 035° True E—Ebb, Dir. 225° True

January				February				March															
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots												
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m												
1 F	0254	0606	1.9F	16 Sa	0350	0712	1.8F	1 M	0416	0731	2.2F	16 Tu	0429	0745	2.0F	1 M	0308	0628	2.3F	16 Tu	0323	0645	2.0F
	0913	1200	2.0E		1002	1252	1.7E		1037	1325	2.2E		1052	1333	1.9E		0931	1221	2.2E		0948	1230	1.8E
	1509	1836	2.4F		1557	1932	2.2F		1635	1958	2.5F		1640	2000	2.1F		1530	1854	2.5F		1537	1858	2.1F
	2158				2238				2314				2317				2204				2208		
2 Sa	0344	0654	1.9E	17 Su	0425	0745	1.8F	2 Tu	0504	0820	2.2F	17 W	0502	0814	2.0F	2 Tu	0355	0714	2.3F	17 W	0355	0713	2.0F
	1002	1249	2.1E		1041	1325	1.8E		1128	1415	2.2E		1130	1409	1.9E		1021	1308	2.2E		1024	1304	1.9E
	1559	1924	2.4F		1632	2003	2.1F		1725	2047	2.4F		1715	2030	2.1F		1618	1939	2.4F		1611	1926	2.1F
	2246				2314								2353				2250				2242		
3 Su	0125	0744	2.0E	18 M	0500	0816	1.8F	3 W	0002	0245	2.1E	18 Th	0538	0848	2.0F	3 W	0442	0801	2.4F	18 Th	0428	0742	2.1F
	0434	0744	2.0F		1119	1401	1.8E		0554	0911	2.2F		1211	1449	1.8E		1111	1357	2.2E		1102	1340	1.9E
	1053	1340	2.1E		1708	2034	2.1F		1817	2139	2.3F		1754	2105	2.0F		1706	2026	2.3F		1647	1957	2.0F
	1649	2013	2.4F		2351												2337				2318		
4 M	0216	0836	2.1F	19 Tu	0537	0849	1.8F	4 Th	0053	0336	2.0E	19 F	0032	0310	1.8E	4 Th	0529	0851	2.3F	19 F	0503	0816	2.1F
	0525	0836	2.1F		1200	1439	1.8E		0646	1007	2.1F		0617	0927	1.9F		1202	1446	2.0E		1143	1420	1.8E
	1146	1432	2.1E		1746	2107	2.0F		1319	1601	1.9E		1255	1532	1.7E		1756	2116	2.2F		1725	2033	1.9F
	1742	2106	2.4F						1912	2235	2.1F		1836	2145	1.9F						2357		
5 Tu	0027	0308	2.0E	20 W	0029	0306	1.7E	5 F	0147	0431	1.8E	20 Sa	0115	0354	1.7E	5 F	0026	0309	1.9E	20 Sa	0542	0855	2.0F
	0618	0931	2.1F		0615	0925	1.8F		0742	1109	2.0F		0700	1011	1.9F		0619	0943	2.2F		1228	1540	1.7E
	1242	1527	2.0E		1243	1521	1.7E		1419	1701	1.7E		1345	1620	1.6E		1257	1538	1.8E		1808	2114	1.8F
	1837	2201	2.3F		1826	2143	2.0F		2011	2338	1.9F		1923	2232	1.7F		1849	2210	2.0F		1808	2114	1.8F
6 W	0120	0402	1.9E	21 Th	0110	0347	1.7E	6 Sa	0244	0530	1.7E	21 Su	0202	0442	1.6E	6 Sa	0118	0401	1.8E	21 Su	0041	0322	1.8E
	0713	1031	2.0F		0656	1006	1.8F		0842	1217	1.9F		0748	1103	1.8F		0712	1042	2.0F		0626	0941	2.0F
	1341	1624	1.9E		1329	1605	1.7E		1523	1807	1.5E		1440	1712	1.5E		1355	1635	1.6E		1318	1553	1.6E
	1935	2302	2.1F		1910	2225	1.9F		2115				2017	2326	1.6F		1946	2311	1.8F		1857	2202	1.7F
7 Th	0216	0500	1.8E	22 F	0155	0432	1.7E	7 Su		0047	1.7F	22 M	0256	0536	1.5E	7 Su	0214	0458	1.6E	22 M	0130	0412	1.7E
	0812	1136	2.0F		0741	1052	1.7F		0345	0635	1.5E		0844	1203	1.7F		0810	1148	1.9F		0717	1034	1.9F
	1443	1727	1.7E		1420	1654	1.6E		0945	1327	1.9F		1542	1811	1.4E		1457	1739	1.4E		1414	1647	1.5E
	2036				1958	2312	1.7F		1630	1919	1.4E		2118				2048				1953	2259	1.5F
8 F	0007	0601	1.7E	23 Sa	0242	0520	1.6E	8 M		0156	1.7F	23 Tu	0356	0635	1.5E	8 M	0315	0602	1.5E	23 Tu	0227	0508	1.6E
	0913	1245	1.9F		0830	1144	1.7F		0447	0744	1.5E		0946	1312	1.7F		0913	1257	1.8F		0815	1137	1.8F
	1549	1834	1.6E		1515	1746	1.5E		1735	2031	1.4E		1645	1915	1.3E		1602	1850	1.3E		1517	1748	1.4E
	2141				2051				2328				2225				2154				2057		
9 Sa	0115	0707	1.6E	24 Su	0334	0612	1.5E	9 Tu	0547	0850	1.5E	24 W	0458	0738	1.5E	9 Tu	0417	0712	1.6F	24 W	0330	0610	1.5E
	1016	1354	1.9F		0923	1242	1.7F		1151	1533	2.0F		1051	1425	1.8F		1017	1403	1.9F		0920	1249	1.8F
	1655	1945	1.5E		1613	1843	1.4E		1835	2134	1.4E		1748	2022	1.4E		1705	2001	1.3E		1621	1854	1.4E
	2247				2150								2332				2300				2206		
10 Su	0221	0812	1.6E	25 M	0429	0708	1.5E	10 W	0029	0357	1.7F	25 Th	0559	0842	1.6E	10 W	0519	0819	1.4E	25 Th	0436	0717	1.5E
	1118	1458	2.0F		1020	1345	1.7F		0644	0948	1.6E		1154	1531	1.9F		1119	1503	1.9F		1028	1405	1.8F
	1759	2054	1.5E		1714	1943	1.3E		1928	2228	1.5E		1846	2125	1.5E		1804	2103	1.4E		1724	2002	1.5E
	2352				2251												2359				2313		
11 M	0323	0915	1.6E	26 Tu	0525	0806	1.5E	11 Th	0122	0448	1.8F	26 F	0033	0356	1.7F	11 Th	0329	0918	1.7F	26 F	0540	0824	1.6E
	0612	0915	1.6E		1119	1450	1.8F		0734	1038	1.6E		0657	0943	1.8E		0616	0918	1.5E		1135	1512	2.0F
	1217	1556	2.1F		1813	2045	1.4E		1336	1713	2.2F		1254	1629	2.1F		1215	1555	2.0F		1823	2106	1.6E
	1858	2156	1.5E		2353				2014	2312	1.6E		1940	2223	1.7E		1855	2155	1.5E				
12 Tu	0051	0419	1.8F	27 W	0621	0904	1.6E	12 F	0208	0533	1.9F	27 Sa	0129	0451	1.9F	12 F	0051	0419	1.8F	27 Sa	0014	0340	1.8F
	0706	1010	1.6E		1216	1550	1.9F		0819	1119	1.7E		0751	1040	1.9E		0706	1007	1.6E		0639	0927	1.8E
	1311	1649	2.1F		1909	2144	1.5E		1418	1755	2.2F		1349	1720	2.3F		1305	1642	2.1F		1236	1610	2.1F
	1952	2249	1.5E						2055	2350	1.6E		2030	2314	1.9E		1941	2238	1.6E		1917	2203	1.8E
13 W	0145	0510	1.8F	28 Th	0052	0411	1.7F	13 Sa	0247	0612	1.9F	28 Su	0220	0541	2.1F	13 Sa	0136	0503	1.9F	28 Su	0110	0435	2.0F
	0756	1059	1.7E		0715	1001	1.8E		0900	1155	1.7E		0842	1131	2.1E		0752	1049	1.7E		0734	1024	1.9E
	1359	1737	2.2F		1312	1645	2.1F		1456	1831	2.2F		1440	1808	2.4F		1348	1723	2.1F		1332	1702	2.3F
	2040	2335	1.6E		2001	2240	1.7E		2132				2117				2021	2315	1.7E		2007	2255	1.9E
14 Th	0231	0556	1.8F	29 F	0147	0504	1.8F	14 Su	0323	0646	1.9F	14 Su	0215	0541	2.0F	14 Su	0215	0541	2.0F	29 M	0200	0525	2.2F
	0841	1141	1.7E		0807	1054	1.9E		0938	122													

Pollock Rip Channel, Massachusetts, 2010

F—Flood, Dir. 035° True E—Ebb, Dir. 225° True

October				November				December																					
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum															
h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots										
1	F	0252	0523	1.4E	16	Sa	0409	0703	1.4E	1	M	0428	0706	1.6E	16	Tu	0512	0805	1.6E	1	W	0458	0743	1.7E	16	Th	0514	0800	1.6E
		0832	1140	1.4F			1006	1338	1.6F			1019	1342	1.7F			1111	1443	1.8F			1055	1425	1.9F			1112	1445	1.8F
		1505	1743	1.5E			1626	1921	1.4E			1649	1930	1.6E			1737	2025	1.5E			1730	2014	1.6E			1748	2027	1.4E
		2052					2221					2240					2326					2321					2331		
2	Sa	0354	0626	1.4E	17	Su	0505	0803	1.5E	2	Tu	0525	0809	1.7E	17	W	0559	0852	1.6E	2	Th	0555	0844	1.8E	17	F	0602	0848	1.6E
		0938	1252	1.5F			1104	1434	1.7F			1119	1446	1.9F			1158	1530	1.9F			1154	1527	2.1F			1200	1534	1.8F
		1608	1847	1.5E			1723	2021	1.5E			1750	2034	1.7E			1827	2114	1.5E			1830	2118	1.7E			1839	2118	1.4E
		2158					2318					2342																	
3	Su	0455	0731	1.4E	18	M	0556	0856	1.6E	3	W	0620	0907	1.8E	18	Th	0644	0935	1.7E	3	F	0650	0942	1.8E	18	Sa	0649	0934	1.6E
		1043	1404	1.6F			1155	1525	1.9F			1216	1544	2.1F			1242	1614	2.0F			1250	1624	2.2F			1328	1700	2.1F
		1711	1952	1.6E			1816	2112	1.6E			1847	2134	1.8E			1913	2158	1.6E			1928	2217	1.7E			1927	2205	1.5E
		2303																											
4	M	0553	0833	1.6E	19	Tu	0642	0941	1.7E	4	Th	0712	1001	1.9E	19	F	0726	1014	1.7E	4	Sa	0742	1035	1.9E	19	Su	0733	1018	1.7E
		1143	1507	1.8F			1241	1610	2.0F			1308	1637	2.2F			1322	1653	2.0F			1342	1717	2.3F			1328	1700	2.0F
		1810	2055	1.7E			1903	2157	1.6E			1941	2229	1.9E			1957	2239	1.6E			2022	2312	1.8E			2013	2249	1.5E
5	Tu	0646	0930	1.8E	20	W	0725	1020	1.7E	5	F	0801	1051	2.0E	20	Sa	0806	1051	1.8E	5	Su	0831	1125	1.9E	20	M	0816	1100	1.8E
		1238	1602	2.0F			1322	1651	2.0F			1358	1727	2.3F			1400	1729	2.1F			1432	1807	2.3F			1410	1739	2.1F
		1905	2152	1.9E			1946	2237	1.7E		●	2033	2320	1.9E			2039	2317	1.6E		●	2113					2056	2332	1.6E
6	W	0736	1022	1.9E	21	Th	0804	1055	1.8E	6	Sa	0849	1138	2.0E	21	Su	0845	1128	1.8E	6	M	0919	1212	1.9E	21	Tu	0858	1142	1.8E
		1329	1653	2.2F			1359	1728	2.1F			1446	1815	2.4F		○	1437	1803	2.1F			1519	1855	2.3F		○	1451	1817	2.2F
		1957	2244	2.0E			2027	2312	1.7E			2124					2119	2355	1.7E			2202				2139			
7	Th	0824	1110	2.0E	22	F	0841	1127	1.8E	7	Su	0936	1224	2.0E	22	M	0923	1205	1.8E	7	Tu	1006	1257	1.9E	22	W	0940	1224	1.9E
		1417	1741	2.3F		○	1434	1800	2.1F			1533	1903	2.4F			1514	1837	2.1F			1605	1941	2.3F			1533	1857	2.2F
	●	2047	2334	2.1E			2105	2346	1.7E			2214					2200					2249					2223		
8	F	0910	1157	2.1E	23	Sa	0917	1159	1.8E	8	M	1023	1311	1.9E	23	Tu	1003	1245	1.9E	8	W	1053	1341	1.8E	23	Th	1024	1309	2.0E
		1504	1827	2.4F			1507	1830	2.1F			1620	1951	2.3F			1552	1914	2.1F			1649	2025	2.2F			1617	1939	2.3F
		2137					2144				2304						2243					2336					2307		
9	Sa	0957	1242	2.1E	24	Su	0952	1233	1.8E	9	Tu	1111	1358	1.8E	24	W	1045	1328	1.9E	9	Th	1140	1426	1.7E	24	F	1111	1356	2.0E
		1551	1915	2.4F			1541	1901	2.1F			1707	2041	2.2F			1634	1954	2.2F			1734	2110	2.1F			1704	2025	2.3F
		2227					2222				2355						2328										2354		
10	Su	1044	1329	2.0E	25	M	1029	1310	1.8E	10	W	1202	1447	1.7E	25	Th	1130	1414	1.9E	10	F	1228	1512	1.7E	25	Sa	1202	1446	2.0E
		1638	2003	2.3F			1617	1934	2.1F			1757	2133	2.1F			1720	2040	2.1F			1820	2156	2.0F			1754	2114	2.3F
		2318					2303																						
11	M	1133	1417	1.9E	26	Tu	1109	1351	1.8E	11	Th	1255	1539	1.6E	26	F	1221	1505	1.8E	11	Sa	1318	1600	1.6E	26	Su	1257	1540	1.9E
		1727	2056	2.2F			1656	2013	2.1F			1849	2228	2.0F			1810	2132	2.1F			1908	2243	2.0F			1848	2208	2.2F
							2347																						
12	Tu	1225	1509	1.8E	27	W	1153	1435	1.8E	12	F	1351	1635	1.5E	27	Sa	1317	1559	1.8E	12	Su	1411	1650	1.5E	27	M	1356	1637	1.8E
		1820	2153	2.1F			1739	2058	2.0F			1944	2326	1.9F			1906	2229	2.0F			1958	2333	1.9F		○	1946	2308	2.1F
13	W	1321	1605	1.6E	28	Th	1242	1525	1.7E	13	Sa	1449	1734	1.4E	28	Su	1418	1658	1.7E	13	M	1505	1743	1.4E	28	Tu	1459	1739	1.7E
		1916	2256	2.0F			1829	2149	1.9F		○	2041					2007	2332	2.0F			2050					2049		
14	Th	1422	1708	1.5E	29	F	1339	1620	1.6E	14	Su	1548	1834	1.4E	29	M	1522	1801	1.6E	14	Tu	1600	1838	1.4E	29	W	1605	1845	1.6E
	○	2017					1926	2249	1.9F			2138					2111					2144					2155		
15	F	1524	1815	1.4E	30	Sa	1440	1720	1.6E	15	M	1644	1932																

The Race, Long Island Sound, 2010

F—Flood, Dir. 302° True E—Ebb, Dir. 112° True

January				February				March															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0513	0811	3.6F	16 Sa	0553	0842	2.6F	1 M	0644	0937	3.7F	16 Tu	0642	0931	2.7F	1 M	0536	0829	3.8F	16 Tu	0542	0828	2.8F
	1125	1436	4.2E		1158	1503	3.1E		1250	1555	4.1E		1243	1549	3.0E		1144	1446	4.2E		1144	1444	3.0E
	1754	2045	3.5F		1823	2109	2.6F		1907	2202	3.8F		1856	2149	2.8F		1757	2052	3.9F		1751	2043	2.9F
2 Sa	0002	0301	3.6E	17 Su	0029	0323	2.7E	2 Tu	0120	0422	4.0E	17 W	0103	0410	3.0E	2 Tu	0008	0311	4.3E	17 W	0617	0904	2.8F
	0605	0902	3.6F		0631	0919	2.6F		0736	1027	3.5F		0719	1008	2.6F		0626	0917	3.8F		1218	1520	3.0E
	1215	1526	4.2E		1233	1540	3.1E		1341	1644	3.9E		1317	1626	2.8E		1232	1533	4.0E		1823	2119	2.9F
	1842	2134	3.6F		1856	2144	2.6F		1955	2251	3.6F		1928	2226	2.7F		1842	2138	3.8F				
3 Su	0052	0352	3.7E	18 M	0103	0401	2.7E	3 W	0210	0514	3.8E	18 Th	0136	0449	2.9E	3 W	0055	0359	4.1E	18 Th	0030	0341	3.2E
	0659	0953	3.6F		0708	0957	2.5F		0830	1118	3.2F		0758	1049	2.5F		0716	1005	3.5F		0653	0943	2.7F
	1307	1616	4.1E		1308	1618	2.9E		1433	1735	3.5E		1354	1706	2.7E		1321	1620	3.7E		1253	1558	2.9E
	1930	2224	3.6F		1929	2220	2.6F		2045	2341	3.3F		2005	2307	2.6F		1929	2225	3.6F		1857	2157	2.8F
4 M	0143	0444	3.7E	19 Tu	0138	0440	2.7E	4 Th	0303	0607	3.5E	19 F	0214	0532	2.8E	4 Th	0143	0448	3.9E	19 F	0104	0421	3.1E
	0754	1046	3.4F		0748	1037	2.4F		0927	1212	2.8F		0842	1133	2.3F		0807	1054	3.2F		0732	1023	2.6F
	1400	1707	3.8E		1345	1657	2.8E		1529	1829	3.0E		1436	1750	2.5E		1411	1709	3.3E		1411	1639	2.7E
	2020	2315	3.5F		2004	2259	2.6F		2139				2046	2351	2.5F		2018	2313	3.2F		1935	2238	2.7F
5 Tu	0236	0538	3.6E	20 W	0214	0522	2.7E	5 F	0359	0703	3.2E	20 Sa	0257	0620	2.7E	5 F	0233	0539	3.5E	20 Sa	0143	0504	3.0E
	0852	1141	3.1F		0830	1119	2.3F		1029	1311	2.4F		0932	1223	2.1F		0900	1145	2.7F		0816	1108	2.5F
	1456	1800	3.5E		1424	1739	2.6E		1630	1926	2.6E		1525	1841	2.3E		1504	1801	2.9E		1414	1724	2.5E
	2113				2041	2341	2.5F		2238				2135				2110				2019	2325	2.6F
6 W	0332	0634	3.4E	21 Th	0253	0607	2.6E	6 Sa	0459	0803	2.9E	21 Su	0350	0715	2.6E	6 Sa	0327	0633	3.1E	21 Su	0229	0553	2.9E
	0953	1239	2.8F		0916	1205	2.1F		1134	1415	2.1F		1031	1319	2.0F		0958	1240	2.3F		0907	1159	2.3F
	1555	1857	3.1E		1508	1824	2.4E		1735	2028	2.3E		1626	1938	2.1E		1602	1856	2.5E		1505	1816	2.4E
	2209				2123				2341				2233				2208				2111		
7 Th	0105	0430	3.0F	22 F	0338	0656	2.5E	7 Su	0603	0907	2.7E	22 M	0452	0816	2.6E	7 Su	0426	0731	2.7E	22 M	0324	0649	2.8E
	0573	0873	3.2E		1009	1256	2.0F		1240	1528	1.9F		1137	1422	2.0F		1101	1342	2.0F		1005	1256	2.2F
	1207	1514	2.5F		1600	1915	2.2E		1842	2133	2.1E		1736	2042	2.1E		1705	1957	2.1E		1606	1916	2.3E
	1658	1956	2.8E		2211								2340				2312				2213		
8 F	0205	0531	2.8F	23 Sa	0429	0750	2.5E	8 M	0046	0345	2.1F	23 Tu	0602	0921	2.7E	8 M	0530	0834	2.4E	23 Tu	0429	0751	2.7E
	0834	1203	3.0E		1107	1352	1.9F		0706	1011	2.6E		1244	1528	2.1F		1207	1452	1.8F		1111	1359	2.2F
	1447	1804	2.6E		1700	2011	2.1E		1343	1641	1.9F		1847	2148	2.3E		1812	2102	2.0E		1716	2021	2.3E
	2307				2307				1946	2236	2.1E										2324		
9 Sa	0010	0308	2.6F	24 Su	0528	0849	2.6E	9 Tu	0148	0452	2.1F	24 W	0051	0350	2.5F	9 Tu	0019	0312	1.9F	24 W	0541	0857	2.8E
	0632	0937	2.9E		1211	1453	1.9F		0804	1110	2.7E		0710	1024	3.0E		0635	0938	2.4E		1218	1505	2.3F
	1307	1557	2.2F		1807	2111	2.1E		1439	1742	2.0F		1347	1633	2.4F		1310	1607	1.8F		1827	2128	2.5E
	1909	2200	2.4E						2042	2332	2.2E		1953	2251	2.7E		1916	2206	2.0E				
10 Su	0112	0413	2.5F	25 M	0008	0312	2.3F	10 W	0244	0548	2.2F	25 Th	0157	0454	2.8F	10 W	0122	0422	1.9F	25 Th	0037	0331	2.5F
	0731	1037	2.9E		0631	0949	2.8E		0856	1201	2.8E		0814	1123	3.4E		0735	1038	2.4E		0651	1001	3.0E
	1408	1704	2.2F		1314	1555	2.1F		1527	1829	2.2F		1444	1733	2.8F		1406	1709	1.9F		1321	1610	2.6F
	2010	2300	2.4E		1913	2213	2.3E		2130				2051	2350	3.2E		2011	2304	2.2E		1931	2232	2.9E
11 M	0210	0513	2.4F	26 Tu	0112	0414	2.5F	11 Th	0332	0634	2.4F	26 F	0258	0554	3.2F	11 Th	0219	0521	2.1F	26 F	0144	0437	2.8F
	0827	1133	3.0E		0733	1049	3.0E		0942	1245	2.9E		0911	1218	3.7E		0828	1130	2.6E		0756	1101	3.3E
	1502	1801	2.2F		1414	1657	2.4F		1609	1907	2.4F		1536	1828	3.3F		1454	1755	2.1F		1418	1711	3.0F
	2104	2354	2.4E		2015	2312	2.6E		2213				2144				2059	2353	2.4E		2029	2330	3.4E
12 Tu	0303	0606	2.5F	27 W	0214	0514	2.8F	12 F	0416	0711	2.5F	27 Sa	0354	0649	3.5F	12 F	0308	0606	2.2F	27 Sa	0244	0537	3.1F
	0917	1223	3.0E		0832	1145	3.4E		1023	1325	3.0E		1005	1309	4.0E		0914	1215	2.7E		0854	1156	3.6E
	1550	1849	2.3F		1508	1754	2.7F		1647	1939	2.5F		1624	1918	3.6F		1536	1832	2.3F		1511	1805	3.3F
	2153				2112				2251				2233				2141				2121		
13 W	0351	0651	2.5F	28 Th	0312	0611	3.2F	13 Sa	0455	0746	2.6F	28 Su	0446	0740	3.7F	13 Sa	0351	0645	2.7E	28 Su	0339	0632	3.4F
	1002	1307	3.1E		0928	1238	3.8E		1100	1401	3.1E		1055	1358	4.2E		0956	1255	2.9E		0947	1248	3.8E
	1633	1928	2.4F		1559	1848	3.1F		1721	2009	2.6F		1711	2006	3.9F		1613	1905	2.5F		1600	1855	3.6F
	2237				2204				2326				2321				2218				2211		
14 Th	0126	0435	2.6E	29 F	0407	0705	3.5F	14 Su	0532	0820	2.7F	29 M	0430	0719	2.6F	14 Su	0430	0719	2.6F	29 M	0430	0723	3.6F
	0730	1044	3.1E		1020	1329	4.1E		1135	1437	3.1E		1034	1332	3.0E		1034	1332	3.0E		10		

Throgs Neck, Long Island Sound, New York, 2010

F—Flood, Dir. 015° True E—Ebb, Dir. 193° True

January				February				March															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0226	0552	1.1F	16 Sa	0317	0610	1.0F	1 M	0342	0717	1.0F	1 M	0244	0554	1.2F	16 Tu	0241	0603	1.0F				
	0840	1202	0.8E		0921	1227	0.7E		1008	1321	0.9E		0958	1325	0.7E		0900	1208	0.9E	0857	1215	0.7E	
	1448	1816	1.1F		1529	1833	0.9F		1614	1933	1.1F		1600	1940	0.9F		1508	1818	1.2F	1500	1826	0.9F	
	2058				2126				2221				2202				2113			2059			
2 Sa	0316	0643	1.1F	17 Su	0340	0658	1.0F	2 Tu	0441	0759	1.2F	17 W	0417	0805	0.9F	2 Tu	0332	0643	1.2F	17 W	0312	0650	1.0F
	0932	1252	0.8E		0954	1310	0.7E		1058	1411	0.8E		1033	1407	0.6E		0947	1257	0.9E		0928	1256	0.7E
	1539	1907	1.1F		1556	1920	0.9F		1704	2023	1.1F		1636	2028	0.9F		1555	1907	1.1F		1532	1913	0.9F
	2147				2156				2311				2240				2201				2134		
3 Su	0407	0733	1.1F	18 M	0411	0745	0.9F	3 W	0532	0850	1.1F	18 Th	0456	0853	0.9F	3 W	0419	0733	1.2F	18 Th	0348	0737	1.0F
	1025	1343	0.8E		1027	1353	0.6E		1150	1503	0.8E		1113	1451	0.6E		1035	1347	0.8E		1004	1338	0.7E
	1630	1957	1.1F		1629	2008	0.9F		1757	2114	1.0F		1716	2116	0.8F		1642	1957	1.1F		1609	2000	0.9F
	2238				2231				0003	0327	0.8E		00235	0.9E	0225		0.7E	0419	0733		1.2F	0348	0737	1.0F
4 M	0459	0824	1.1F	19 Tu	0447	0833	0.9F	4 Th	0626	0941	1.0F	19 F	0539	0942	0.9F	4 Th	0507	0823	1.1F	19 F	0428	0825	0.9F
	1118	1436	0.8E		1104	1437	0.6E		1245	1556	0.7E		1156	1538	0.6E		1123	1437	0.8E		1043	1422	0.6E
	1724	2049	1.1F		1707	2056	0.8F		1854	2206	1.0F		1801	2206	0.8F		1731	2048	1.0F		1650	2049	0.9F
	2331				2310				0100	0422	0.7E		01010	0.6E	0310		0.6E	0507	0823		1.1F	0428	0825	0.9F
5 Tu	0553	0916	1.1F	20 W	0527	0921	0.9F	5 F	0726	1033	1.0F	20 Sa	0626	1032	0.8F	5 F	0558	0914	1.0F	20 Sa	0512	0914	0.9F
	1214	1529	0.8E		1146	1523	0.6E		1346	1652	0.7E		1244	1628	0.5E		1215	1529	0.7E		1127	1509	0.6E
	1821	2141	1.0F		1748	2145	0.8F		2002	2259	0.9F		1851	2257	0.8F		1825	2139	0.9F		1735	2139	0.8F
					2353				0203	0517	0.7E		0102	0452	0.6E		0032	0354	0.7E		00333	0.6E	
6 W	0651	1008	1.0F	21 Th	0611	1011	0.9F	6 Sa	0836	1126	0.9F	21 Su	0719	1124	0.8F	6 Sa	0654	1006	0.9F	21 Su	0600	1005	0.8F
	1314	1624	0.7E		1230	1611	0.5E		1452	1748	0.6E		1337	1723	0.5E		1312	1623	0.6E		1216	1601	0.6E
	1923	2233	1.0F		1834	2235	0.8F		2119	2352	0.8F		1946	2350	0.8F		1928	2231	0.9F		1826	2231	0.8F
					0040	0431	0.6E		0312	0614	0.6E		0159	0550	0.6E		0133	0449	0.6E		0040	0428	0.6E
7 Th	0755	1101	1.0F	22 F	0659	1101	0.8F	7 Su	0948	1219	0.9F	22 M	0817	1217	0.8F	7 Su	0802	1058	0.9F	22 M	0654	1057	0.8F
	1417	1720	0.7E		1319	1702	0.5E		1558	1845	0.6E		1435	1821	0.6E		1416	1718	0.6E		1309	1656	0.6E
	2035	2326	0.9F		1924	2326	0.8F		0421	0045	0.8F		0303	0043	0.8F		0243	0546	0.6E		0139	0526	0.6E
					0040	0431	0.6E		0421	0711	0.6E		0920	1310	0.9F		0919	1151	0.8F		0754	1150	0.8F
8 F	0905	1154	1.0F	23 Sa	0751	1153	0.8F	8 M	1053	1312	0.8F	23 Tu	0649	066E	0.6E	8 M	0919	1151	0.8F	23 Tu	0754	1150	0.8F
	1523	1817	0.6E		1412	1756	0.5E		1659	1940	0.6E		1538	1919	0.6E		1523	1815	0.6E		1408	1755	0.6E
	2147				2018				2326				2154				2155				2026		
					0018	0.8F	0019		0.9F	0523	0806		0.6E	0413	0748		0.6E	0353	0642		0.5E	0246	0626	0.6E
9 Sa	0340	0642	0.7E	24 Su	0227	0619	0.6E	9 Tu	1150	1404	0.8F	24 W	1029	1403	0.9F	9 Tu	1026	1244	0.8F	24 W	0901	1244	0.9F
	1014	1247	0.9E		0847	1245	0.8F		1754	2033	0.6E		1643	2015	0.7E		1626	1910	0.5E		1513	1854	0.6E
	1626	1913	0.6E		1509	1851	0.5E		0019	0229	0.8F		0523	0844	0.7E		2255				2134		
	2252				2118				0617	0858	0.6E		1136	1455	1.0F		0456	0738	0.6E		0359	0725	0.6E
10 Su	0445	0737	0.6E	25 M	0947	1337	0.9F	10 W	1241	1455	0.9F	25 Th	1136	1455	1.0F	10 W	1124	1336	0.8F	25 Th	1013	1337	0.9F
	1115	1339	0.9E		1609	1946	0.6E		1842	2123	0.6E		1746	2110	0.8E		1722	2004	0.6E		1622	1951	0.7E
	1725	2007	0.6E		2221				0106	0320	0.9F		0006	0322	1.0F		2348				2244		
	2350				0432	0812	0.6E		0705	0947	0.6E		1237	1547	1.0F		0550	0830	0.6E		0509	0821	0.7E
11 M	0544	0831	0.6E	26 Tu	1050	1429	0.9F	11 Th	1327	1544	0.9F	26 F	1237	1547	1.0F	11 Th	1215	1427	0.8F	26 F	1124	1430	1.0F
	1210	1430	0.9F		1709	2041	0.7E		1924	2210	0.7E		1843	2202	0.8E		1810	2054	0.6E		1727	2046	0.8E
	1818	2059	0.6E		2324				0148	0409	0.9F		0103	0413	1.1F		0035	0252	0.9F		0204	0204	1.0F
					0538	0907	0.7E		0747	1034	0.7E		0720	1029	0.8E		0637	0920	0.6E		0509	0821	0.7E
12 Tu	0637	0922	0.6E	27 W	1152	1521	1.0F	12 F	1408	1633	0.9F	27 Sa	1331	1638	1.1F	12 F	1300	1517	0.9F	27 Sa	1224	1522	1.0F
	1301	1521	0.9F		1807	2133	0.7E		2001	2255	0.7E		1936	2253	0.9E		1853	2141	0.6E		1825	2139	0.8E
	1906	2149	0.7E		0024	0347	1.0F		0223	0457	0.9F		0155	0504	1.2F		0116	0341	0.9F		0046	0348	1.1F
					0639	0959	0.8E		0824	1118	0.7E		0811	1119	0.9E		0719	1006	0.7E		0703	1007	0.8E
13 W	0725	1011	0.7E	28 Th	1250	1612	1.0F	13 Sa	1442	1720	0.9F	28 Su	1421	1728	1.1F	13 Sa	1340	1605	0.9F	28 Su	1317	1613	1.1F
	1347	1610	0.9F		1901	2225	0.8E		2032	2338	0.7E		2025	2342	0.9E		1929	2226	0.7E		1917	2230	0.9E
	1948	2236	0.7E		0119	0438	1.1F		0249	0544	1.0F		0150	0429	1.0F		0150	0429	1.0F		0137	0439	1.2F
					0735	1051	0.8E		0857	1201	0.7E		0755	1050	0.7E		0755	1050	0.7E		0752	1057	0.9E
14 Th	1428	1659	0.9F	29 F	1344	1702	1.1F	14 Su	1506	1807	0.9F	29 M	1413	1653	0.9F	29 M	1405	1703	1.1F	29 M	1405	1703	1.1F
	2026	2321	0.7E		1952	2315	0.9E		2059				2000	2309	0.7E		2007	2319	0.9E		2007	2319	0.9E
					0211	0528	1.1F		0312	0631	0.7E		0215	0516	1.0F		0215	0516	1.0F		0226	0528	1.2F
					0827	1141	0.9E		0927	1243	0.7E		0828	1133	0.7E		0828	1133	0.7E		0840	1145	0.9E
15 F	0847	1143	0.7E	30 Sa	1435	1752	1.1F	15 M	1529	1853	0.9F	30 Tu	1436	1739	0.9F	30 Tu	1451	1753	1.1F	30 Tu	1451	1753	1.1F
	1502	1746	0.9F		2042				2128														

Throgs Neck, Long Island Sound, New York, 2010

F—Flood, Dir. 015° True E—Ebb, Dir. 193° True

April				May				June																					
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum															
	h	m	knots		h	m	knots		h	m	knots		h	m	knots														
1 Th		0357	0707	1.1F	16 F		0322	0710	1.0F	1 Sa		0420	0731	1.0F	16 Su		0345	0733	1.0F	1 Tu		0521	0843	0.9F	16 W		0511	0850	1.0F
		1011	1322	0.8E			0937	1312	0.7E			1031	1346	0.7E			0957	1335	0.7E			1125	1455	0.6E			1119	1456	0.8E
		1621	1932	1.1F			1545	1934	0.9F			1646	1956	1.0F			1611	1959	1.0F			1742	2109	0.9F			1740	2117	1.0F
		2227					2152					2253					2224					0001	0322	0.6E			0001	0325	0.7E
2 F		0443	0757	1.1F	17 Sa		0404	0759	0.9F	2 Su		0504	0820	0.9F	17 M		0433	0823	1.0F	2 W		0606	0933	0.8F	17 Th		0607	0941	1.0F
		1057	1411	0.8E			1018	1357	0.7E			1115	1435	0.7E			1044	1425	0.7E			1208	1544	0.6E			1214	1550	0.8E
		1707	2022	1.0F			1628	2023	0.9F			1730	2046	0.9F			1701	2050	1.0F			1826	2159	0.9F			1836	2209	1.0F
		2314					2239					2341					2317					0050	0412	0.6E			0100	0421	0.7E
3 Sa		0530	0847	1.0F	18 Su		0450	0848	0.9F	3 M		0552	0911	0.9F	18 Tu		0525	0914	0.9F	3 Th		0654	1023	0.8F	18 F		0706	1034	1.0F
		1145	1501	0.7E			1103	1446	0.7E			1200	1525	0.6E			1135	1517	0.7E			1254	1634	0.6E			1313	1645	0.8E
		1757	2112	0.9F			1716	2114	0.9F			1817	2137	0.9F			1754	2141	1.0F			1914	2249	0.9F			1937	2302	1.0F
							2329					0034	0352	0.6E			0014	0347	0.7E			0142	0504	0.5E			0203	0517	0.7E
4 Su		0623	0938	0.9F	19 M		0540	0939	0.9F	4 Tu		0645	1002	0.8F	19 W		0622	1007	0.9F	4 F		0746	1114	0.8F	19 Sa		0812	1127	1.0F
		1236	1554	0.6E			1153	1538	0.6E			1249	1616	0.6E			1230	1612	0.7E			1343	1725	0.6E			1416	1742	0.7E
		1853	2204	0.9F			1808	2206	0.9F			1910	2228	0.8F			1851	2234	1.0F			2005	2340	0.8F			2043	2355	1.0F
							0025	0407	0.6E			0132	0445	0.5E			0115	0444	0.7E			0237	0556	0.5E			0309	0614	0.7E
5 M		0725	1030	0.8F	20 Tu		0636	1032	0.9F	5 W		0748	1053	0.8F	20 Th		0723	1100	0.9F	5 Sa		0841	1205	0.8F	20 Su		0925	1220	0.9F
		1334	1648	0.6E			1248	1634	0.6E			1344	1709	0.6E			1330	1709	0.7E			1436	1817	0.6E			1523	1839	0.7E
		2001	2256	0.8F			1906	2259	0.9F			2008	2319	0.8F			1954	2327	1.0F			2058					2153		
							0126	0505	0.6E			0234	0539	0.5E			0221	0541	0.7E			0031	09F			0413	0710	0.7E	
6 Tu		0843	1122	0.8F	21 W		0738	1125	0.9F	6 Th		0900	1145	0.8F	21 F		0831	1153	0.9F	6 Su		0938	1256	0.8F	21 M		1036	1314	0.9F
		1438	1743	0.5E			1348	1732	0.6E			1442	1802	0.6E			1435	1806	0.7E			1529	1908	0.6E			1629	1935	0.7E
		2113	2349	0.8F			2009	2352	0.9F			2111					2101					2152					2259		
							0234	0604	0.6E			0334	0632	0.5E			0329	0638	0.7E			0425	0738	0.6E			0514	0805	0.7E
7 W		0952	1215	0.8F	22 Th		0846	1218	0.9F	7 F		1003	1236	0.8F	22 Sa		0944	1246	0.9F	7 M		1031	1347	0.8F	22 Tu		1138	1406	0.9F
		1542	1838	0.5E			1454	1830	0.7E			1539	1854	0.6E			1543	1903	0.7E			1623	1959	0.6E			1731	2029	0.7E
		2215					2117					2209					2210					2244					2358		
							0046	1.0F			0102	0.9F		0121		0.8E		0114	1.0F			0212	0.9F			0232	1.0F		
8 Th		0420	0707	0.5E	23 F		0346	0702	0.7E	8 Sa		0429	0724	0.6E	23 Su		0433	0734	0.7E	8 Tu		0514	0828	0.6E	23 W		0609	0858	0.7E
		1050	1307	0.8F			1000	1312	0.9F			1056	1327	0.8F			1053	1339	1.0F			1121	1437	0.8F			1234	1458	0.9F
		1639	1931	0.6E			1602	1927	0.7E			1632	1945	0.6E			1648	1958	0.8E			1715	2049	0.6E			1827	2122	0.7E
		2308					2227					2258					2315					2333					2358		
9 F		0514	0759	0.6E	24 Sa		0452	0758	0.7E	9 Su		0518	0814	0.6E	24 M		0532	0829	0.7E	9 W		0559	0917	0.6E	24 Th		0700	0949	0.7E
		1141	1358	0.8F			1109	1405	1.0F			1141	1417	0.8F			1153	1431	1.0F			1207	1527	0.9F			1325	1549	0.9F
		1728	2021	0.6E			1707	2022	0.8E			1719	2034	0.6E			1747	2052	0.8E			1805	2137	0.7E			1919	2212	0.7E
		2355					2332					2341					0012	0258	1.1F			0021	0352	1.0F			0142	0413	1.0F
10 Sa		0602	0848	0.6E	25 Su		0551	0852	0.8E	10 M		0602	0902	0.6E	25 Tu		0626	0921	0.8E	10 Th		0642	1004	0.7E	25 F		0747	1038	0.7E
		1227	1448	0.8F			1209	1457	1.0F			1219	1507	0.9F			1247	1523	1.0F			1251	1616	0.9F			1412	1638	1.0F
		1812	2109	0.6E			1806	2115	0.8E			1802	2122	0.7E			1842	2144	0.8E			1854	2225	0.7E			2007	2301	0.7E
							0029	0323	1.1F			0019	0331	1.0F			0105	0348	1.1F			0107	0441	1.0F			0227	0503	1.0F
11 Su		0644	0935	0.6E	26 M		0644	0944	0.8E	11 Tu		0641	0949	0.7E	26 W		0716	1011	0.8E	11 F		0724	1051	0.7E	26 Sa		0830	1125	0.7E
		1305	1536	0.9F			1302	1548	1.1F			1252	1555	0.9F			1338	1613	1.0F			1336	1706	1.0F			1454	1727	1.0F
		1849	2155	0.7E			1859	2206	0.8E			1843	2208	0.7E			1932	2234	0.8E			1943	2313	0.7E			2051	2348	0.7E
							0120	0413	1.1F			0057	0420	1.0F			0153	0438	1.1F			0153	0530	1.0F			0308	0551	1.0F
12 M		0721	1020	0.7E	27 Tu		0734	1034	0.8E	12 W		0718	1034	0.7E	27 Th		0803	1100	0.8E	12 Sa		0807	1138	0.8E	27 Su		0909	1211	0.7E
		1336	1624	0.9F			1350	1638	1.1F			1325	1644	0.9F			1424	1703	1.0F			1421	1755	1.0F			1531	1816	1.0F
		1923	2239	0.7E			1948	2256	0.9E			1923	2253	0.7E			2020	2322	0.8E			2032					2132		
							0208	0503	1.1F			0136	0508	1.0F			0239	0527	1.0F			0240	0001	0.7E			0344	0639	0.9F
13 Tu		0754	1104	0.7E	28 W		0820	1122	0.8E	13 Th		0754	1118	0.7E	28 F		0847	1148	0.8E	13 Su		0852	1225	0.8E	28 M		0943	1256	0.7E
		1401	1712	0.9F			1436	1728	1.1F			1402	1732	1.0F			1508	1752	1.0F			1508	1844	1.0F			1602	1904	1.0F
		1955	2322	0.7E			2036	2344	0.8E																				

Throgs Neck, Long Island Sound, New York, 2010

F—Flood, Dir. 015° True E—Ebb, Dir. 193° True

July				August				September																										
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum																				
h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots															
1 Th	0528	0904	0.8F	16 F	0548	0916	1.0F	1 Su	0616	1013	0.8F	16 M	0115	0426	0.7E	1 W	0114	0501	0.5E	16 Th	0300	0553	0.6E											
	1130	1511	0.6E		1155	1526	0.8E		1221	1612	0.6E		0727	1035	0.9F		0723	1127	0.8F		0932	1155	0.8F	1533	1821	0.6E								
	1747	2129	0.9F		1818	2143	1.1F		1839	2240	0.8F		2002	2302	0.9F		1952	2354	0.8F		2204			2204										
2 F	0008	0338	0.6E	17 Sa	0039	0356	0.7E	2 M	0059	0441	0.5E	17 Tu	0220	0522	0.6E	2 Th	0209	0557	0.5E	17 F	0404	0649	0.6E	18 Sa	0502	0743	0.6E							
	0611	0953	0.8F		0646	1008	1.0F		0704	1104	0.8F		0844	1128	0.9F		0822	1220	0.8F		0926	1313	0.8F		1033	1248	0.8F	1127	1340	0.8F				
	1212	1558	0.6E		1253	1621	0.8E		1311	1703	0.6E		1443	1749	0.6E		1437	1826	0.6E		1544	1923	0.6E		1636	1917	0.6E	1731	2010	0.6E	2303			
3 Sa	0054	0427	0.5E	18 Su	0140	0452	0.7E	3 Tu	0150	0534	0.5E	18 W	0329	0620	0.6E	3 F	0309	0654	0.6E	18 Sa	0502	0743	0.6E	19 Su	0552	0834	0.6E	20 M	0636	0921	0.7E			
	0656	1043	0.8F		0751	1101	1.0F		0756	1156	0.8F		0958	1222	0.9F		0926	1313	0.8F		1033	1248	0.8F		1127	1340	0.8F		1258	1520	0.9F	1902	2146	0.7E
	1258	1648	0.6E		1355	1717	0.7E		1405	1757	0.5E		1554	1847	0.6E		1544	1923	0.6E		1731	2010	0.6E		1819	2100	0.6E		2355			0042	0255	0.9F

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Throgs Neck, Long Island Sound, New York, 2010

F—Flood, Dir. 015° True E—Ebb, Dir. 193° True

October				November				December															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0140	0529	0.6E	16 Sa	0325	0617	0.6E	1 M	0324	0659	0.7E	16 Tu	0421	0726	0.6E	1 W	0409	0730	0.7E	16 Th	0409	0740	0.6E
	0757	1154	0.8F		0957	1220	0.8F		0948	1314	1.0F		1050	1331	0.9F		1035	1341	1.0F		1033	1351	0.9F
	1418	1801	0.6E		1604	1847	0.6E		1617	1930	0.7E		1704	1955	0.6E		1658	2001	0.7E		1703	2010	0.6E
	2031				2232				2229				2330					2316				2316	
2 Sa	0242	0627	0.6E	17 Su	0422	0711	0.6E	2 Tu	0429	0754	0.8E	17 W	0508	0815	0.6E	2 Th	0512	0825	0.8E	17 F	0502	0830	0.6E
	0902	1247	0.9F		1051	1311	0.8F		1053	1406	1.0F		1134	1421	0.9F		1138	1433	1.1F		1123	1441	0.9F
	1527	1859	0.6E		1658	1939	0.6E		1717	2025	0.8E		1749	2043	0.6E		1755	2055	0.8E		1749	2059	0.6E
	2139				2323				2331														
3 Su	0113	0438	0.9F	18 M	0513	0801	0.6E	3 W	0530	0848	0.8E	18 Th	0551	0903	0.6E	3 F	0611	0918	0.8E	18 Sa	0553	0919	0.6E
	0347	0724	0.7E		1139	1402	0.9F		1152	1458	1.1F		1212	1511	0.9F		1234	1524	1.1F		1209	1531	0.9F
	1009	1340	1.0F		1746	2029	0.6E		1812	2117	0.8E		1830	2130	0.6E		1848	2146	0.8E		1831	2146	0.6E
	1635	1955	0.7E																				
	2247																						
4 M	0206	0527	0.9F	19 Tu	0010	0226	0.8F	4 Th	0027	0323	1.1F	19 F	0047	0335	0.9F	4 Sa	0109	0350	1.0F	19 Su	0042	0356	0.9F
	0451	0819	0.7E		0557	0850	0.6E		0626	0940	0.8E		0631	0949	0.7E		0705	1009	0.8E		0641	1007	0.7E
	1113	1432	1.0F		1221	1451	0.9F		1246	1549	1.1F		1247	1559	1.0F		1326	1615	1.1F		1253	1620	1.0F
	1736	2048	0.8E		1828	2116	0.6E		1903	2208	0.8E		1906	2215	0.7E		1938	2237	0.8E		1910	2233	0.7E
	2348																						
5 Tu	0257	0550	0.9F	20 W	0051	0315	0.9F	5 F	0118	0414	1.1F	20 Sa	0117	0423	0.9F	5 Su	0159	0440	1.0F	20 M	0122	0445	0.9F
	0550	0912	0.8E		0636	0936	0.7E		0718	1030	0.9E		0710	1035	0.7E		0757	1059	0.8E		0727	1055	0.7E
	1211	1523	1.1F		1257	1540	1.0F		1337	1639	1.1F		1322	1647	1.0F		1415	1705	1.1F		1337	1709	1.0F
	1831	2140	0.8E		1906	2201	0.7E	●	1952	2257	0.9E		1941	2300	0.7E	●	2024	2325	0.8E		1950	2319	0.7E
6 W	0042	0348	1.1F	21 Th	0126	0403	0.9F	6 Sa	0207	0504	1.1F	21 Su	0149	0511	0.9F	6 M	0245	0530	1.0F	21 Tu	0204	0534	1.0F
	0644	1003	0.9E		0710	1020	0.7E		0808	1120	0.9E		0749	1119	0.7E		0845	1148	0.8E		0813	1141	0.7E
	1303	1614	1.2F		1325	1627	1.0F		1425	1729	1.1F	○	1400	1735	1.0F		1501	1754	1.0F		1421	1757	1.0F
	1921	2230	0.9E		1940	2245	0.7E		2039	2346	0.8E		2016	2344	0.7E		2108			○	2032		
7 Th	0132	0438	1.1F	22 F	0151	0450	0.9F	7 Su	0253	0554	1.1F	22 M	0225	0559	0.9F	7 Tu	0329	0619	1.0F	22 W	0247	0622	1.0F
	0735	1052	0.9E		0742	1103	0.7E		0857	1209	0.8E		0830	1204	0.7E		0932	1236	0.7E		0900	1228	0.7E
	1353	1704	1.2F		1353	1714	1.0F		1512	1819	1.1F		1440	1823	1.0F		1544	1843	1.0F		1506	1846	1.0F
●	2010	2319	0.9E	○	2011	2327	0.7E		2125				2053				2150				2115		
8 F	0220	0528	1.1F	23 Sa	0217	0538	0.9F	8 M	0340	0035	0.8E	23 Tu	0305	0028	0.7E	8 W	0410	0100	0.8E	23 Th	0332	0712	1.0F
	0824	1142	0.9E		0815	1145	0.7E		0945	0644	1.1F		0914	0647	1.0F		1017	0708	1.0F		0947	1316	0.7E
	1441	1754	1.2F		1426	1801	1.0F		1558	1258	0.8E		1523	1911	1.0F		1627	1932	1.0F		1553	1935	1.0F
	2057				2043				2210				2134				2231				2201		
9 Sa	0307	0618	0.9E	24 Su	0249	0625	0.9F	9 Tu	0426	0124	0.8E	24 W	0348	0113	0.7E	9 Th	0450	0148	0.7E	24 F	0419	0801	1.0F
	0913	1231	0.9E		0851	1228	0.7E		1034	0734	1.0F		1001	1337	0.7E		1102	1413	0.7E		1036	1406	0.7E
	1529	1843	1.1F		1503	1849	1.0F		1646	1958	1.0F		1609	2000	0.9F		1709	2022	0.9F		1642	2025	1.0F
	2144				2118				2256				2219				2311				2249		
10 Su	0057	0354	0.9E	25 M	0326	0713	0.9F	10 W	0514	0213	0.7E	25 Th	0435	0201	0.7E	10 F	0530	0235	0.7E	25 Sa	0509	0852	1.0F
	0708	1001	1.1F		0932	1312	0.7E		1125	0824	1.0F		1050	0826	0.9F		1147	1502	0.6E		1128	1457	0.7E
	1321	1617	1.1F		1543	1937	0.9F		1736	1439	0.7E		1658	2051	0.9F		1752	2111	0.9F		1733	2116	1.0F
	1934	2232			2157				2344				2307				2353				2341		
11 M	0147	0444	0.8E	26 Tu	0137	0407	0.7E	11 Th	0304	0304	0.7E	26 F	0251	0251	0.7E	11 Sa	0324	0324	0.6E	26 Su	0320	0320	0.8E
	0759	1052	1.0F		0801	1017	0.6E		0915	0915	0.9F		0917	0917	0.9F		0937	0937	0.9F		0602	0943	1.0F
	1412	1708	1.0F		1359	1627	0.9F		1531	1531	0.6E		1520	1520	0.6E		1552	1552	0.6E		1223	1551	0.7E
	2024	2322			2026	2240			2140	2140	0.9F		1751	2142	0.9F		1840	2201	0.8F		1829	2208	1.0F
12 Tu	0239	0536	0.7E	27 W	0223	0452	0.6E	12 F	0356	0356	0.6E	27 Sa	0344	0344	0.7E	12 Su	0388	0413	0.6E	27 M	0366	0415	0.8E
	0850	1147	1.0F		0851	1105	0.9F		0659	0659	0.9F		0619	0619	1.0F		0659	1028	0.9F		0658	1036	1.0F
	1505	1803	0.9F		1448	1715	0.9F		1319	1319	0.6E		1241	1241	0.6E		1326	1643	0.6E		1323	1646	0.7E
	2116				2116	2327			1938	1938	0.8F		1848	1848	0.9F		1931	2252	0.8F	○	1929	2301	0.9F
13 W	0016	0332	0.7E	28 Th	0313	0542	0.6E	13 Sa	0130	0449	0.6E	28 Su	0055	0439	0.7E	13 M	0127	0504	0.6E	28 Tu	0135	0511	0.7E
	0635	0942	0.9F		0943	1158	0.6E		0801	1058	0.8F		0718	1102	1.0F		0749	1118	0.8F		0800	1129	1.0F
	1247	1559	0.6E		1542	1808	0.8F		1420	1719	0.5E		1343	1712	0.7E		1421	1735	0.5E		1427	1743	0.7E
	1909	2208	0.9F		1808	2208	0.8F	○	2047	2323	0.8F	○	1950	2327	0.9F	○	2027	2343	0.8F		2036	2355	0.9F
14 Th	0116	0427	0.6E	29																			

Hell Gate (off Mill Rock), East River, New York, 2010

F—Flood, Dir. 050° True E—Ebb, Dir. 230° True

January				February				March																			
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum													
	h	m	knots		h	m	knots		h	m	knots		h	m	knots												
1 F		0025	5.0E	16 Sa		0102	4.6E	1 M		0523	4.0F	16 Tu		0146	4.8E	1 M		0049	5.3E	16 Tu		0407	0707	3.7F			
	0353	0651	3.9F		0432	0728	3.4F		0515	0811	3.6F		0413	0715	4.1F		0515	0811	3.6F		0413	0715	4.1F	0407	0707	3.7F	
	0956	1255	5.3E		1028	1324	4.8E		1119	1406	4.8E		1021	1316	5.2E		1119	1406	4.8E		1021	1316	5.2E	1015	1300	4.7E	
	1630	1921	3.8F		1659	1949	3.3F		1735	2027	3.4F		1638	1938	4.1F		1735	2027	3.4F		1638	1938	4.1F	1625	1921	3.6F	
2223			2246			2350			2241			2332			2227				2227								
2 Sa		0117	5.1E	17 Su		0138	4.7E	2 Tu		0246	5.2E	17 W		0223	4.8E	2 Tu		0138	5.3E	17 W		0443	0742	3.7F			
	0445	0743	3.9F		0510	0804	3.4F		0616	0913	3.9F		0550	0847	3.5F		0503	0805	4.1F		0443	0742	3.7F				
	1049	1346	5.3E		1107	1359	4.8E		1219	1512	5.1E		1156	1443	4.7E		1111	1403	5.2E		1052	1336	4.8E				
	1721	2013	3.8F		1736	2024	3.3F		1842	2138	3.8F		1809	2103	3.4F		1726	2026	4.0F		1659	1956	3.6F				
2315			2324			0041	0337	5.1E	0008	0301	4.8E	0026	0226	5.2E	0026	0226	5.2E	0154	049E								
3 Su		0209	5.2E	18 M		0214	4.7E	3 W		0709	1006	3.7F	18 Th		0627	0925	3.4F	3 W		0553	0853	4.0F	18 Th		0519	0818	3.6F
	0539	0836	3.9F		0547	0840	3.4F		0709	1006	3.7F	0627		0925	3.4F	0553	0853		4.0F	0519	0818	3.6F					
	1235	1530	5.1E		1145	1436	4.7E		1311	1603	4.9E	1234		1523	4.6E	1200	1451		5.0E	1200	1451	5.0E		1130	1414	4.7E	
	1812	2105	3.7F		1812	2100	3.3F		1934	2230	3.6F	1844		2142	3.3F	1815	2114		3.9F	1815	2114	3.9F		1733	2033	3.6F	
2315			2324			0001	0252	4.7E	0047	0343	4.7E	0020	0314	5.1E	0020	0314	5.1E	0233	4.9E								
4 M		0302	5.1E	19 Tu		0252	4.7E	4 Th		0805	1101	3.5F	19 F		0707	1006	3.3F	4 Th		0644	0943	3.8F	19 F		0557	0857	3.5F
	0634	0930	3.8F		0625	0918	3.3F		0805	1101	3.5F	0707		1006	3.3F	0644	0943		3.8F	0557	0857	3.5F					
	1235	1530	5.1E		1223	1514	4.7E		1404	1655	4.6E	1315		1605	4.5E	1250	1538		4.8E	1250	1538	4.8E		1208	1454	4.7E	
	1905	2158	3.6F		1849	2137	3.2F		2029	2325	3.4F	1922		2225	3.2F	1904	2204		3.7F	1904	2204	3.7F		1809	2113	3.5F	
2315			2324			0029	0524	4.6E	0047	0343	4.7E	0110	0403	4.8E	0110	0403	4.8E	0021	0316	4.8E							
5 Tu		0356	5.0E	20 W		0332	4.6E	5 F		0904	1159	3.2F	20 Sa		0753	1052	3.1F	5 F		0737	1035	3.5F	20 Sa		0638	0939	3.4F
	0731	1026	3.6F		0704	0957	3.2F		0904	1159	3.2F	0753		1052	3.1F	0737	1035		3.5F	0638	0939	3.4F					
	1330	1624	4.9E		1303	1555	4.6E		1501	1751	4.3E	1400		1652	4.4E	1341	1627		4.5E	1341	1627	4.5E		1250	1538	4.5E	
	2001	2254	3.5F		1927	2217	3.1F		2127			2008		2313	3.1F	1957	2257		3.4F	1957	2257	3.4F		1849	2157	3.4F	
2315			2324			0156	0452	4.8E	0229	0524	4.6E	0130	0428	4.6E	0110	0403	4.8E	0110	0403	4.8E	0021	0316	4.8E				
6 W		0452	4.8E	21 Th		0415	4.6E	6 Sa		0026	3.1F	21 Su		0220	0519	4.5E	6 Sa		0203	0455	4.5E	21 Su		0107	0402	4.7E	
	0831	1125	3.4F		0746	1040	3.1F		0327	0625	4.4E		0220	0519	4.5E	0203		0455	4.5E	0107	0402		4.7E				
	1427	1721	4.7E		1345	1638	4.5E		1006	1303	3.0F		0847	1145	3.0F	0832		1130	3.2F	0725	1027		3.3F				
	2058	2353	3.3F		2007	2300	3.0F		1559	1853	4.1E		2103			1435		1719	4.2E	1338	1626		4.4E				
2315			2324			0254	0552	4.7E	0228			0220	0519	4.5E	2053	2354	3.1F	1938	2248	3.3F							
7 Th		0552	4.7E	22 F		0501	4.5E	7 Su		0131	3.0F	22 M		0009	3.0F	7 Su		0300	0551	4.2E	22 M		0159	0454	4.5E		
	0933	1227	3.2F		0833	1126	3.0F		0427	0733	4.2E		0319	0615	4.4E		0932	1231	2.9F	0820		1121	3.1F				
	1526	1822	4.5E		1432	1725	4.4E		1109	1410	2.8F		0950	1245	2.9F		1532	1818	3.9E	1433		1720	4.3E				
	2158				2053	2349	2.9F		1659	2003	4.0E		1556	1843	4.2E		2153			2036		2346	3.2F				
2315			2324			0252	0551	4.4E	2330			2208			2330			2036	2346	3.2F							
8 F		0656	3.2F	23 Sa		0551	4.4E	8 M		0236	2.9F	23 Tu		0113	3.0F	8 M		0058	2.9F	23 Tu		0301	0552	4.4E			
	0353	0656	4.5E		0927	1219	2.9F		0527	0845	4.1E		0426	0718	4.4E		0400	0655	3.9E		0925	1223	3.0F				
	1037	1333	3.1F		1524	1817	4.3E		1210	1513	2.8F		1059	1353	2.9F		1034	1337	2.8F		1537	1821	4.2E				
	1626	1927	4.3E		2146				1758	2112	4.0E		1702	1948	4.2E		1632	1925	3.8E		2146						
2259			2348			0028	0336	3.0F	2319			2256			2355			2256									
9 Sa		0200	3.1F	24 Su		0043	2.9F	9 Tu		0028	0336	3.0F	24 W		0222	3.1F	9 Tu		0205	2.8F	24 W		0053	0657	4.3E		
	0453	0805	4.4E		0348	0647	4.4E		0625	0949	4.1E	0535		0826	4.4E	0500		0808	3.8E	0409		0657	4.3E				
	1139	1438	3.0F		1028	1317	2.8F		1305	1608	2.9F	1207		1501	3.1F	1134		1442	2.7F	1035		1332	3.1F				
	1726	2034	4.2E		1623	1914	4.2E		1852	2209	4.1E	1808		2056	4.4E	1731		2037	3.8E	1645		1929	4.2E				
2359			2245			0120	0428	3.1F	2330			2208			2355			2300									
10 Su		0302	3.1F	25 M		0143	2.9F	10 W		0120	0428	3.1F	25 Th		0330	3.4F	10 W		0307	2.9F	25 Th		0205	0608	4.4E		
	0552	0912	4.4E		0450	0747	4.4E		0717	1038	4.2E	0640		0933	4.6E	0558		0915	3.9E	0519		0806	4.4E				
	1238	1538	3.0F		1132	1420	2.9F		1353	1655	3.0F	1310		1606	3.4F	1229		1538	2.8F	1144		1443	3.2F				
	1822	2137	4.2E		1726	2014	4.3E		1940	2253	4.2E	1910		2201	4.7E	1825		2137	3.9E	1751		2038	4.4E				
2315			2348			0206	0513	3.2F	2330			2208			2355			2300									
11 M		0054	3.1F	26 Tu		0246	3.1F	11 Th		0206	0513	3.2F	26 F		0434	3.6F	11 Th		0400	3.0F	26 F		0010	0315	3.4F		
	0647	1010	4.4E		0554	0849	4.6E		0804	1118	4.4E	0741		1036	4.8E	0651		1006	4.0E	0625		0915	4.6E				
	1331	1631	3.1F		1235	1524	3.1F		1435	1736	3.2F	1406		1705	3.7F	1318		1625	3.0F	1247		1548	3.5F				
	1915	2230	4.3E		1828	2117	4.5E		2024	2330	4.4E	2007		2302	4.9E	1913		2221	4.1E	1852		2145	4.7E				
2315			2348			0248	0552	3.3F	2330			2208			2355			2300									
12 Tu		0449	3.2F	27 W		0349	3.3F	12 F		0248	0552	3.3F	27 Sa		0531	3.9F	12 F		0444	3.2F	27 Sa		0113	0419	3.7F		
	0738	1058	4.5E		0656	0952	4.7E		0846	1152	4.5E																

Hell Gate (off Mill Rock), East River, New York, 2010

F—Flood, Dir. 050° True E—Ebb, Dir. 230° True

April				May				June																					
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum															
h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots										
1	Th	0531	0832	3.9F	16	F	0455	0752	3.6F	1	Sa	0558	0855	3.6F	16	Su	0521	0816	3.6F	1	Tu	0706	0958	3.1F	16	W	0651	0944	3.6F
		1138	1427	4.9E			1103	1348	4.7E			1159	1446	4.6E			1124	1411	4.8E			1300	1545	4.3E			1250	1541	4.8E
		1748	2050	3.8F			1705	2007	3.6F			1812	2113	3.5F			1732	2034	3.6F			1921	2216	3.1F			1911	2209	3.6F
		2357					2316										2343												
2	F	0620	0919	3.7F	17	Sa	0536	0834	3.6F	2	Su	0646	0942	3.3F	17	M	0610	0904	3.5F	2	W	0752	1042	3.0F	17	Th	0746	1040	3.5F
		1226	1512	4.7E			1145	1430	4.7E			1246	1531	4.4E			1213	1501	4.7E			1346	1630	4.2E			1346	1637	4.8E
		1837	2138	3.6F			1745	2050	3.6F			1901	2200	3.3F			1822	2125	3.5F			2009	2302	2.9F			2011	2308	3.5F
3	Sa	0710	1008	3.4F	18	Su	0620	0919	3.5F	3	M	0735	1030	3.1F	18	Tu	0702	0956	3.4F	3	Th	0839	1129	2.8F	18	F	0843	1139	3.4F
		1315	1559	4.4E			1230	1517	4.6E			1335	1617	4.2E			1305	1554	4.6E			1433	1717	4.1E			1445	1737	4.7E
		1927	2228	3.3F			1831	2138	3.5F			1952	2250	3.0F			1919	2220	3.4F			2059	2351	2.8F	18	☉	2115		
4	Su	0802	1100	3.1F	19	M	0710	1009	3.3F	4	Tu	0826	1120	2.9F	19	W	0759	1053	3.3F	4	F	0928	1217	2.8F	19	Sa	0943	1241	3.3F
		1407	1648	4.1E			1321	1607	4.5E			1425	1706	4.0E			1403	1651	4.6E			1522	1806	4.1E			1545	1840	4.6E
		2021	2322	3.1F			1924	2231	3.3F			2045	2343	2.9F			2022	2321	3.3F	4	☉	2150					2219		
5	M	0858	1157	2.9F	20	Tu	0807	1105	3.2F	5	W	0919	1214	2.8F	20	Th	0900	1155	3.3F	5	Sa	1017	1307	2.8F	20	Su	1044	1344	3.3F
		1501	1742	3.9E			1418	1703	4.4E			1517	1759	3.9E			1504	1752	4.5E			1612	1857	4.1E			1646	1946	4.6E
		2119					2026	2332	3.2F	5	☉	2141					2128					2242					2323		
6	Tu	0956	1258	2.7F	21	W	0911	1208	3.1F	6	Th	1013	1310	2.7F	21	F	1003	1300	3.3F	6	Su	1106	1357	2.8F	21	M	1144	1447	3.3F
		1558	1842	3.7E	21	☉	2136					1610	1854	3.8E			1606	1858	4.5E			1701	1949	4.2E			1746	2052	4.6E
		2219										2236					2236					2334							
7	W	1054	1400	2.7F	22	Th	1018	1316	3.2F	7	F	1105	1403	2.7F	22	Sa	1105	1405	3.3F	7	M	1154	1446	2.9F	22	Tu	1241	1546	3.4F
		1655	1946	3.7E			1627	1913	4.4E			1702	1948	3.9E			1708	2005	4.6E			1751	2040	4.3E			1843	2153	4.7E
		2317					2248					2329					2340												
8	Th	1149	1456	2.8F	23	F	1124	1425	3.3F	8	Sa	1154	1452	2.9F	23	Su	1205	1508	3.5F	8	Tu	1240	1534	3.1F	23	W	1335	1641	3.5F
		1748	2046	3.8E			1731	2022	4.5E			1751	2040	4.1E			1808	2110	4.7E			1839	2131	4.5E			1937	2249	4.7E
							2355																						
9	F	1238	1544	2.9F	24	Sa	1225	1528	3.5F	9	Su	1239	1537	3.0F	24	M	1301	1605	3.6F	9	W	1325	1621	3.2F	24	Th	1426	1731	3.5F
		1837	2134	4.0E			1831	2128	4.7E			1837	2127	4.3E			1904	2210	4.8E			1926	2220	4.7E			2027	2337	4.7E
10	Sa	1322	1625	3.1F	25	Su	1322	1626	3.7F	10	M	1322	1619	3.2F	25	Tu	1354	1658	3.7F	10	Th	1410	1708	3.4F	25	F	1513	1817	3.5F
		1921	2215	4.2E			1927	2228	4.9E			1921	2212	4.5E			1957	2304	4.9E			2014	2309	4.8E			2114		
11	Su	1402	1702	3.3F	26	M	1414	1719	3.9F	11	Tu	1402	1659	3.3F	26	W	1444	1748	3.7F	11	F	1456	1755	3.6F	26	Sa	1558	1901	3.5F
		2002	2253	4.5E			2020	2322	5.1E			2003	2255	4.7E			2047	2353	5.0E			2101	2357	5.0E			2159		
12	M	1440	1738	3.4F	27	Tu	1504	1808	3.9F	12	W	1442	1739	3.5F	27	Th	1532	1835	3.7F	12	Sa	1542	1842	3.7F	27	Su	1641	1942	3.5F
		2041	2331	4.6E			2109					2045	2337	4.8E			2135					2149					2242		
13	Tu	1516	1813	3.5F	28	W	1552	1855	3.9F	13	Th	1522	1820	3.6F	28	F	1619	1920	3.7F	13	Su	1631	1931	3.7F	28	M	1723	2022	3.4F
		2119					2158					2127					2221					2239					2324		
14	W	1551	1850	3.6F	29	Th	1639	1941	3.9F	14	F	1602	1902	3.6F	29	Sa	1704	2004	3.6F	14	M	1721	2021	3.7F	29	Tu	1805	2101	3.3F
		2157					2245					2210					2306					2330							
15	Th	1627	1927	3.6F	30	F	1725	2027	3.7F	15	Sa	1645	1947	3.7F	30	Su	1749	2048	3.4F	15	Tu	1815	2114	3.7F	30	W	1846	2141	3.2F
		2235					2331					2255					2351					1815	2114	3.7F					

Hell Gate (off Mill Rock), East River, New York, 2010

F—Flood, Dir. 050° True E—Ebb, Dir. 230° True

July				August				September															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 Th	0048	0335	4.5E	16 F	0104	0354	4.9E	1 Su	0138	0422	4.3E	16 M	0239	0523	4.4E	1 W	0241	0522	4.1E	16 Th	0419	0709	3.0F
	0714	1003	3.1F		0724	1022	3.7F		0746	1045	3.1F		0850	1155	3.4F		0830	1146	3.1F		1028	1345	3.0F
	1308	1554	4.4E		1329	1621	4.9E		1355	1643	4.4E		1505	1756	4.4E		1504	1751	4.2E		1647	1953	3.8E
	1929	2222	3.1F		1953	2251	3.6F		2010	2310	3.1F		2130				2114				2307		
2 F	0131	0417	4.4E	17 Sa	0200	0449	4.7E	2 M	0223	0507	4.2E	17 Tu	0339	0625	4.1E	2 Th	0339	0618	4.0E	17 F	0519	0824	3.7E
	0755	1045	3.0F		0820	1118	3.5F		0828	1131	3.0F		0952	1301	3.2F		0931	1246	3.1F		1129	1449	3.1F
	1351	1637	4.3E		1426	1718	4.7E		1442	1731	4.3E		1607	1903	4.2E		1607	1851	4.2E		1747	2102	3.9E
	2013	2306	3.0F		2054	2352	3.4F		2059	2359	3.0F		2234				2220						
3 Sa	0215	0501	4.3E	18 Su	0258	0547	4.5E	3 Tu	0313	0556	4.1E	18 W	0441	0734	3.9E	3 F	0442	0720	4.0E	18 Sa	0614	0925	3.8E
	0838	1129	2.9F		0919	1219	3.4F		0917	1222	3.0F		1055	1409	3.1F		1040	1352	3.2F		1224	1543	3.2F
	1436	1723	4.2E		1525	1819	4.6E		1535	1824	4.2E		1710	2017	4.1E		1712	1955	4.2E		1840	2154	4.0E
	2100	2353	2.9F		2157				2156				2336				2328						
4 Su	0302	0547	4.2E	19 M	0359	0649	4.3E	4 W	0408	0650	4.1E	19 Th	0542	0847	3.9E	4 Sa	0546	0825	4.2E	19 Su	0702	1011	4.0E
	0924	1216	2.9F		1019	1323	3.3F		1102	1318	3.0F		1156	1513	3.2F		1149	1459	3.4F		1312	1629	3.3F
	1524	1812	4.2E		1626	1925	4.4E		1633	1921	4.2E		1810	2126	4.1E		1816	2101	4.4E		1927	2234	4.1E
	2151				2300				2257				2336				2328						
5 M	0352	0637	4.1E	20 Tu	0500	0755	4.2E	5 Th	0507	0748	4.1E	20 F	0638	0949	4.0E	5 Su	0646	0929	4.4E	20 M	0746	1048	4.2E
	1012	1306	2.8F		1121	1428	3.2F		1113	1419	3.1F		1251	1608	3.2F		1253	1602	3.6F		1355	1709	3.4F
	1614	1903	4.2E		1727	2034	4.4E		1734	2022	4.3E		1904	2221	4.2E		1916	2203	4.6E		2009	2308	4.3E
	2245				2300				2359				2336				2328						
6 Tu	0445	0729	4.1E	21 W	0002	0306	3.1F	6 F	0256	0548	3.1F	21 Sa	0436	0728	4.1E	6 M	0433	0742	4.7E	21 Tu	0527	0825	4.4E
	1103	1359	2.9F		0559	0902	4.2E		0607	0848	4.2E		0728	1038	4.1E		0742	1029	4.7E		0825	1120	4.4E
	1708	1958	4.3E		1220	1530	3.3F		1215	1521	3.3F		1341	1656	3.4F		1351	1700	3.9F		1434	1744	3.6F
	2341				1826	2140	4.4E		1834	2123	4.5E		1952	2304	4.3E		2012	2300	4.9E		2049	2339	4.4E
7 W	0540	0823	4.2E	22 Th	0100	0405	3.2F	7 Sa	0356	0649	4.4E	22 Su	0520	0813	4.3E	7 Tu	0527	0835	5.0E	22 W	0600	0903	4.5E
	1156	1453	3.3F		0655	1003	4.2E		0705	0949	4.4E		0813	1117	4.3E		0835	1125	5.0E		0903	1152	4.5E
	1802	2053	4.4E		1315	1626	3.3F		1314	1620	3.5F		1425	1737	3.5F		1446	1753	4.1F		1511	1818	3.7F
					1920	2236	4.4E		1932	2222	4.7E		2036	2340	4.4E		2105	2354	5.0E		2126		
8 Th	0634	0918	4.3E	23 F	0152	0456	3.2F	8 Su	0453	0747	4.7E	23 M	0558	0854	4.4E	8 W	0618	0926	5.2E	23 Th	0705	1010	4.7E
	1248	1548	3.2F		0747	1055	4.3E		0800	1047	4.7E		0854	1151	4.4E		0926	1217	5.2E		1010	1315	4.7E
	1856	2149	4.6E		1405	1715	3.4F		1411	1716	3.8F		1505	1815	3.6F		1538	1845	4.2F		1547	1851	3.7F
					2010	2323	4.5E		2028	2318	4.9E		2117				2156				2203		
9 F	0727	1013	4.5E	24 Sa	0239	0542	3.3F	9 M	0546	0853	4.9E	24 Tu	0612	0933	4.5E	9 Th	0707	1016	5.2E	24 F	0705	1015	4.7E
	1341	1641	3.4F		0834	1138	4.4E		0853	1142	4.9E		0933	1224	4.5E		1016	1308	5.2E		1015	1300	4.7E
	1950	2243	4.8E		1451	1759	3.5F		1505	1810	4.0F		1543	1849	3.6F		1630	1935	4.2F		1623	1926	3.7F
					2056				2121				2155				2246				2240		
10 Sa	0819	1106	4.7E	25 Su	0322	0624	3.4F	10 Tu	0637	0939	5.1E	25 W	0706	1010	4.6E	10 F	0756	1106	5.2E	25 Sa	0740	1051	4.7E
	1432	1734	3.6F		0917	1216	4.5E		0944	1235	5.1E		1010	1257	4.6E		1106	1357	5.2E		1051	1336	4.7E
	2042	2337	4.9E		1534	1840	3.5F		1557	1902	4.1F		1619	1923	3.7F		1720	2025	4.1F		1658	2001	3.7F
					2139				2212				2233				2337				2317		
11 Su	0910	1159	4.8E	26 M	0039	0339	4.6E	11 W	0727	1035	5.2E	26 Th	0813	1123	4.7E	11 Sa	0846	1156	5.1E	26 Su	0815	1128	4.7E
	1524	1825	3.8F		0402	0702	3.4F		0427	0727	4.0F		0440	0739	3.6F		0541	0846	4.1F		0511	0815	3.6F
	2134				0958	1252	4.5E		1035	1326	5.2E		1047	1331	4.7E		1156	1447	5.1E		1128	1415	4.7E
					1614	1917	3.6F		1649	1953	4.1F		1655	1957	3.7F		1812	2116	4.0F		1735	2039	3.6F
12 M	0401	0655	3.7F	27 Tu	0114	0414	4.6E	12 Th	0817	1125	5.2E	27 F	0813	1123	4.7E	12 Su	0937	1249	4.8E	27 M	0854	1207	4.6E
	1000	1250	5.0E		0441	0738	3.4F		0517	0817	4.0F		0514	0813	3.5F		0632	0937	3.9F		0545	0854	3.5F
	1615	1917	3.9F		1038	1327	4.6E		1125	1417	5.2E		1123	1407	4.7E		1249	1538	4.8E		1207	1456	4.6E
	2226				1652	1953	3.5F		1741	2044	4.1F		1730	2032	3.6F		1906	2209	3.7F		1814	2119	3.4F
13 Tu	0450	0745	3.8F	28 W	0148	0448	4.6E	13 F	0908	1217	5.1E	28 Sa	0848	1200	4.6E	13 M	0403	0725	3.6F	28 Tu	0317	0623	3.4F
	1051	1342	5.1E		0518	0813	3.4F		0607	0908	4.0F		0548	0848	3.5F		0725	1031	3.6F		0623	0936	3.4F
	1707	2008	3.9F		1116	1403	4.6E		1217	1508	5.1E		1200	1445	4.6E		1344	1631	4.5E		1251	1540	4.5E
	2318				1730	2029	3.5F		1835	2136	3.9F		1806	2109	3.5F		2002	2306	3.4F		1857	2205	3.3F
14 W	0540	0836	3.8F	29 Th	0224	0524	4.6E	14 Sa	0334	0638	3.8F	29 Su	0306	0622	3.4F	14 Tu	0457	0822	3.3F	29 W	0403	0708	3.3F
	1142	1434	5.1E		0554	0848	3.4F		0658	1000	3.8F		0622	0926	3.4F		0822	1130	3.3F		0708	1024	3.3F
	1801	2101	3.9F		1155	1440	4.6E		1310	1600	4.9E		1239	1525	4.5E		1442	1730	4.2E		1340	1630	4.4E
					1808	2106	3.4F		1930	2231	3.7F		1844	2149	3.4F		2102				1948	2256	3.1F
15 Th	0631	0928	3.8F	30 F	0017	0301	4.6E	15 Su	0427	0752	4.6E	30 M	0347	0658	4.3E	15 W	0558	0924	3.9E	30 Th	0455	0802	3.2F
	1235	1526																					

Hell Gate (off Mill Rock), East River, New York, 2010

F—Flood, Dir. 050° True E—Ebb, Dir. 230° True

October				November				December																		
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum												
	h	m	knots		h	m	knots		h	m	knots		h	m	knots											
1 F	0314	0553	4.1E	16 Sa	0443	0741	3.7E	1 M	0458	0746	4.4E	16 Tu	0537	0830	4.0E	1 W	0533	0832	4.7E	16 Th	0533	0825	4.2E			
	0908	1222	3.1F		1058	1414	2.9F		1119	1422	3.4F		1205	1507	2.9F		1209	1507	3.4F		1214	1503	2.8F	1214	1503	2.8F
	1544	1827	4.2E		1711	2016	3.8E		1732	2019	4.5E		1803	2054	4.0E		1807	2102	4.6E		1807	2102	4.6E	1802	2049	4.2E
	2156				2330					2350																
2 Sa		0100	3.1F	17 Su	0537	0842	3.8E	2 Tu	0559	0852	4.7E	17 W	0623	0917	4.2E	2 Th	0632	0936	4.8E	17 F	0622	0916	4.4E			
	0419	0657	4.1E		1153	1507	3.0F		1223	1526	3.6F		1251	1551	3.1F		1309	1607	3.5F		1302	1551	2.9F	1302	1551	2.9F
	1021	1331	3.2F		1803	2109	3.9E		1833	2123	4.6E		1849	2138	4.2E		1905	2203	4.7E		1905	2203	4.7E	1851	2138	4.3E
	1132	1440	3.4F																							
3 Su		0209	3.2F	18 M	0625	0928	4.0E	3 W	0656	0953	4.9E	18 Th	0707	1000	4.4E	3 F	0728	1034	5.0E	18 Sa	0709	1005	4.6E			
	0524	0805	4.3E		1241	1553	3.2F		1321	1625	3.8F		1334	1632	3.2F		1404	1703	3.6F		1433	1637	3.1F	1433	1637	3.1F
	1132	1440	3.4F		1850	2151	4.1E		1929	2221	4.8E		1933	2220	4.4E		1959	2258	4.8E		1959	2258	4.8E	1938	2226	4.4E
	1757	2040	4.4E																							
4 M	0009	0313	3.5F	19 Tu	0709	1007	4.2E	4 Th	0750	1050	5.1E	19 F	0748	1041	4.6E	4 Sa	0820	1127	5.1E	19 Su	0756	1052	4.7E			
	0624	0910	4.5E		1324	1633	3.3F		1416	1718	3.9F		1416	1711	3.3F		1456	1754	3.7F		1438	1722	3.2F	1438	1722	3.2F
	1236	1545	3.7F		1933	2226	4.2E		2022	2315	4.9E		2015	2300	4.5E		2050	2349	4.9E		2024	2312	4.6E	2024	2312	4.6E
	1857	2143	4.6E																							
5 Tu	0107	0412	3.7F	20 W	0749	1042	4.4E	5 F	0842	1142	5.2E	20 Sa	0829	1122	4.7E	5 Su	0911	1217	5.1E	20 M	0842	1138	4.9E			
	0721	1011	4.8E		1404	1710	3.4F		1507	1809	4.0F		1456	1750	3.4F		1545	1843	3.7F		1518	1807	3.4F	1518	1807	3.4F
	1335	1642	3.9F		2014	2301	4.4E		2113				2056	2341	4.6E		2139				2109	2358	4.7E	2109	2358	4.7E
	1953	2241	4.8E																							
6 W	0201	0507	4.0F	21 Th	0827	1117	4.6E	6 Sa	0932	1231	5.2E	21 Su	0910	1203	4.9E	6 M	0959	1303	5.0F	21 Tu	0928	1225	5.0E			
	0814	1107	5.1E		1443	1745	3.5F		1557	1858	4.0F		1537	1830	3.5F		1633	1929	3.6F		1602	1851	3.5F	1602	1851	3.5F
	1429	1736	4.1F		2052	2336	4.5E		2202				2137				2226				2154			2154		
	2045	2334	5.0E																							
7 Th	0252	0557	4.1F	22 F	0905	1153	4.7E	7 Su	1021	1319	5.1E	22 M	0951	1245	4.9E	7 Tu	1046	1347	4.9E	22 W	1014	1311	5.1E			
	0905	1159	5.2E		1520	1820	3.6F		1647	1946	3.9F		1618	1911	3.5F		1719	2014	3.5F		1647	1937	3.5F	1647	1937	3.5F
	1521	1827	4.2F		2130				2250				2218				2311				2239			2239		
	2136																									
8 F		0024	5.1E	23 Sa	0942	1230	4.8E	8 M	1051	1406	5.0E	23 Tu	1033	1328	5.0E	8 W	1132	1430	4.8E	23 Th	1102	1358	5.1E			
	0341	0647	4.2F		1557	1856	3.6F		1736	2034	3.7F		1700	1953	3.5F		1805	2058	3.4F		1733	2024	3.6F	1733	2024	3.6F
	0954	1249	5.3E		2208				2338				2300				2356				2327			2327		
	1612	1916	4.2F																							
9 Sa		0113	5.0E	24 Su	1020	1308	4.8E	9 Tu	1158	1452	4.8E	24 W	1118	1414	4.9E	9 Th	1217	1512	4.6E	24 F	1151	1447	5.1E			
	0430	0735	4.1F		1635	1934	3.6F		1825	2123	3.5F		1745	2039	3.4F		1851	2142	3.2F		1822	2113	3.5F	1822	2113	3.5F
	1044	1337	5.2E		2246																					
	1702	2005	4.1F																							
10 Su		0200	4.9E	25 M	1044	1349	4.8E	10 W	1248	1540	4.5E	25 Th	1206	1502	4.9E	10 F	1303	1555	4.5E	25 Sa	1243	1538	5.0E			
	0519	0824	4.0F		1714	2013	3.5F		1916	2213	3.2F		1834	2127	3.4F		1938	2227	3.0F		1913	2204	3.5F	1913	2204	3.5F
	1134	1426	5.0E		2326																					
	1752	2054	3.9F																							
11 M	0005	0248	4.7E	26 Tu	1140	1432	4.8E	11 Th	1340	1629	4.3E	26 F	1259	1553	4.8E	11 Sa	1350	1640	4.3E	26 Su	1338	1632	4.8E			
	0609	0914	3.8F		1756	2056	3.4F		2009	2306	3.0F		1927	2220	3.3F		2025	2313	2.9F		2008	2300	3.4F	2008	2300	3.4F
	1225	1515	4.8E																							
	1844	2146	3.6F																							
12 Tu	0056	0338	4.4E	27 W	1226	1518	4.7E	12 F	1433	1721	4.1E	27 Sa	1356	1648	4.6E	12 Su	1438	1726	4.2E	27 M	1437	1729	4.7E			
	0701	1006	3.5F		1842	2143	3.3F		2103				2024	2318	3.2F		2114				2107	2359	3.3F	2107	2359	3.3F
	1318	1606	4.5E																							
	1938	2240	3.3F																							
13 W	0150	0430	4.2E	28 Th	1317	1609	4.5E	13 Sa	1527	1816	3.9E	28 Su	1458	1748	4.5E	13 M	1528	1815	4.1E	28 Tu	1538	1830	4.5E			
	0757	1103	3.3F		1935	2236	3.2F		2158				2126				2204				2209			2209		
	1414	1701	4.2E																							
	2035	2340	3.1F																							
14 Th	0247	0528	3.9E	29 F	1416	1705	4.4E	14 Su	1622	1912	3.9E	29 M	1602	1852	4.5E	14 Tu	1620	1906	4.0E	29 W	1642	1935	4.5E			
	0857	1206	3.0F		2035	2335	3.1F		2251				2229				2255				2312			2312		
	1513	1802	3.9E																							
	2135																									
15 F		0044	2.9F	30 Sa	1416	1705	4.4E	15 M	1714	2006	3.9E	30 Tu	1706	1957	4.5E	15 W	1711	1958	4.1E	30 Th	1744	2042	4.5E			
	0346	0632	3.7E		2035	2335	3.1F		2251				2229				2255				2312			2312		
	0959	1312	2.9F																							
	1613	1910	3.8E																							
16 Sa		0044																								

The Narrows, New York Harbor, New York, 2010

F—Flood, Dir. 336° True E—Ebb, Dir. 164° True

July				August				September															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 Th	0047	0355	1.8E	16 F	0055	0404	1.9E	1 Su	0131	0429	1.8E	16 M	0224	0541	1.7E	1 W	0230	0527	1.7E	16 Th	0424	0756	1.4E
	0736	1023	1.1F		0740	1032	1.6F		0800	1050	1.5F		0910	1213	1.6F		0853	1152	1.7F		1101	1404	1.4F
	1320	1626	1.5E		1330	1635	1.8E		1401	1706	1.6E		1505	1837	1.6E		1458	1815	1.7E		1655	2046	1.6E
	1948	2237	1.3F		2008	2255	1.4F		2048	2327	1.3F		2210				2208						
2 F	0133	0439	1.7E	17 Sa	0148	0459	1.8E	2 M	0217	0518	1.8E	17 Tu	0324	0656	1.5E	2 Th	0329	0636	1.6E	17 F	0004	0259	1.2F
	0820	1107	1.2F		0837	1133	1.5F		0847	1140	1.6F		1014	1314	1.5F		0955	1247	1.8F		0540	0907	1.5E
	1406	1718	1.5E		1427	1741	1.6E		1450	1807	1.6E		1610	1954	1.5E		1558	1931	1.8E		1205	1513	1.3F
	2043	2328	1.3F		2116				2147				2319				2310				1803	2146	1.7E
3 Sa	0219	0527	1.7E	18 Su	0242	0604	1.6E	3 Tu	0308	0616	1.7E	18 W	0434	0810	1.4E	3 F	0435	0750	1.7E	18 Sa	0102	0405	1.2F
	0903	1149	1.4F		0935	1231	1.5F		0939	1230	1.7F		1117	1420	1.4F		1100	1345	1.8F		0646	1004	1.5E
	1453	1816	1.5E		1526	1856	1.5E		1543	1913	1.7E		1719	2106	1.6E		1703	2041	1.9E		1303	1616	1.4F
	2138				2224				2246				2191	2106	1.6E		1900	2234	1.7E		1900	2234	1.7E
4 Su	0305	0621	1.7E	19 M	0339	0714	1.5E	4 W	0405	0720	1.7E	19 Th	0549	0919	1.4E	4 Sa	0541	0859	1.8E	19 Su	0154	0459	1.3F
	0947	1231	1.5F		1033	1327	1.5F		1033	1321	1.8F		1219	1534	1.3F		1203	1448	1.8F		0737	1051	1.6E
	1542	1914	1.6E		1629	2008	1.5E		1640	2017	1.8E		1825	2207	1.6E		1808	2141	2.1E		1354	1707	1.4F
	2233				2330				2344				2046				1908	2234	2.3E		1947	2311	1.7E
5 M	0355	0715	1.7E	20 Tu	0443	0820	1.5E	5 Th	0507	0824	1.8E	20 F	0658	1017	1.5E	5 Su	0642	0959	2.0E	20 M	0236	0542	1.3F
	1033	1314	1.6F		1131	1429	1.4F		1130	1415	1.8F		1317	1637	1.4F		1304	1554	1.9F		0817	1129	1.7E
	1635	2010	1.7E		1735	2115	1.6E		1740	2117	2.0E		1921	2255	1.7E		1908	2234	2.3E		1437	1747	1.4F
	2328												2192	2255	1.7E		2002	2321	2.4E		2024	2341	1.7E
6 Tu	0449	0810	1.8E	21 W	0552	0923	1.5E	6 F	0610	0926	1.9E	21 Sa	0753	1105	1.5E	6 M	0737	1052	2.3E	21 Tu	0307	0616	1.3F
	1119	1401	1.7F		1227	1542	1.4F		1226	1516	1.9F		1410	1727	1.4F		1401	1654	2.1F		0848	1201	1.7E
	1728	2104	1.9E		1837	2213	1.6E		1838	2211	2.2E		2007	2334	1.7E		2002	2321	2.4E		1513	1818	1.4F
													2046				2052				2054		
7 W	0021	0247	1.3F	22 Th	0135	0435	1.1F	7 Sa	0133	0414	1.6F	22 Su	0305	0606	1.3F	7 Tu	0241	0530	2.0F	22 W	0007	0007	1.7E
	0546	0904	1.8E		0657	1019	1.5E		0708	1021	2.0E		0837	1146	1.6E		0828	1141	2.5E		0331	0638	1.3F
	1207	1453	1.8F		1322	1644	1.4F		1323	1617	2.0F		1454	1807	1.4F		1455	1746	2.2F		0914	1231	1.7E
	1821	2154	2.0E		1930	2301	1.7E		1933	2300	2.3E		2046				2052				1544	1836	1.4F
																					2120		
8 Th	0113	0348	1.4F	23 F	0231	0530	1.2F	8 Su	0224	0508	1.8F	23 M	0340	0007	1.7E	8 W	0326	0007	2.5E	23 Th	0031	0031	1.7E
	0641	0955	1.9E		0754	1108	1.5E		0801	1112	2.2E		0643	0643	1.3F		0916	1230	2.6E		0351	0635	1.3F
	1255	1548	1.9F		1414	1733	1.5F		1418	1712	2.2F		0911	1222	1.6E		1546	1834	2.3F		0938	1258	1.7E
	1910	2241	2.2E		2017	2343	1.8E		2025	2346	2.4E		1531	1838	1.4F		2140				1612	1849	1.4F
													2118								2147		
9 F	0204	0443	1.5F	24 Sa	0318	0617	1.2F	9 M	0311	0555	1.9F	24 Tu	0407	0037	1.7E	9 Th	0411	0054	2.5E	24 F	0056	0056	1.7E
	0734	1044	2.0E		0842	1152	1.5E		0851	1201	2.3E		0940	0711	1.2F		1005	1319	2.6E		0410	0647	1.4F
	1345	1640	2.1F		1500	1813	1.5F		1511	1802	2.2F		1604	1859	1.4F		1636	1924	2.2F		1003	1325	1.7E
	1958	2325	2.3E		2058				2114				2148				2228				1641	1914	1.4F
													2148								2215		
10 Sa	0252	0531	1.7F	25 Su	0357	0657	1.2F	10 Tu	0356	0640	2.0F	25 W	0429	0104	1.7E	10 F	0456	0142	2.5E	25 Sa	0122	0122	1.8E
	0824	1131	2.1E		0924	1234	1.5E		0939	1251	2.4E		1007	0718	1.2F		1055	1410	2.5E		0433	0716	1.6F
	1435	1729	2.1F		1541	1846	1.5F		1602	1852	2.2F		1634	1917	1.4F		1728	2017	2.0F		1033	1352	1.8E
	2045				2135				2203				2218				2317				1714	1949	1.4F
													2218								2248		
11 Su	0338	0616	1.7F	26 M	0431	0732	1.2F	11 W	0441	0727	2.0F	26 Th	0450	0131	1.7E	11 Sa	0545	0230	2.3E	26 Su	0154	0154	1.8E
	0912	1218	2.1E		1001	1313	1.5E		1028	1342	2.4E		1036	0725	1.2F		1148	1501	2.3E		1108	1423	1.8E
	1525	1816	2.2F		1619	1914	1.5F		1654	1943	2.1F		1705	1356	1.6E		1826	2114	1.8F		1752	2031	1.3F
	2132				2211				2251				2249								2328		
12 M	0054	0247	1.8E	27 Tu	0502	0756	1.1F	12 Th	0527	0816	2.0F	27 F	0514	0159	1.8E	12 Su	0639	0319	2.2E	27 M	0231	0231	1.8E
	0959	1308	2.1E		1036	1351	1.5E		1119	1432	2.3E		1108	0753	1.3F		1244	1554	2.1E		0539	0837	1.7F
	1615	1905	2.1F		1655	1944	1.4F		1747	2037	1.9F		1740	1425	1.7E		1930	2220	1.5F		1150	1459	1.9E
	2219				2247				2342				2324								1839	2120	1.3F
13 Tu	0507	0748	1.7F	28 W	0532	0812	1.1F	13 F	0616	0909	1.9F	28 Sa	0544	0230	1.8E	13 M	0739	0413	1.9E	28 Tu	0312	0312	1.8E
	1048	1359	2.1E		1111	1427	1.6E		1213	1522	2.2E		1146	0830	1.5F		1342	1656	1.9E		0624	0926	1.7F
	1706	1957	2.0F		1732	2019	1.4F		1846	2135	1.7F		1821	1457	1.7E		2039	2335	1.3F		1237	1540	1.9E
</																							

The Narrows, New York Harbor, New York, 2010

F—Flood, Dir. 336° True E—Ebb, Dir. 164° True

October				November				December															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0302	0603	1.5E	16 Sa	0513	0840	1.5E	1 M	0447	0812	1.7E	16 Tu	0018	0331	1.3F	1 W	0527	0855	1.8E	16 Th	0606	0939	1.8E
	0927	1221	1.6F		1139	1440	1.3F		1127	1401	1.5F		1245	1546	1.3F		1212	1443	1.3F		1250	1532	1.2F
	1524	1850	1.7E		1727	2109	1.7E		1711	2042	1.8E		1821	2144	1.7E		1744	2112	1.8E		1814	2133	1.7E
2 Sa	0407	0722	1.6E	17 Su	0025	0329	1.3F	2 Tu	0550	0915	1.9E	17 W	0055	0415	1.4F	2 Th	0022	0313	1.7F	17 F	0037	0329	1.5F
	1038	1320	1.6F		0614	0936	1.6E		1227	1505	1.6F		0658	1022	1.8E		0626	0952	1.9E		0650	1021	1.9E
	1631	2007	1.8E		1235	1541	1.3F		1812	2138	2.0E		1331	1632	1.3F		1310	1552	1.4F		1337	1621	1.3F
3 Su	0513	0835	1.8E	18 M	0111	0423	1.3F	3 W	0050	0341	1.8F	18 Th	0129	0445	1.4F	3 F	0113	0413	1.8F	18 Sa	0116	0410	1.7F
	1144	1423	1.7F		0704	1022	1.7E		0647	1010	2.1E		0735	1058	1.8E		0721	1043	2.1E		0730	1059	2.0E
	1739	2112	1.9E		1324	1634	1.4F		1324	1610	1.7F		1413	1708	1.3F		1406	1653	1.5F		1421	1702	1.3F
4 M	0615	0937	2.0E	19 Tu	0150	0506	1.4F	4 Th	0138	0436	2.0F	19 F	0200	0501	1.5F	4 Sa	0202	0505	2.0F	19 Su	0156	0450	1.8F
	1245	1530	1.8F		0743	1100	1.7E		0740	1059	2.3E		0807	1131	1.9E		0811	1130	2.2E		0809	1136	2.1E
	1841	2206	2.1E		1408	1715	1.4F		1419	1706	1.8F		1452	1735	1.3F		1459	1745	1.6F		1503	1739	1.4F
5 Tu	0712	1031	2.3E	20 W	0221	0538	1.4F	5 F	0226	0524	2.2F	20 Sa	0230	0521	1.7F	5 Su	0251	0552	2.0F	20 M	0237	0529	1.9F
	1342	1633	2.0F		0815	1133	1.8E		0830	1146	2.4E		0839	1203	1.9E		0859	1217	2.2E		0848	1213	2.1E
	1936	2254	2.3E		1446	1747	1.4F		1510	1755	1.9F		1528	1801	1.4F		1548	1834	1.6F		1544	1816	1.5F
6 W	0803	1119	2.5E	21 Th	0247	0554	1.4F	6 Sa	0313	0610	2.3F	21 Su	0301	0550	1.8F	6 M	0340	0637	2.0F	21 Tu	0319	0609	2.0F
	1436	1726	2.1F		0842	1202	1.8E		0919	1234	2.5E		0911	1235	2.0E		0946	1306	2.2E		0928	1252	2.1E
	2026	2340	2.4E		1520	1807	1.3F		1601	1844	1.9F		1604	1831	1.4F		1637	1924	1.5F		1624	1855	1.5F
7 Th	0852	1207	2.6E	22 F	0309	0556	1.5F	7 Su	0400	0656	2.2F	22 M	0335	0625	1.9F	7 Tu	0429	0726	1.9F	22 W	0403	0653	1.9F
	1527	1814	2.2F		0908	1230	1.8E		1007	1324	2.4E		0945	1308	2.0E		1034	1356	2.2E		1010	1334	2.1E
	2114				1551	1824	1.3F		1651	1936	1.7F		1640	1908	1.4F		1727	2019	1.5F		1705	1939	1.5F
8 F	0941	1256	2.6E	23 Sa	0332	0616	1.6F	8 M	0449	0746	2.1F	23 Tu	0413	0706	1.9F	8 W	0521	0819	1.8F	23 Th	0450	0741	1.8F
	1617	1903	2.1F		0935	1258	1.8E		1057	1416	2.3E		1022	1345	2.0E		1125	1445	2.1E		1056	1417	2.1E
	2202				1622	1850	1.3F		1745	2034	1.6F		1720	1952	1.3F		1820	2118	1.4F		1749	2027	1.4F
9 Sa	1030	1347	2.5E	24 Su	0359	0647	1.7F	9 Tu	0542	0842	1.9F	24 W	0456	0752	1.8F	9 Th	0617	0917	1.6F	24 F	0541	0833	1.7F
	1709	1955	1.9F		1006	1327	1.9E		1150	1508	2.2E		1106	1424	2.0E		1218	1534	2.0E		1146	1501	2.0E
	2252				1655	1925	1.3F		1845	2141	1.4F		1805	2040	1.3F		1916	2220	1.3F		1838	2118	1.4F
10 Su	1122	1438	2.4E	25 M	0432	0725	1.8F	10 W	0024	0330	1.8E	25 Th	0545	0843	1.7F	10 F	0057	0401	1.6E	25 Sa	0021	0321	1.7E
	1805	2053	1.7F		1041	1359	1.9E		0643	0946	1.7F		1155	1507	1.9E		0717	1020	1.5F		0639	0929	1.6F
	2346				1734	2007	1.3F		1247	1603	2.0E		1856	2134	1.3F		1311	1626	1.8E		1238	1546	1.9E
11 M	1217	1531	2.2E	26 Tu	0510	0810	1.8F	11 Th	0126	0430	1.6E	26 F	0034	0327	1.6E	11 Sa	0151	0500	1.5E	26 Su	0115	0412	1.7E
	1908	2200	1.5F		1122	1436	1.9E		0750	1057	1.5F		0643	0940	1.5F		0820	1123	1.4F		0742	1029	1.5F
					1819	2056	1.2F		1344	1705	1.8E		1249	1553	1.8E		1404	1722	1.7E		1331	1636	1.7E
12 Tu	1315	1630	1.9E	27 W	0557	0900	1.7F	12 F	0228	0541	1.5E	27 Sa	0129	0419	1.5E	12 Su	0244	0604	1.5E	27 M	0209	0511	1.6E
	2016	2317	1.4F		1210	1518	1.9E		0858	1205	1.5F		0749	1042	1.4F		0920	1218	1.4F		0849	1131	1.4F
					1912	2150	1.2F		1442	1815	1.7E		1345	1647	1.7E		1455	1820	1.7E		1424	1736	1.6E
13 W	1414	1741	1.7E	28 Th	0047	0337	1.6E	13 Sa	0329	0654	1.5E	28 Su	0225	0524	1.5E	13 M	0335	0705	1.5E	28 Tu	0305	0623	1.5E
	2126				0653	0956	1.6F		1003	1303	1.4F		0859	1144	1.4F		1016	1305	1.3F		0956	1229	1.3F
					1303	1605	1.8E		1541	1921	1.7E		1441	1756	1.6E		1545	1914	1.6E		1519	1844	1.6E
14 Th	1516	1900	1.7E	29 F	0144	0431	1.5E	14 Su	0429	0758	1.5E	29 M	0323	0641	1.5E	14 Tu	0427	0801	1.6E	29 W	0405	0735	1.5E
	2232				0759	1057	1.5F		1102	1357	1.4F		1007	1243	1.4F		1110	1351	1.3F		1101	1326	1.2F
					1400	1703	1.7E		1639	2016	1.7E		1540	1909	1.6E		1636	2003	1.6E		1618	1951	1.5E
15 F	1622	2010	1.7E	30 Sa	0242	0539	1.5E	15 M	0240	0540	1.3F	30 Tu	0118	0418	1.5F	15 W	0209	0509	1.3F	30 Th	0152	0452	1.5F
	2332				0910	1200	1.5F		0854	1154	1.3F		0425	0752	1.6E		0518	0852	1.6E		0508	0842	1.6E
					1500	1819	1.6E		1156	1452	1.3F		1112	1341	1.4F		1201	1439	1.2F		1203	1429	1.1F
					2210				1734	2104	1.7E		1643	2013	1.7E		1726	2050	1.7E		1722	2053	1.6E
				31 Su	0343	0700	1.5E																
					1021	1300	1.5F																
					1604	1936	1.7E																
					2307																		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

George Washington Bridge, Hudson River, 2010

F—Flood, Dir. 010° True E—Ebb, Dir. 203° True

January				February				March																					
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum															
h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots	h	m	h	m	knots										
1 F		0457	0755	2.8F	16 Sa	0001	0317	2.0E	1 M	0036	0355	2.9E	16 Tu	0048	0400	2.2E	1 M	0536	0844	2.5F	16 Tu	0543	0850	2.4E					
		1138	1515	3.4E			0547	0920		1.9F		0636		0948	2.4F			0644	1000	1.6F			1153	1522	3.3E		1141	1506	2.7E
		1819	2107	1.6F			1215	1550		2.8E		1300		1628	3.3E			1250	1611	2.7E			1813	2122	2.3F		1756	2100	1.9F
		2354					1904	2214		1.5F		1925		2241	2.1F			1912	2232	1.7F									
2 Sa		0549	0848	2.7F	17 Su	0043	0355	2.0E	2 Tu	0130	0446	2.8E	17 W	0124	0430	2.2E	2 Tu	0021	0344	3.1E	17 W	0009	0330	2.5E					
		1228	1601	3.4E			0627	1002		1.7F		0732		1051	2.2F			0725	1035	1.5F			0630	0940	2.2F		0621	0920	1.6F
		1905	2204	1.7F			1249	1622		2.7E		1346		1713	3.1E			1327	1638	2.6E			1240	1606	3.2E		1219	1535	2.6E
							1931	2255		1.5F		2013		2335	2.2F			1946	2253	1.7F			1856	2215	2.3F		1828	2113	1.9F
3 Su		0644	0949	2.5F	18 M	0124	0430	1.9E	3 W	0224	0540	2.6E	18 Th	0200	0502	2.2E	3 W	0112	0433	3.0E	18 Th	0045	0402	2.6E					
		1317	1648	3.3E			0708	1042		1.6F		0834		1151	1.9F			0812	1114	1.4F			0724	1039	2.0F		0703	0954	1.6F
		1953	2303	1.8F			1322	1650		2.6E		1433		1802	2.8E			1406	1710	2.4E			1325	1650	2.9E		1325	1605	2.6E
							2001	2332		1.5F		2104						2023	2316	1.7F			1941	2309	2.3F		1903	2138	2.0F
4 M		0741	1059	2.3F	19 Tu	0203	0502	1.9E	4 Th		0028	2.1F	19 F	0239	0540	2.2E	4 Th	0203	0525	2.8E	19 F	0122	0436	2.6E					
		1406	1735	3.1E			0752	1121		1.4F		0319		0643	2.4E			0906	1159	1.3F			0824	1138	1.7F		0749	1037	1.4F
		2043	2359	1.9F			1357	1715		2.5E		0943		1251	1.6F			1448	1748	2.2E			1411	1735	2.6E		1411	1640	2.4E
							2035					1522		1859	2.4E			2106	2352	1.8F			2029				1941	2218	2.1F
5 Tu		0845	1204	2.0F	20 W		0005	1.5F	5 F		0122	2.1F	20 Sa	0323	0630	2.1E	5 F		0002	2.2F	20 Sa	0203	0515	2.6E					
		1455	1829	2.8E			0242	0535		1.8E		0417		0755	2.3E			1007	1251	1.1F			0255	0622	2.5E		0843	1130	1.3F
		2137					0841	1159		1.3F		1059		1352	1.3F			1534	1835	2.0E			0933	1236	1.4F		1422	1719	2.3E
							1435	1746		2.3E		1614		2006	2.1E			2154					1459	1827	2.2E		2026	2308	2.1F
6 W		0955	1306	1.7F	21 Th		0034	1.5F	6 Sa		0218	2.0F	21 Su	0415	0748	2.1E	6 Sa		0055	2.0F	21 Su	0251	0604	2.5E					
		1547	1932	2.6E			0322	0616		1.8E		0520		0904	2.3E			0349	0729	2.3E			0552	0941	2.3E		0944	1228	1.2F
		2232					0936	1240		1.2F		1219		1456	1.1F			1626	1937	1.9E			1550	1933	1.8E		1509	1806	2.1E
							1517	1825		2.2E		1713		2111	2.0E			2247					2121				2118		
7 Th		1110	1410	1.5F	22 F		0101	1.6F	7 Su		0316	2.0F	22 M	0515	0914	2.2E	7 Su		0151	1.9F	22 M	0346	0715	2.3E					
		1642	2038	2.4E			0406	0716		1.8E		0627		1005	2.4E			1210	1438	1.0F			0448	0839	2.2E		1050	1331	1.1F
		2327					1037	1328		1.1F		1337		1602	1.0F			1726	2056	1.9E			1649	2044	1.7E		1603	1908	1.9E
							1604	1916		2.0E		1820		2209	1.9E			2344					2316				2218		
8 F		1227	1515	1.3F	23 Sa		0133	1.7F	8 M		0416	2.0F	23 Tu	0621	1018	2.5E	8 M		0250	1.8F	23 Tu	0448	0848	2.3E					
		1743	2138	2.3E			0455	0838		1.9E		0731		1101	2.5E			1323	1541	0.9F			1552	1941	1.6E		1155	1438	1.1F
							1139	1424		1.0F		1445		1708	1.0F			1833	2207	2.0E			1756	2146	1.6E		1706	2037	1.9E
							1657	2022		1.9E		1928		2303	1.9E			2247					2218				2323		
9 Sa		1344	1621	1.2F	24 Su		0216	1.8F	9 Tu		0515	2.0F	24 W	0044	0348	2.2F	9 Tu		0350	1.7F	24 W	0557	0955	2.5E					
		1848	2233	2.2E			0550	0944		2.1E		0825		1153	2.6E			1421	1710	1.2F			0656	1035	2.3E		1256	1544	1.2F
							1243	1525		1.0F		1541		1807	1.1F			1939	2310	2.2E			1422	1643	1.0F		1817	2155	2.1E
							1756	2127		1.9E		2027		2354	1.9E			2040					1907	2240	1.7E		1926	2259	2.4E
10 Su		1454	1727	1.2F	25 M		0308	2.0F	10 W		0610	2.0F	25 Th	0145	0500	2.3F	10 W		0449	1.7F	25 Th	0029	0338	2.1F					
		1951	2325	2.2E			0649	1041		2.4E		0912		1241	2.7E			1514	1809	1.5F			0752	1124	2.4E		1352	1648	1.4F
							1345	1628		1.0F		1626		1857	1.3F			2040					2008	2331	1.8E		1926	2259	2.4E
							1857	2225		2.0E		2119																	
11 M		1556	1827	1.2F	26 Tu		0406	2.2F	11 Th		0044	2.0E	26 F	0010	0250	2.5E	11 Th		0544	1.7F	26 F	0135	0452	2.1F					
		2047					0749	1136		2.7E		0319		0656	2.1F			0246	0606	2.4F			0837	1210	2.5E		0807	1146	2.9E
							1444	1731		1.1F		0953		1325	2.8E			0924	1301	3.1E			1544	1828	1.3F		1443	1747	1.7F
							1957	2323		2.2E		1701		1939	1.4F			2137					2058				2028	2359	2.7E
12 Tu		1648	1918	1.3F	27 W		0509	2.4F	12 F		0130	2.0E	27 Sa	0108	0280	2.8E	12 F		0020	1.9E	27 Sa	0239	0558	2.3F					
		2139					0845	1230		2.9E		0405		0737	2.0F			0345	0702	2.6F			0302	0631	1.8F		0903	1238	3.1E
							1538	1827		1.3F		1031		1405	2.8E			1016	1350	3.3E			0917	1251	2.6E		1531	1839	2.1F
							2054					1728		2018	1.5F			1646	1946	2.0F			1612	1908	1.5F		2126		
13 W		1022	1352	3.0E	28 Th		0610	2.6F	13 Sa		0213	2.1E	28 Su	0202	0300	3.0E	13 Sa		0105	2.1E	28 Su	0339	0654	2.3F					
		1732	2004	1.3F			0256	0610		2.6F		0448		0815	1.9F			0441	0753	2.6F			0348	0712	1.8F		0954	1327	3.2E
		2228					0940	1322		3.2E		1106		1442	2.8E			1105	1437	3.4E			0953	1329	2.6E		1616	1926	2.3F
							1627	1916		1.5F		1752		2055	1.6F			2328					1636	1943	1.7F		2220		
14 Th		1103	1435	3.0E	29 F		0705	2.6E	14 Su		0252	2.2E	14 Su	0146	0220	2.2F	14 Su		0146										

George Washington Bridge, Hudson River, 2010

F—Flood, Dir. 010° True E—Ebb, Dir. 203° True

April				May				June																			
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots												
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m												
1 Th	0053	0419	3.1E	16 F	0010	0338	2.9E	1 Sa	0120	0450	3.0E	16 Su	0031	0403	3.2E	1 Tu	0220	0558	2.5E	16 W	0156	0523	3.1E				
	0718	1027	1.8F		0645	0925	1.5F		0812	1112	1.4F		0717	0959	1.4F		0939	1234	1.3F		0838	1144	1.7F				
	1305	1627	2.7E		1232	1537	2.5E		1333	1650	2.1E		1253	1556	2.4E		1451	1800	1.5E		1424	1728	2.4E				
	1910	2242	2.3F		1826	2100	2.3F		1924	2311	2.1F		1843	2124	2.6F		2040				2023	2332	2.2F				
2 F	0141	0508	2.9E	17 Sa	0052	0416	3.0E	2 Su	0206	0539	2.7E	17 M	0120	0448	3.1E	2 W		0028	1.5F	17 Th	0247	0616	2.9E				
	0817	1125	1.5F		0732	1013	1.4F		0915	1207	1.2F		0808	1101	1.4F		0300	0644	2.2E		0931	1240	1.8F				
	1351	1711	2.3E		1315	1615	2.4E		1421	1735	1.8E		1343	1643	2.3E		1021	1320	1.3F		1523	1835	2.3E				
	1955	2336	2.1F		1907	2145	2.4F		2013				1935	2224	2.4F		1542	1900	1.4E		2131						
3 Sa	0230	0601	2.6E	18 Su	0138	0459	2.9E	3 M		0004	1.9F	18 Tu	0211	0537	2.9E	3 Th		0116	1.3F	18 F		0041	1.9F				
	0925	1222	1.3F		0825	1113	1.3F		0251	0632	2.4E		0903	1202	1.4F		0340	0736	2.1E		0340	0720	2.6E				
	1439	1759	2.0E		1400	1657	2.3E		1019	1300	1.1F		1436	1735	2.2E		1059	1405	1.3F		1026	1337	1.9F				
	2046				1955	2240	2.3F		1512	1830	1.5E		2035	2334	2.2F		1635	2009	1.3E		1626	1958	2.2E				
4 Su		0029	1.9F	19 M	0228	0549	2.7E	4 Tu		0057	1.6F	19 W	0306	0637	2.7E	4 Th		0205	1.1F	19 Sa		0149	1.7F				
	0321	0702	2.3E		0924	1214	1.2F		0338	0731	2.2E		1001	1300	1.5F		0422	0829	2.0E		0436	0830	2.5E				
	1041	1319	1.1F		1450	1747	2.1E		1116	1352	1.1F		1536	1843	2.1E		1134	1449	1.4F		1121	1435	2.0F				
	1530	1900	1.6E		2052	2344	2.2F		1608	1941	1.3E		2143				1728	2109	1.5E		1733	2112	2.4E				
	2143								2215								2348				2359						
5 M		0124	1.7F	20 Tu	0324	0655	2.5E	5 W		0151	1.4F	20 Th		0049	2.0F	5 Sa		0255	1.0F	20 Su		0256	1.6F				
	0414	0809	2.2E		1027	1317	1.2F		0426	0830	2.1E		0403	0751	2.6E		0509	0916	2.0E		0537	0932	2.5E				
	1152	1418	1.0F		1548	1851	1.9E		1203	1444	1.1F		1058	1400	1.6F		1209	1531	1.5F		1215	1533	2.2F				
	1628	2015	1.4E		2158				1709	2050	1.3E		1641	2014	2.1E		1820	2159	1.6E		1841	2215	2.6E				
	2246								2322				2256														
6 Tu		0222	1.6F	21 W		0055	2.1F	6 Th		0245	1.2F	21 F		0203	1.8F	6 Su		0044	0344	1.0F	21 M		0112	0404	1.4F		
	0511	0911	2.1E		0426	0821	2.4E		0515	0922	2.0E		0504	0901	2.6E		0600	0958	2.0E		0641	1028	2.5E				
	1252	1516	1.0F		1128	1420	1.3F		1241	1534	1.2F		1154	1500	1.8F		1245	1610	1.6F		1309	1632	2.3F				
	1734	2121	1.4E		1653	2026	2.0E		1811	2147	1.5E		1751	2130	2.3E		1908	2244	1.9E		1945	2313	2.8E				
	2351				2308																						
7 W		0320	1.5F	22 Th		0213	2.0F	7 F		0027	0339	1.2F	22 Sa		0009	0314	1.7F	7 M		0136	0435	1.0F	22 Tu		0223	0511	1.4F
	0610	1003	2.2E		0532	0930	2.5E		0606	1007	2.1E		0608	1000	2.6E		0653	1038	2.0E		0744	1121	2.5E				
	1340	1612	1.1F		1226	1523	1.5F		1313	1621	1.4F		1247	1559	2.0F		1321	1647	1.7F		1400	1731	2.4F				
	1844	2216	1.6E		1804	2144	2.2E		1907	2235	1.7E		1900	2232	2.6E		1950	2327	2.1E		2042						
8 Th		0054	1.4F	23 F		0019	1.9F	8 Sa		0124	0431	1.1F	23 Su		0120	0422	1.7F	8 Tu		0224	0524	1.1F	23 W		0009	3.0E	
	0704	1049	2.2E		0639	1027	2.7E		0656	1048	2.1E		0712	1053	2.7E		0745	1117	2.1E		0842	1214	2.4E				
	1417	1704	1.3F		1320	1624	1.7F		1344	1704	1.5F		1339	1657	2.2F		1400	1720	1.8F		1450	1825	2.5F				
	1943	2306	1.8E		1914	2247	2.5E		1953	2320	1.9E		2002	2330	2.8E		2030				2134						
9 F		0152	1.4F	24 Sa		0128	1.9F	9 Su		0213	0520	1.2F	24 M		0228	0528	1.7F	9 W			0010	2.4E	24 Th		0102	3.1E	
	0751	1131	2.3E		0742	1120	2.8E		0742	1126	2.2E		0810	1146	2.8E		0834	1159	2.1E		0937	1305	2.4E				
	1447	1751	1.5F		1411	1723	2.0F		1415	1743	1.7F		1429	1753	2.4F		1439	1751	2.1F		1539	1914	2.5F				
	2030	2352	1.9E		2017	2346	2.8E		2033				2058				2110				2223						
10 Sa		0242	1.4F	25 Su		0233	2.0F	10 M			0002	2.1E	25 Tu		0025	3.0E	10 Th			0054	2.7E	25 F		0153	3.2E		
	0832	1211	2.4E		0838	1212	2.9E		0257	0604	1.3F		0331	0628	1.7F		0357	0653	1.3F		0524	0801	1.5F				
	1513	1829	1.6F		1459	1816	2.3F		0827	1204	2.2E		0905	1237	2.7E		0921	1242	2.2E		1029	1354	2.3E				
	2110				2113				1448	1815	1.8F		1517	1844	2.6F		1521	1823	2.3F		1625	1959	2.5F				
11 Su		0035	2.1E	26 M		0041	3.1E	11 Tu			0043	2.4E	26 W		0119	3.2E	11 Th			0138	2.9E	26 Sa		0240	3.2E		
	0325	0641	1.5F		0335	0642	2.1F		0338	0644	1.4F		0431	0722	1.7F		0444	0732	1.4F		0612	0851	1.4F				
	0910	1248	2.4E		0930	1302	3.0E		0910	1241	2.3E		0957	1327	2.7E		1008	1326	2.3E		1121	1441	2.2E				
	1541	1902	1.8F		1546	1905	2.5F		1522	1841	2.0F		1603	1931	2.6F		1604	1858	2.5F		1710	2045	2.4F				
	2147				2206				2144				2240				2238				2353						
12 M		0116	2.3E	27 Tu		0134	3.2E	12 W			0122	2.6E	27 Th		0210	3.3E	12 Sa			0222	3.1E	27 Su		0325	3.1E		
	0405	0716	1.6F		0433	0734	2.0F		0419	0720	1.5F		0527	0813	1.7F		0529	0811	1.4F		0655	0941	1.4F				
	0949	1324	2.5E		1020	1350	3.0E		0954	1318	2.3E		1048	1415	2.6E		1056	1411	2.4E		1209	1526	2.1E				
	1610	1929	1.9F		1631	1950	2.6F		1558	1902	2.2F		1648	2016	2.6F		1649	1938	2.7F		1754	2132	2.2F				
	2222				2257				2221				2328				2326										
13 Tu		0153	2.5E	28 W		0225	3.3E	13 Th			0201	2.8E	28 F		0259	3.3E	13 Su			0306	3.3E	28 M					

George Washington Bridge, Hudson River, 2010

F—Flood, Dir. 010° True E—Ebb, Dir. 203° True

July				August				September																		
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum												
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m											
1 Th	0222	0554	2.4E	16 F	0226	0552	2.9E	1 Su	0300	0606	2.1E	16 M	0345	0726	2.2E	1 W	0404	0705	1.8E	16 Th	0048	0314	1.0F			
	0917	1241	1.4F		0900	1217	2.1F		0935	1253	1.5F		1018	1344	2.1F		1022	1305	1.8F		0531	0921	1.7E			
	1508	1814	1.6E		1506	1822	2.5E		1549	1856	1.7E		1645	2030	2.3E		1646	2043	2.1E		1151	1523	1.8F	1828	2212	2.4E
	2106				2119				2220				2340				2353									
2 F		0038	1.2F	17 Sa	0316	0649	2.7E	2 M	0344	0650	1.9E	17 Tu	0442	0838	2.0E	2 Th	0501	0820	1.7E	17 F	0153	0417	1.1F			
	0258	0627	2.2E		0316	0649	2.7E		0344	0650	1.9E		0442	0838	2.0E		0501	0820	1.7E		0645	1020	1.8E			
	0953	1320	1.4F		0954	1312	2.1F		1018	1321	1.6F		1116	1444	2.0F		1117	1406	1.9F		1254	1625	1.7F	1355	1724	1.8F
	1553	1909	1.5E		1606	1937	2.3E		1635	2015	1.8E		1752	2137	2.4E		1749	2151	2.3E		1929	2303	2.5E	1929	2303	2.5E
2204			2232			2320																				
3 Sa		0122	1.1F	18 Su	0409	0757	2.4E	3 Tu	0434	0750	1.8E	18 W	0549	0942	1.9E	3 F	0606	0937	1.8E	18 Sa	0244	0517	1.2F			
	0337	0707	2.0E		0409	0757	2.4E		0434	0750	1.8E		0549	0942	1.9E		0606	0937	1.8E		0751	1113	1.9E			
	1031	1357	1.5F		1049	1409	2.1F		1104	1357	1.6F		1215	1546	2.0F		1216	1513	2.0F		1355	1724	1.8F	2020	2350	2.6E
	1639	2016	1.5E		1711	2052	2.3E		1726	2123	1.9E		1900	2235	2.5E		1855	2248	2.5E		2020	2350	2.6E			
2302			2348																							
4 Su		0208	0.9F	19 M	0507	0904	2.3E	4 W	0530	0900	1.8E	19 Th	0701	1039	1.9E	4 Sa	0712	1042	2.1E	19 Su	0325	0609	1.4F			
	0421	0802	1.9E		0507	0904	2.3E		0530	0900	1.8E		0701	1039	1.9E		0712	1042	2.1E		0844	1203	2.0E			
	1111	1433	1.5F		1145	1508	2.1F		1152	1444	1.8F		1313	1649	2.0F		1317	1625	2.1F		1451	1815	1.8F	2103		
	1727	2114	1.6E		1819	2157	2.5E		1823	2220	2.2E		2001	2329	2.7E		1957	2342	2.8E		2103					
5 M		0000	0.9F	20 Tu	0106	0346	1.2F	5 Th	0123	0408	0.9F	20 F	0314	0543	1.2F	5 Su	0245	0540	1.4F	20 M		0034	2.6E			
	0512	0859	1.9E		0612	1004	2.3E		0632	1001	1.8E		0807	1134	2.0E		0813	1142	2.3E		0357	0652	1.6F			
	1151	1508	1.6F		1240	1609	2.2F		1242	1539	2.0F		1410	1748	2.1F		1418	1734	2.3F		0929	1250	2.2E	1540	1859	1.8F
	1816	2204	1.9E		1925	2255	2.7E		1922	2313	2.5E		2053				2054				1540	1859	1.8F	2141		
6 Tu		0056	0.9F	21 W	0220	0455	1.2F	6 F	0221	0510	1.0F	21 Sa	0403	0637	1.3F	6 M	0332	0631	1.7F	21 Tu		0114	2.6E			
	0608	0948	1.9E		0220	0455	1.2F		0733	1058	2.0E		0903	1225	2.1E		0909	1240	2.7E		0423	0728	1.8F			
	1234	1543	1.7F		1335	1710	2.2F		1336	1640	2.2F		1503	1839	2.1F		1517	1833	2.4F		1010	1333	2.3E	1624	1938	1.8F
	1905	2252	2.2E		2024	2351	2.8E		2019				2138				2146				1624	1938	1.8F	2217		
7 W		0152	0.444	22 Th	0327	0600	1.2F	7 Sa	0314	0605	1.2F	22 Su	0443	0722	1.5F	7 Tu	0416	0717	2.0F	22 W		0151	2.6E			
	0706	1035	1.9E		0823	1153	2.2E		0830	1155	2.2E		0953	1314	2.1E		1004	1334	2.9E		0448	0801	1.9F			
	1317	1622	1.9F		1428	1807	2.3F		1431	1742	2.4F		1554	1924	2.1F		1615	1925	2.5F		1048	1413	2.4E	1702	2013	1.7F
	1953	2340	2.4E		2116				2113				2218				2236				1702	2013	1.7F	2252		
8 Th		0246	0.539	23 F	0424	0656	1.3F	8 Su	0402	0654	1.4F	23 M	0514	0802	1.6F	8 W	0459	0801	2.2F	23 Th		0225	2.6E			
	0801	1123	2.0E		0424	0656	1.3F		0924	1251	2.4E		1038	1359	2.2E		1058	1426	3.2E		0514	0831	1.9F			
	1403	1708	2.1F		1518	1858	2.4F		1526	1838	2.6F		1639	2004	2.0F		1710	2015	2.5F		1124	1450	2.5E	1738	2047	1.6F
	2042				2204				2205				2255				2325				2328					
9 F		0029	2.7E	24 Sa	0512	0745	1.4F	9 M	0446	0738	1.7F	24 Tu	0540	0840	1.7F	9 Th	0542	0846	2.4F	24 F		0255	2.6E			
	0853	1214	2.1E		0512	0745	1.4F		1018	1345	2.7E		1120	1441	2.3E		1151	1517	3.2E		0542	0855	1.9F			
	1451	1756	2.4F		1607	1943	2.3F		1622	1929	2.7F		1721	2042	1.9F		1804	2107	2.3F		1158	1523	2.5E	1814	2120	1.5F
	2131				2247				2256				2330								1814	2120	1.5F			
10 Sa		0118	3.0E	25 Su	0552	0830	1.5F	10 Tu	0529	0821	1.9F	25 W	0604	0916	1.7F	10 F	0625	0936	2.4F	25 Sa		0323	2.5E			
	0944	1306	2.3E		0552	0830	1.5F		1112	1437	2.9E		1159	1519	2.3E		1243	1606	3.2E		0612	0911	1.9F			
	1541	1844	2.6F		1653	2026	2.2F		1716	2019	2.6F		1800	2120	1.7F		1857	2205	2.1F		1232	1554	2.6E	1852	2155	1.4F
	2221				2328				2345												1852	2155	1.4F			
11 Su		0205	3.2E	26 M	0625	0914	1.5F	11 W	0611	0909	2.1F	26 Th	0629	0951	1.7F	11 Sa	0710	1031	2.4F	26 Su		0351	2.5E			
	0511	0755	1.5F		0625	0914	1.5F		1206	1528	3.0E		1237	1554	2.3E		1334	1657	3.0E		0645	0925	1.9F			
	1035	1356	2.5E		1147	1505	2.2E		1810	2113	2.5F		1838	2158	1.6F		1954	2306	1.8F		1307	1624	2.6E	1935	2234	1.3F
	1632	1931	2.7F		1737	2109	2.1F														1935	2234	1.3F			
12 M		0251	3.3E	27 Tu	0005	0337	2.9E	12 Th	0032	0400	3.3E	27 F	0038	0402	2.6E	12 Su	0145	0507	2.7E	27 M		0423	2.3E			
	0555	0839	1.6F		0005	0337	2.9E		0654	1001	2.2F		0657	1023	1.7F		0757	1127	2.3F		0721	0957	2.0F			
	1127	1446	2.6E		0653	0957	1.6F		1259	1618	3.0E		1312	1625	2.3E		1426	1751	2.7E		1345	1659	2.5E	2024	2320	1.2F
	1724	2019	2.7F		1819	2152	1.8F		1905	2214	2.3F		1917	2236	1.4F		2059				2024	2320	1.2F			
13 Tu		0002	0.336	28 W	0039	0412	2.8E	13 F	0119	0444	3.2E	28 Sa	0113	0427	2.5E	13 M	0233	0556	2.4E	28 Tu		0500	2.2E			
	0638	0929	1.7F		0039	0412	2.8E		0739	1057	2.2F		0729	1049	1.7F		0849	1223	2.2F		0802	1041	2.0F			
	1221	1536	2.8E		1311	1623	2.1E		1352	1710	2.9E		1347	1654	2.2E		1520	1854	2.5E		1428	1741	2.5E	2120		
	1817	2114	2.6F		1901	2236	1.6F		2003	2316	2.0F		1959	2315	1.3F		2213				2120					
14 W		0050	0.420	29 Th	0112	0442	2.6E	14 Sa	0205	0529	2.9E	29 Su	0150	0455	2.4E	14 Tu	0106	0317	1.3F	29 W		0012	1.1F			
	0722	1026	1.8F		0112	0442	2.6E		0828	1152	2.2F		0804	1108	1.7F		0325	0657	2.0E							

George Washington Bridge, Hudson River, 2010

F—Flood, Dir. 010° True E—Ebb, Dir. 203° True

October				November				December															
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots								
h m	h m	h m		h m	h m	h m		h m	h m	h m		h m	h m	h m									
1 F	0440	0753	1.7E	16 Sa	0624	0957	1.6E	1 M	0639	1015	2.4E	16 Tu	0741	1107	1.9E	1 W	0727	1059	2.8E	16 Th	0738	1115	2.0E
	1052	1343	1.9F		1237	1556	1.5F		1255	1600	1.8F		1410	1706	1.1F		1354	1651	1.6F		1420	1713	1.0F
	1720	2123	2.4E		1844	2230	2.3E		1905	2248	2.7E		1926	2311	2.1E		1935	2314	2.7E		1925	2304	2.0E
2 Sa	0026	0314	1.1F	17 Su	0158	0443	1.3F	2 Tu	0136	0445	2.0F	17 W	0200	0529	1.7F	2 Th	0154	0517	2.4F	17 F	0143	0512	1.8F
	0546	0922	1.9E		0727	1049	1.8E		0743	1115	2.7E		0822	1150	2.1E		0827	1157	3.0E		0818	1158	2.3E
	1158	1459	1.9F		1340	1652	1.4F		1402	1708	1.9F		1455	1753	1.2F		1500	1756	1.6F		1504	1801	1.1F
	1829	2222	2.6E		1935	2314	2.3E		2004	2340	2.8E		2011	2350	2.1E		2032				2015	2344	2.0E
3 Su	0120	0415	1.3F	18 M	0231	0532	1.5F	3 W	0225	0541	2.3F	18 Th	0233	0605	1.8F	3 F		0007	2.7E	18 Sa	0222	0545	1.9F
	0655	1029	2.2E		0817	1137	2.0E		0841	1212	3.0E		0859	1232	2.3E		0245	0612	2.6F		0857	1241	2.5E
	1305	1614	2.0F		1435	1744	1.4F		1505	1810	1.9F		2054	1535	1.835		0922	1252	3.2E		1547	1844	1.2F
	1933	2316	2.7E		2018	2355	2.4E		2058								1602	1853	1.7F		2103		
4 M	0211	0513	1.6F	19 Tu	0259	0614	1.7F	4 Th		0031	2.9E	19 F		0027	2.2E	4 Sa		0059	2.7E	19 Su		0026	2.0E
	0758	1129	2.6E		0859	1222	2.2E		0313	0633	2.5F		0306	0635	1.9F		0334	0703	2.7F		0303	0614	2.1F
	1409	1723	2.1F		1522	1829	1.5F		0936	1307	3.2E		0934	1312	2.5E		1014	1345	3.3E		0937	1323	2.8E
	2031				2057				1604	1905	2.0F		1613	1913	1.3F		1700	1947	1.7F		1630	1923	1.3F
5 Tu		0007	2.9E	20 W		0034	2.4E	5 F		0121	2.9E	20 Sa		0104	2.2E	5 Su		0150	2.6E	20 M		0109	2.1E
	0258	0607	2.0F		0327	0650	1.8F		0400	0720	2.7F		0342	0658	2.1F		0422	0751	2.7F		0345	0645	2.3F
	0855	1227	2.9E		0936	1304	2.3E		1028	1359	3.3E		1009	1350	2.7E		1104	1435	3.3E		1020	1405	3.0E
	1511	1824	2.2F		1602	1908	1.5F		1701	1956	1.9F		1652	1948	1.4F		1754	2039	1.6F		1713	2000	1.3F
	2123				2135				2240				2220				2314				2238		
6 W		0057	3.0E	21 Th		0110	2.4E	6 Sa		0209	2.9E	21 Su		0140	2.2E	6 M		0238	2.5E	21 Tu		0153	2.2E
	0344	0655	2.3F		0355	0720	1.9F		0446	0806	2.7F		0418	0717	2.2F		0509	0838	2.6F		0429	0720	2.5F
	0950	1321	3.1E		1012	1343	2.5E		1119	1450	3.4E		1047	1428	2.9E		1153	1524	3.3E		1105	1447	3.2E
	1609	1916	2.3F		1639	1943	1.5F		1755	2048	1.8F		1732	2022	1.4F		1846	2135	1.5F		1756	2039	1.4F
	2213				2213				2331				2305								2325		
7 Th		0145	3.1E	22 F		0144	2.4E	7 Su		0257	2.7E	22 M		0217	2.3E	7 Tu		0326	2.3E	22 W		0237	2.3E
	0429	0740	2.5F		0426	0744	2.0F		0532	0854	2.6F		0457	0741	2.4F		0555	0930	2.4F		0515	0801	2.6F
	1043	1413	3.3E		1046	1420	2.6E		1209	1540	3.3E		1127	1506	3.0E		1239	1611	3.2E		1152	1530	3.3E
	1705	2006	2.2F		1715	2016	1.5F		1849	2146	1.6F		1814	2058	1.4F		1937	2232	1.5F		1838	2122	1.5F
	2302				2253								2349										
8 F		0231	3.1E	23 Sa		0216	2.4E	8 M		0343	2.5E	23 Tu		0256	2.3E	8 W		0412	2.2E	23 Th		0322	2.5E
	0513	0825	2.6F		0458	0801	2.0F		0616	0947	2.4F		0537	0816	2.5F		0641	1024	2.2F		0604	0847	2.6F
	1135	1504	3.4E		1120	1454	2.7E		1258	1628	3.2E		1210	1545	3.1E		1323	1656	3.0E		1240	1612	3.2E
	1758	2058	2.1F		1752	2048	1.5F		1945	2246	1.5F		1858	2142	1.3F		2028	2325	1.4F		1922	2215	1.5F
	2351				2334																		
9 Sa		0317	3.0E	24 Su		0248	2.4E	9 Tu		0429	2.3E	24 W		0337	2.3E	9 Th		0458	1.9E	24 F		0410	2.5E
	0557	0913	2.6F		0532	0815	2.1F		0702	1044	2.2F		0621	0859	2.5F		0729	1119	1.9F		0656	0944	2.5F
	1226	1553	3.3E		1156	1527	2.8E		1345	1717	2.9E		1256	1626	3.1E		1405	1740	2.7E		1329	1655	3.1E
	1852	2155	1.8F		1831	2121	1.4F		2046	2344	1.4F		1945	2237	1.3F		2117				2008	2311	1.6F
10 Su		0039	2.8E	25 M		0015	2.4E	10 W		0517	2.0E	25 Th		0421	2.3E	10 F		0014	1.4F	25 Sa		0500	2.5E
	0642	1007	2.5F		0607	0842	2.2F		0752	1140	2.0F		0709	0952	2.4F		0236	0546	1.7E		0753	1052	2.2F
	1316	1643	3.1E		1234	1602	2.9E		1432	1809	2.7E		1345	1710	3.0E		0824	1210	1.7F		1418	1741	3.0E
	1948	2256	1.6F		1915	2203	1.3F		2151				2035	2334	1.4F		1446	1826	2.4E		2057		
11 M		0127	2.5E	26 Tu		0058	2.3E	11 Th		0038	1.3F	26 F		0509	2.2E	11 Sa		0101	1.4F	26 Su		0005	1.8F
	0728	1104	2.3F		0646	0920	2.3F		0255	0610	1.7E		0805	1056	2.2F		0326	0642	1.5E		0251	0557	2.4E
	1405	1735	2.8E		1317	1640	2.9E		0848	1235	1.8F		1436	1801	2.8E		0926	1300	1.4F		0857	1202	2.0F
	2053	2356	1.4F		2004	2256	1.2F		1519	1905	2.4E		2129				1526	1916	2.2E		1509	1836	2.7E
12 Tu		0217	2.1E	27 W		0142	2.2E	12 F		0131	1.2F	27 Sa		0029	1.4F	12 Su		0146	1.4F	27 M		0059	1.9F
	0819	1201	2.1F		0731	1010	2.2F		0350	0717	1.5E		0307	0606	2.1E		0418	0749	1.4E		0350	0710	2.3E
	1456	1833	2.6E		1403	1724	2.8E		0954	1330	1.6F		0910	1208	2.0F		1033	1350	1.2F		1008	1309	1.8F
	2206				2059	2353	1.2F		1607	2006	2.2E		1531	1904	2.6E		1608	2009	2.0E		1602	1944	2.5E
13 W		0054	1.2F	28 Th		0229	2.1E	13 Sa		0223	1.3F	28 Su		0125	1.6F	13 M		0231	1.5F	28 Tu		0156	2.0F
	0309	0632	1.8E		0823	1110	2.1F		0450	0828	1.4E		0407	0725	2.1E		0512	0852	1.5E		0454	0833	2.3E
	0916	1258	1.9F		1455	1818	2.6E		1104	1426	1.4F		1021	1321	1.9F		1139	1440	1.0F		1121	1417	1.6F
	1550	1939	2.3E		2158																		

Kingston–Rhinecliff Bridge, Hudson River, 2010

F–Flood, Dir. 011° True E–Ebb, Dir. 191° True

January				February				March															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0239	0553	1.3E	16 Sa	0338	0703	1.1E	1 M	0410	0732	1.4E	16 Tu	0416	0725	1.3E	1 M	0258	0629	1.5E	16 Tu	0257	0613	1.3E
	0858	1126	1.5F		0949	1216	1.1F		1031	1255	1.4F		1043	1300	1.0F		0927	1151	1.4F		0936	1154	1.1F
	1445	1833	1.5E		1535	1942	1.4E		1614	1955	1.6E		1616	1940	1.5E		1507	1855	1.6E		1506	1828	1.4E
	2207				2242				2315				2306				2203				2151		
2 Sa	0332	0649	1.3E	17 Su	0419	0732	1.1E	2 Tu	0503	0821	1.5E	17 W	0451	0759	1.3E	2 Tu	0349	0722	1.5E	17 W	0332	0649	1.4E
	0950	1216	1.5F		1031	1251	1.0F		1126	1349	1.3F		1124	1341	1.0F		1020	1244	1.3F		1016	1233	1.1F
	1536	1923	1.6E		1611	1953	1.4E		1707	2037	1.6E		1657	2016	1.5E		1600	1939	1.6E		1548	1908	1.4E
	2254				2314				0003	0235	1.2F		0526	0834	1.4E		0440	0810	1.5E		0407	0727	1.5E
3 Su	0427	0742	1.4E	18 M	0458	0801	1.2E	3 W	0555	0908	1.4E	18 Th	0526	0834	1.4E	3 W	1114	1339	1.2F	18 Th	1058	1315	1.1F
	1043	1308	1.4F		1112	1329	1.0F		1224	1448	1.1F		1741	2055	1.4E		1653	2021	1.5E		1631	1948	1.4E
	1628	2008	1.6E		1647	2014	1.4E		1801	2121	1.5E		1918	2228	1.2E		2335				2303		
	2341				2348				0053	0329	1.2F		0604	0913	1.3E		0530	0208	1.3F		0444	0805	1.5E
4 M	0523	0832	1.4E	19 Tu	0536	0832	1.2E	4 Th	0648	1002	1.3E	19 F	0604	0913	1.3E	4 Th	1211	1439	1.1F	19 F	1144	1400	1.0F
	1139	1402	1.3F		1154	1410	0.9F		1328	1554	1.0F		1300	1515	0.9F		1747	2103	1.4E		1717	2029	1.4E
	1721	2052	1.5E		1726	2045	1.4E		1857	2211	1.3E		1827	2138	1.3E		0023	0259	1.2F		0525	0846	1.5E
									0146	0428	1.1F		0742	1121	1.2E		0621	0949	1.4E		1804	2112	1.3E
5 Tu	0618	0922	1.3E	20 W	0613	0907	1.2E	5 F	0742	1121	1.2E	20 Sa	0647	0958	1.3E	5 F	0621	0949	1.4E	20 Sa	0525	0846	1.5E
	1238	1500	1.2F		1240	1455	0.9F		1437	1712	0.9F		1359	1610	0.8F		1314	1548	0.9F		1236	1449	0.9F
	1816	2139	1.5E		1808	2123	1.4E		1957	2316	1.2E		1918	2228	1.2E		1843	2149	1.2E		1804	2112	1.3E
									0242	0530	1.1F		0153	0422	1.1F		0115	0354	1.1F		0027	0258	1.3F
6 W	0713	1020	1.2E	21 Th	0650	0947	1.2E	6 Sa	0840	1255	1.3E	21 Su	0736	1052	1.2E	6 Sa	0714	1106	1.3E	21 Su	0611	0930	1.4E
	1343	1606	1.0F		1331	1545	0.8F		1549	1827	0.8F		1505	1712	0.7F		1422	1705	0.8F		1335	1544	0.8F
	1913	2235	1.3E		1854	2208	1.3E		2103				2014	2325	1.1E		1941	2247	1.1E		1855	2201	1.2E
									0340	0631	1.0F		0248	0517	1.1F		0211	0457	1.0F		0119	0351	1.2F
7 Th	0810	1139	1.2E	22 F	0731	1034	1.2E	7 Su	0943	1406	1.3E	22 M	0832	1156	1.2E	7 Su	0810	1236	1.2E	22 M	0703	1023	1.3E
	1452	1720	0.9F		1429	1641	0.8F		1659	1938	0.8F		1611	1818	0.6F		1534	1816	0.7F		1440	1648	0.7F
	2015	2348	1.2E		1946	2300	1.2E		2212				2119				2044				1952	2259	1.1E
									0200	0444	1.0E		0348	0614	1.2F		0310	0016	0.9E		0220	0449	1.1F
8 F	0910	1311	1.2E	23 Sa	0817	1129	1.1E	8 M	1044	1506	1.4E	23 Tu	0935	1307	1.2E	8 M	0911	1345	1.3E	23 Tu	0802	1128	1.2E
	1603	1836	0.9F		1532	1741	0.7F		1802	2044	0.8F		1713	1926	0.7F		1642	1921	0.7F		1546	1757	0.6F
	2122				2043	2357	1.1E		2315				2225				2150				2057		
									0300	0531	1.0E		0348	0614	1.2F		0411	0138	0.9E		0325	0550	1.1F
9 Sa	0410	0700	1.1F	24 Su	0910	1230	1.2E	9 Tu	1140	1558	1.5E	24 W	1039	1422	1.2E	9 Tu	1014	1443	1.3E	24 W	0908	1245	1.2E
	1012	1422	1.4E		1635	1843	0.7F		1856	2140	0.9F		1809	2036	0.7F		1739	2022	0.8F		1647	1906	0.7F
	1711	1950	0.8F		2146				0010	0351	1.1E		2326				2253				2206		
	2231								0623	0926	1.1F		0546	0814	1.2F		0411	0705	0.9F		0325	0550	1.1F
10 Su	0504	0759	1.1F	25 M	1007	1332	1.2E	10 W	1228	1645	1.5E	25 Th	1139	1531	1.3E	10 W	1110	1533	1.3E	25 Th	1017	1410	1.2E
	1815	2058	0.9F		1735	1948	0.7F		1942	2226	0.9F		1900	2133	0.9F		1827	2115	0.8F		1741	2014	0.8F
	2334				2248				0058	0437	1.1E		2022	0336	1.2E		0509	0808	0.9F		0431	0652	1.1F
									0712	1010	1.1F		0643	0914	1.3F		1110	1533	1.3E		1017	1410	1.2E
11 M	0555	0856	1.2F	26 Tu	1103	1435	1.3E	11 Th	1310	1728	1.5E	26 F	1233	1626	1.4E	11 Th	1157	1615	1.3E	26 F	1119	1518	1.3E
	1203	1617	1.6E		1831	2053	0.7F		2022	2306	1.0F		1948	2220	1.0F		1906	2157	0.9F		1831	2112	1.0F
	1913	2157	0.9F		2345				0142	0518	1.1E		0222	0336	1.2E		0602	0903	0.9F		0532	0757	1.2F
									0759	1046	1.1F		0115	0434	1.3E		1157	1615	1.3E		1119	1518	1.3E
12 Tu	0030	0410	1.2E	27 W	0603	0834	1.3F	12 F	1349	1806	1.4E	27 Sa	1324	1717	1.5E	12 F	1237	1651	1.3E	27 Sa	1215	1609	1.4E
	0644	0946	1.2F		1157	1536	1.4E		2056	2340	1.0F		2034	2304	1.2F		1940	2232	1.0F		1919	2200	1.2F
	1252	1707	1.6E		1923	2149	0.8F						0207	0531	1.4E		1237	1651	1.3E		1215	1609	1.4E
	2006	2246	1.0F						0223	0554	1.2E		0207	0531	1.4E		1940	2232	1.0F		1919	2200	1.2F
13 W	0733	1029	1.2F	28 Th	0657	0929	1.4F	13 Sa	0843	1118	1.0F	28 Su	0834	1101	1.4F	13 Sa	0735	1020	1.0F	28 Su	0727	0959	1.3F
	1337	1755	1.6E		1249	1633	1.4E		1425	1834	1.4E		1416	1807	1.6E		1313	1716	1.3E		1307	1657	1.5E
	2052	2331	1.0F		2013	2236	0.9F		2128				2119	2348	1.3F		2012	2259	1.0F		2005	2243	1.3F
									0008	0302	1.0F		0207	0531	1.4E		0110	0445	1.2E		0058	0427	1.4E
14 Th	0820	1107	1.1E	29 F	0751	1022	1.5F	14 Su	0924	1148	1.0F	14 Su	0834	1101	1.4F	14 Su	0817	1050	1.0F	29 M	0727	0959	1.3F
	1419	1840	1.5E		1340	1729	1.5E		1500	1849	1.4E		1416	1807	1.6E		1349	1729	1.3E		1359	1746	1.5E
	2132				2059	2321	1.0F		2200				2119	2348	1.3F		2044	2321	1.1F		2051	2326	1.4F
									0032	0340	1.0F		0207	0531	1.4E		0147	0513	1.2E		0148	0523	1.5E
15 F	0254	0626	1.0F	30 Sa	0845	1112	1.5F	15 M	1003	1222	1.0F	15 M	0857	1120	1.0F	15 M	0857	1120	1.0F	30 Tu	0916	1142	1.3F
	0906	1142	1.1F		1431	1824	1.5E		1537	1909	1.4E		1426	1753	1.4E		1426	1753	1.4E		1452	1835	1.5E
	1458	1																					

Kingston–Rhinecliff Bridge, Hudson River, 2010

F–Flood, Dir. 011° True E–Ebb, Dir. 191° True

July				August				September																			
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots												
h m	h m	h m		h m	h m	h m		h m	h m	h m		h m	h m	h m													
1 Th	0018 0553 1258 1845	0237 0913 1544 2132	0.8F 1.3E 0.9F 1.0E	16 F	0008 0545 1249 1838	0229 0908 1517 2144	1.2F 1.5E 1.1F 1.3E	1 Su	0116 0637 1327 1913	0328 0948 1551 2212	0.8F 1.3E 1.0F 1.1E	16 M ●	0201 0723 1408 2005	0428 1034 1647 2205	0.9F 1.2E 1.1F 1.1E	1 W ○	0239 0753 1423 2003	0448 1100 1651 2325	0.7F 1.1E 1.1F 1.2E	16 Th	0410 0924 1545 2145	0652 1308 1836 2445	0.8F 0.9E 0.9F 1.0F				
2 F	0106 0631 1336 1924	0321 0943 1614 2211	0.7F 1.2E 0.9F 1.0E	17 Sa	0110 0640 1342 1934	0329 0958 1615 2246	1.1F 1.4E 1.1F 1.2E	2 M ○	0210 0725 1412 1955	0421 1036 1638 2303	0.7F 1.2E 1.0F 1.1E	17 Tu	0313 0828 1507 2107	0548 1149 1752 2317	0.8F 1.1E 1.1F 1.1F	2 Th	0344 0855 1521 2104	0553 1201 1748 2314	0.6F 1.0E 1.1F 1.1E	17 F	0513 1030 1647 2248	0756 1417 1943 2548	0.8F 1.0E 1.0F 1.0F				
3 Sa	0158 0712 1417 2005	0409 1024 1649 2258	0.7F 1.2E 0.9F 1.0E	18 Su ○	0216 0738 1438 2033	0438 1058 1717 2303	0.9F 1.3E 1.1F 1.1F	3 Tu	0310 0820 1502 2044	0520 1131 1728 2344	0.7F 1.1E 1.0F 1.0F	18 W	0426 0939 1608 2213	0704 1323 1857 2413	0.8F 1.0E 1.0F 1.0F	3 F	0447 1000 1621 2209	0659 1305 1846 2409	0.6F 1.0E 1.1F 1.1E	18 Sa	0605 1128 1744 2341	0853 1513 2045 2641	0.9F 1.1E 0.9F 1.0F				
4 Su ○	0252 0800 1501 2048	0503 1114 1729 2350	0.6F 1.1E 0.9F 1.0E	19 M	0327 0843 1536 2135	0554 1214 1819 2355	0.9F 1.2E 1.1F 1.1F	4 W	0412 0922 1554 2139	0621 1230 1819 2399	0.6F 1.1E 1.1F 1.1F	19 Th	0533 1049 1706 2314	0814 1434 2003 2514	0.8F 1.1E 1.1F 1.1F	4 Sa	0543 1102 1720 2311	0806 1408 1946 2511	0.7F 1.1E 1.2F 1.2E	19 Su	0648 1216 1837 2436	0940 1600 2136 2736	1.0F 1.2E 1.0F 1.0F				
5 M	0348 0855 1547 2134	0558 1209 1812 2344	0.6F 1.1E 1.0F 1.0F	20 Tu	0438 0954 1633 2238	0711 1338 1920 2538	0.8F 1.1E 1.1F 1.1F	5 Th	0512 1026 1647 2237	0724 1329 1913 2537	0.7F 1.1E 1.2F 1.2F	20 F	0631 1150 1802	0916 1505 2105	0.9F 1.1E 1.1F	5 Su	0633 1157 1817	0905 1508 2046	0.8F 1.2E 1.3F	20 M	0725 1258 1924	1019 1641 2217	1.0F 1.2E 1.0F				
6 Tu	0443 0955 1633 2221	0655 1304 1858 2421	0.7F 1.1E 1.1F 1.1F	21 W	0545 1104 1728 2336	0825 1448 2022 2636	0.9F 1.2E 1.2F 1.2F	6 F	0608 1124 1739 2332	0830 1426 2008 2632	0.7F 1.1E 1.2F 1.2F	21 Sa	0721 1242 1854	1007 1621 2156	1.0F 1.2E 1.1F	6 M	0721 1248 1914	0953 1604 2143	1.0F 1.3E 1.3F	21 Tu	0759 1336 2008	1050 1716 2250	1.1F 1.2E 1.0F				
7 W	0537 1053 1719 2309	0754 1357 1946 2509	0.7F 1.1E 1.2F 1.2F	22 Th	0646 1205 1820	0930 1546 2120	0.9F 1.2E 1.2F	7 Sa	0700 1217 1833	0928 1522 2104	0.8F 1.2E 1.3F	22 Su	0804 1328 1944	1050 1707 2238	1.0F 1.2E 1.1F	7 Tu	0806 1338 2008	1036 1659 2235	1.1F 1.4E 1.4F	22 W	0831 1411 2049	1115 1744 2318	1.1F 1.3E 1.0F				
8 Th	0629 1147 1805 2356	0854 1449 2036 2556	0.8F 1.2E 1.3F 1.3F	23 F	0742 1301 1912	1024 1634 2210	1.0F 1.2E 1.2F	8 Su	0749 1307 1927	1014 1617 2158	0.9F 1.3E 1.4F	23 M	0842 1410 2031	1127 1750 2315	1.0F 1.2E 1.1F	8 W ●	0850 1428 2101	1117 1755 2325	1.3F 1.5E 1.4F	23 Th ○	0903 1445 2127	1136 1808 2348	1.1F 1.3E 1.0F				
9 F	0721 1238 1853	0946 1541 2126	0.8F 1.2E 1.4F	24 Sa	0831 1351 2002	1112 1728 2254	1.0F 1.2E 1.2F	9 M ●	0835 1357 2021	1057 1712 2248	1.0F 1.3E 1.5F	24 Tu ○	0915 1450 2115	1159 1827 2347	1.1F 1.2E 1.0F	9 Th	0934 1517 2154	1201 1850 2544	1.3F 1.5E 1.5E	24 F	0936 1518 2205	1200 1838 2505	1.2F 1.3E 1.3E				
10 Sa	0811 1327 1943	1031 1633 2215	0.9F 1.2E 1.5F	25 Su ○	0915 1439 2051	1156 1816 2335	1.0F 1.2E 1.2F	10 Tu	0919 1448 2114	1139 1808 2337	1.1F 1.4E 1.5F	25 W	0947 1528 2155	1226 1856 2555	1.1F 1.2E 1.2E	10 F	1019 1608 2247	1246 1941 2547	1.4F 1.6E 1.6E	25 Sa	1010 1552 2245	1232 1912 2545	1.2F 1.4E 1.4E				
11 Su ●	0858 1416 2035	1114 1727 2303	1.0F 1.3E 1.5F	26 M	0954 1524 2137	1237 1859 2537	1.0F 1.2E 1.2E	11 W	1002 1539 2206	1223 1903 2506	1.2F 1.4E 1.4E	26 Th	1018 1603 2234	1249 1920 2534	1.1F 1.3E 1.3E	11 Sa	1104 1658 2342	1333 2028 2542	1.3F 1.5E 1.5E	26 Su	1045 1627 2328	1309 1949 2528	1.3F 1.4E 1.4E				
12 M	0944 1507 2126	1158 1823 2352	1.0F 1.3E 1.5F	27 Tu	1029 1606 2221	1314 1933 2521	1.0F 1.2E 1.2E	12 Th	1046 1630 2259	1310 1952 2559	1.3F 1.5E 1.5E	27 F	1051 1638 2313	1315 1948 2513	1.1F 1.3E 1.3E	12 Su	1152 1749	1423 2116	1.3F 1.5E	27 M	1123 1705	1350 2027	1.3F 1.4E				
13 Tu	1028 1559 2218	1244 1916 2518	1.1F 1.4E 1.4E	28 W	1102 1646 2303	1345 1959 2503	1.0F 1.2E 1.2E	13 F	1132 1722 2354	1359 2039 2554	1.3F 1.5E 1.5E	28 Sa	1125 1711 2355	1348 2020 2555	1.1F 1.3E 1.3E	13 M	1244 1842	1517 2216	1.2F 1.3E	28 Tu	1206 1748	1435 2109	1.3F 1.4E				
14 W	1113 1651 2311	1332 2005 2511	1.1F 1.4E 1.4E	29 Th	1135 1723 2345	1409 2025 2545	1.0F 1.2E 1.2E	14 Sa	1220 1814	1450 2127	1.2F 1.4E	29 Su	1202 1747	1426 2056	1.2F 1.3E	14 Tu	1340 1938	1618 2355	1.1F 1.3E	29 W	1254 1837	1525 2157	1.2F 1.3E				
15 Th	1045 1159 1745	0134 0824 1423 2053	1.4F 1.6E 1.1F 1.4E	30 F	0516 1209 1759	0835 1436 2055	0.9F 1.0F 1.2E	15 Su	0625 1312 1908	0938 1545 2227	1.4E 1.2F 1.3E	30 M	0610 1243 1826	0918 1509 2136	1.3E 1.1F 1.3E	15 W ○	0815 1441 2040	1130 1727 2340	1.0E 1.0F 1.0F	30 Th ○	0730 1352 1933	1033 1621 2256	1.1E 1.1F 1.2E				
				31 Sa	0029 0555 1246 1835	0242 0908 1510 2130	0.8F 1.3E 1.0F 1.2E					31 Tu	0137 0659 1329 1911	0348 1005 1558 2225	0.8F 1.2E 1.1F 1.2E												

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Kingston–Rhinecliff Bridge, Hudson River, 2010

F—Flood, Dir. 011° True E—Ebb, Dir. 191° True

October				November				December															
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots								
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m								
1 F	0316 0831 1456 2035	0527 1136 1721	0.7F 1.0E 1.1F	16 Sa	0439 1003 1626 2211	0727 1353 1918	0.8F 1.0E 0.8F	1 M	0438 1017 1650 2223	0707 1337 1908	0.9F 1.2E 1.0F	16 Tu	0512 1102 1745 2301	0810 1454 2026	1.1E 1.1E 0.7F	1 W	0456 1052 1736 2301	0734 1437 2000	1.1F 1.3E 1.0F	16 Th	0459 1053 1754 2307	0733 1415 2024	1.1E 1.0F 0.7F
2 Sa	0418 0937 1602 2143	0634 1245 1823	1.2E 0.7F 1.0E 1.1F	17 Su	0525 1057 1724 2303	0818 1447 2017	1.2E 0.9F 1.1E 0.8F	2 Tu	0529 1115 1750 2323	0805 1445 2014	1.0F 1.3E 1.1F	17 W	0548 1140 1828 2345	0842 1524 2109	1.0F 1.1E 0.7F	2 Th	0547 1147 1836	0831 1540 2109	1.3E 1.2F 1.5E 1.0F	17 F	0539 1131 1840 2356	0811 1451 2112	1.1E 1.1F 1.2E 0.8F
3 Su	0512 1040 1705 2248	0738 1352 1926	0.8F 1.1E 1.1F	18 M	0603 1143 1814 2347	0902 1532 2107	0.9F 1.2E 0.8F	3 W	0617 1208 1848	0859 1546 2118	1.2F 1.4E 1.1F	18 Th	0623 1215 1910	0909 1541 2146	1.1F 1.2E 0.8F	3 F	0637 1237 1934	0924 1637 2210	1.3F 1.6E 1.1F	18 Sa	0620 1209 1926	0852 1531 2155	1.2F 1.3E 0.8F
4 M	0602 1137 1804 2346	0837 1456 2030	0.9F 1.3E 1.2F	19 Tu	0638 1222 1859	0938 1608 2147	1.0F 1.2E 0.9F	4 Th	0705 1257 1944	0948 1642 2215	1.3F 1.5E 1.2F	19 F	0700 1248 1952	0937 1608 2220	1.2F 1.3E 0.9F	4 Sa	0727 1327 2031	1013 1734 2304	1.4F 1.6E 1.1F	19 Su	0703 1249 2012	0935 1615 2235	1.3F 1.4E 0.9F
5 Tu	0649 1228 1901	0928 1554 2130	1.1F 1.4E 1.2F	20 W	0711 1257 1941	1005 1634 2219	1.1F 1.1E 0.9F	5 F	0753 1346 2039	1032 1739 2308	1.4F 1.6E 1.2F	20 Sa	0739 1323 2034	1009 1644 2255	1.3F 1.4E 1.0F	5 Su	0817 1416 2125	1058 1831 2359	1.4F 1.7E 1.1F	20 M	0747 1331 2059	1018 1702 2315	1.4F 1.5E 0.9F
6 W	0735 1318 1956	1012 1649 2224	1.4E 1.3F 1.5E 1.3F	21 Th	0745 1330 2020	1026 1653 2248	1.1F 1.3E 0.9F	6 Sa	0840 1435 2133	1116 1837	1.5F 1.6E	21 Su	0819 1359 2118	1046 1727 2334	1.4F 1.5E 1.0F	6 M	0906 1507 2217	1144 1924	1.4F 1.7E	21 Tu	0833 1416 2144	1102 1753 2356	1.5F 1.5E 1.0F
7 Th	0821 1407 ● 2050	1055 1745 2314	1.4E 1.5E 1.3F	22 F	0819 1402 ● 2059	1050 1722 2320	1.2F 1.3E 1.0F	7 Su	0928 1524 2228	1201 1931	1.4F 1.7E	22 M	0900 1440 2203	1126 1813	1.4F 1.5E	7 Tu	0955 1557 2309	1231 2012	1.3F 1.7E	22 W	0920 1504 2229	1148 1845	1.5F 1.6E
8 F	0907 1455 2143	1138 1841	1.4F 1.6E	23 Sa	0855 1436 2140	1120 1759 2356	1.3F 1.4E 1.0F	8 M	0928 1524 2322	1201 1931	1.4F 1.7E	23 Tu	0942 1524 2249	1209 1901	1.5F 1.6E	8 W	1045 1647 2358	1320 2055	1.2F 1.6E	23 Th	1009 1553 2314	1236 1932	1.5F 1.6E
9 Sa	0952 1545 2236	1222 1934	1.4F 1.6E	24 Su	0932 1512 2222	1156 1840	1.4F 1.5E	9 Tu	1104 1706	1338 2109	1.2F 1.6E	24 W	1161 2336	1947	1.6E	9 Th	1734	2135	1.5E	24 F	1643 2359	2016	1.5E
10 Su	1039 1635 2332	1309 2023	1.4F 1.6E	25 M	1011 1550 2307	1236 1922	1.4F 1.5E	10 W	1156 1758	1431 2200	1.1F 1.4E	25 Th	1115 1700	1345 2031	1.4F 1.5E	10 F	1820	2209	1.3E	25 Sa	1735	2100	1.5E
11 M	1127 1727	1359 2112	1.3F 1.5E	26 Tu	1051 1633 2356	1320 2004	1.4F 1.5E	11 Th	1252 1848	1529 2301	1.0F 1.3E	26 F	1210 1753	1438 2117	1.3F 1.4E	11 Sa	1903	2238	1.1E	26 Su	1827	2148	1.4E
12 Tu	1218 1819	1452 2212	1.2F 1.4E	27 W	1137 1720	1408 2048	1.3F 1.5E	12 F	1353 1939	1637	0.8F 0.8F	27 Sa	1311 1847	1535 2209	1.2F 1.3E	12 Su	1946	2312	1.0E	27 M	1923	2244	1.3E
13 W	1315 1914	1553 2334	1.0F 1.3E	28 Th	1229 1812	1459 2136	1.3F 1.4E	13 Sa	1457 2031	1744	0.7F	28 Su	1418 1946	1637 2311	1.0F 1.2E	13 M	2032	2355	1.0E	28 Tu	2025	2350	1.2E
14 Th	1417 ● 2011	1704 2011	0.9F 0.9E	29 F	1329 1908	1556 2232	1.2F 1.3E	14 Su	1600 2124	1843 2124	0.9E 0.7F	29 M	1527 2049	1743	1.0F	14 Tu	2122			29 W	2133		
15 F	1522 2112	1814 2112	0.9E 0.8F	30 Sa	1436 2010	1658 2339	1.1F 1.2E	15 M	1656 2215	1937	0.7F	30 Tu	1634 2156	1851	0.9F	15 W	2215			30 Th	2242		
				31 Su	1545 2116	1803	1.0F													31 F	2347		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Bergen Point Reach (Bayonne Bridge), New York, 2010

F—Flood, Dir. 259° True E—Ebb, Dir. 076° True

July				August				September																				
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum														
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m													
1 Th		0202	1.5E	16 F		0546	2.0F	1 Su		0526	1.7F	16 M		0703	1.7F	1 W		0612	1.7F	16 Th		0216	1.2E					
	0507	0733	1.7F		1155	1504	1.8E		1132	1513	1.4E		1320	1600	1.6E		1238	1557	1.5E		0845	1059	1.3F					
	1108	1426	1.3E		1809	2032	1.9F		1745	2103	1.5F		1949	2201	1.5F		1918	2227	1.4F		1433	1701	1.3E					
	1710	1954	1.6F						2350				0138	0408	1.4E		0124	0421	1.3E		2121	2343	1.4F	0310	0531	1.0E		
2 F		0245	1.6E	17 Sa		0001	0314	1.7E	2 M		0601	0927	1.6F	17 Tu		0808	1031	1.5F	2 Th		0720	1049	1.7F	17 F		0948	1209	1.3F
	0534	0821	1.5F		0636	0907	1.9F	1226		1547	1.4E	1412	1641		1.4E	1344	1639	1.4E		1526	1814	1.2E	0948		1209	1.3F		
	1150	1506	1.3E		1254	1543	1.7E	1838		2158	1.4F	2054	2304		1.4F	2056	2330	1.4F		2218			1526		1814	1.2E		
	1741	2045	1.5F		1910	2129	1.7F					0234	0453		1.2E	0228	0520	1.2E					0407		0701	1.1E		
3 Sa		0323	1.6E	18 Su		0100	0350	1.6E	3 Tu		0050	0404	1.4E	18 W		0913	1135	1.5F	3 F		0855	1153	1.8F	18 Sa		0407	0701	1.1E
	0608	0913	1.5F		0736	1004	1.7F	0650		1022	1.7F	0913	1135		1.5F	1447	1755	1.2E		1626	1932	1.2E	0407		0701	1.1E		
	1241	1542	1.4E		1349	1622	1.6E	1324		1624	1.4E	1501	1738		1.2E	2212				2311			1046		1303	1.4F		
	1826	2139	1.4F		2017	2228	1.6F	2007		2257	1.3F	2154											1626		1932	1.2E		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Brandywine Shoal Light, Delaware Bay, 2010

F—Flood, Dir. 330° True E—Ebb, Dir. 153° True

April				May				June																	
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots										
h m	h m	h m		h m	h m	h m		h m	h m	h m		h m	h m	h m											
1 Th	0518 1130 1719 2359	0812 1425 2028	1.7E 1.5E 1.8F	16 F	0449 1045 1629 2308	0735 1338 1932	1.4F 1.4E 1.7F	1 Sa	0547 1153 1733	0838 1441 2045	1.4F 1.3E 1.7F	16 Su	0503 1103 1651 2328	0753 1359 1956	1.6E 1.6F 1.9F	1 Tu	0643 1254 1837	0934 1534 2145	1.3F 1.1E 1.4F	16 W	0626 1231 1819	0918 1521 2127	1.6F 1.6E 1.8F		
2 F	0610 1217 1802	0902 1506 2113	1.6E 1.4F 1.7F	17 Sa	0528 1125 1711 2349	0818 1421 2018	1.4F 1.5E 1.8F	2 Su	0016 0632 1237 1817	0319 0922 1520 2128	1.6E 1.3F 1.2E 1.5F	17 M	0550 1151 1739	0842 1446 2048	1.6F 1.6E 1.9F	2 W	0111 0727 1342 1929	0405 1018 1620 2233	1.4E 1.2F 1.0E 1.3F	17 Th	0058 0723 1331 1921	0403 1013 1617 2226	1.7E 1.6F 1.4E 1.7F		
3 Sa	0701 1305 1846	0950 1547 2157	1.3F 1.2E 1.5F	18 Su	0612 1210 1757	0904 1506 2106	1.4F 1.5E 1.8F	3 M	0059 0719 1324 1904	0358 1006 1602 2214	1.4E 1.2F 1.1E 1.4F	18 Tu	0643 1243 1832	0934 1536 2141	1.5F 1.5E 1.8F	3 Th	0813 1434 2027	1105 1716 2328	1.2F 0.9E 1.1F	18 F	0822 1437 2031	1114 1725 2334	1.5F 1.3E 1.5F		
4 Su	0753 1355 1936	1038 1633 2246	1.1F 1.0E 1.4F	19 M	0703 1301 1850	0954 1555 2159	1.4F 1.4E 1.7F	4 Tu	0145 0807 1415 1957	0443 1054 1651 2305	1.3E 1.1F 0.9E 1.3F	19 W	0114 0742 1343 1933	0420 1031 1632 2241	1.6E 1.5F 1.4E 1.7F	4 F	0251 0900 1532 2132	0545 1158 1825	1.1E 1.1F 0.9E	19 Sa	0305 0923 1548 2147	0613 1221 1845	1.4E 1.4F 1.2E		
5 M	0846 1450 2030	1132 1730 2341	1.0F 0.9E 1.3F	20 Tu	0802 1400 1950	1050 1651 2258	1.4F 1.3E 1.6F	5 W	0236 0858 1512 2056	0538 1148 1755	1.2E 1.1F 0.9E	20 Th	0216 0846 1451 2041	0524 1134 1740 2349	1.5E 1.4F 1.3E 1.6F	5 Sa	0349 0948 1631 2237	0641 1251 1930	1.0F 1.0E 0.9E	20 Su	0416 1024 1658 2302	0723 1327 2001	1.4E 1.5F 1.3E		
6 Tu	0941 1551 2129	1231 1838	1.0F 0.8E	21 W	0907 1507 2056	1155 1758	1.3F 1.2E	6 Th	0332 0950 1614 2200	0638 1245 1905	1.1E 1.1F 0.9E	21 F	0324 0951 1605 2155	0637 1243 1856	1.5E 1.4F 1.2E	6 Su	0447 1034 1723 2336	0732 1340 2025	1.0E 1.2F 1.0E	21 M	0524 1121 1759	0826 1428 2108	1.3E 1.6F 1.5E		
7 W	1036 1653 2231	1328 1942	1.0F 0.9E	22 Th	1014 1621 2206	1303 1909	1.3F 1.2E	7 F	0431 1041 1712 2303	0732 1339 2006	1.1E 1.1F 0.9E	22 Sa	0435 1053 1716 2309	0746 1349 2009	1.5E 1.5F 1.3E	7 M	0539 1118 1808	0817 1425 2112	1.0E 1.3F 1.2E	22 Tu	0623 1213 1852	0924 1525 2208	1.3E 1.6F 1.6E		
8 Th	1126 1747 2330	1422 2038	1.1F 1.0E	23 F	1118 1730 2317	1409 2017	1.4F 1.3E	8 Sa	0526 1127 1802	0819 1428 2100	1.1E 1.1E 1.1E	23 Su	0541 1150 1817	0848 1452 2118	1.5E 1.6F 1.4E	8 Tu	0623 1200 1848	0900 1508 2155	1.1E 1.4F 1.3E	23 W	0715 1302 1941	1016 1615 2259	1.3E 1.7F 1.7E		
9 F	1211 1835	1510 2130	1.2F 1.1E	24 Sa	1216 1832	1511 2124	1.6F 1.4E	9 Su	0614 1207 1845	0902 1511 2149	1.1E 1.3F 1.2E	24 M	0639 1242 1912	0946 1548 2221	1.5E 1.7F 1.6E	9 W	0703 1241 1926	0945 1550 2236	1.1E 1.5F 1.4E	24 Th	0804 1348 2027	1104 1659 2344	1.3E 1.7F 1.7E		
10 Sa	1251 1917	1553 2218	1.3E 1.2E	25 Su	1308 1928	1608 2229	1.7E 1.5E	10 M	0657 1244 1924	0943 1551 2232	1.2E 1.4F 1.3E	25 Tu	0733 1329 2003	1039 1638 2316	1.5E 1.8F 1.7E	10 Th	0743 1325 2006	1030 1632 2317	1.3E 1.6F 1.5E	25 F	0850 1433 2112	1147 1741	1.3E 1.7F		
11 Su	1328 1958	1630 2301	1.4F 1.3E	26 M	1356 2021	1658 2327	1.8F 1.6E	11 Tu	0737 1321 2002	1023 1627 2310	1.2E 1.5F 1.3E	26 W	0824 1415 2052	1127 1722	1.5E 1.8F	11 F	0825 1411 2049	1116 1715 2359	1.4E 1.7F 1.6E	26 Sa	0935 1517 2155	1229 1822	1.3E 1.7F		
12 M	1403 2037	1705 2341	1.5F 1.3E	27 Tu	1442 2113	1744 2113	1.9F 1.7E	12 W	0816 1358 2040	1103 1704 2348	1.2E 1.6F 1.4E	27 Th	0307 0914 1500 2139	0556 1212 1805	1.5F 1.4E 1.8F	12 Sa	0313 0910 1458 2135	0558 1203 1759	1.5F 1.5E 1.8F	27 Su	0409 1019 1601 2236	0657 1310 1905	1.4F 1.3E 1.7F		
13 Tu	1437 2116	1738	1.6F	28 W	1527 2203	1829	1.8F	13 Th	0856 1439 2119	1145 1741	1.3E 1.7F	28 F	0354 1000 1543 2223	0641 1255 1848	1.5F 1.4E 1.8F	13 Su	0357 0957 1546 2223	0643 1251 1847	1.6F 1.6E 1.9F	28 M	0449 1101 1643 2317	0739 1350 1949	1.4F 1.3E 1.6F		
14 W	1513 2153	1813	1.6F	29 Th	1610 2249	1915	1.8F	14 F	0937 1522 2200	1228 1822	1.4E 1.8F	29 Sa	0438 1045 1625 2306	0726 1336 1932	1.4F 1.3E 1.7F	14 M	0443 1045 1634 2312	0732 1340 1938	1.7F 1.7E 2.0F	29 Tu	0528 1143 1727 2357	0822 1430 2034	1.4F 1.3E 1.5F		
15 Th	1550 2230	1851	1.7F	30 F	1651 2333	2000	1.7F	15 Sa	1019 1606 2243	1313 1907	1.5E 1.8F	30 Su	1127 1707 2347	1415 2017	1.3E 1.6F	15 Tu	1136 1724	1430 2032	1.6E 1.9F	30 W	1226 1813	1510 2118	1.2E 1.4F		
												31 M	1210 1750	1454 2101	1.2E 1.5F										

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Reedy Point, Delaware Bay, 2010

F—Flood, Dir. 351° True E—Ebb, Dir. 163° True

January				February				March																
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots									
h m	h m	h m		h m	h m	h m		h m	h m	h m		h m	h m	h m										
1 F	0019 0702 1312 1958	0434 0924 1728 2156	2.2E 2.5F 2.6E 1.6F	16 Sa	0038 0723 1312 1957	0436 0949 1722 2205	1.9E 1.8F 1.9E 1.4F	1 M	0143 0829 1422 2104	0605 1056 1833 2322	2.5E 2.3F 2.6E 1.9F	16 Tu	0117 0807 1355 2024	0452 1024 1724 2327	2.0E 1.8F 1.9E 1.7F	1 M	0041 0728 1315 1953	0502 0954 1727 2213	2.6E 2.2F 2.6E 2.1F	16 Tu	0013 0708 1247 1916	0343 0919 1601 2127	2.0E 1.8F 1.9E 1.9F	
2 Sa	0108 0751 1357 2043	0530 1012 1813 2248	2.3E 2.4F 2.6E 1.7F	17 Su	0114 0756 1347 2028	0503 1016 1742 2234	1.9E 1.8F 1.8E 1.4F	2 Tu	0233 0923 1510 2153	0651 1151 1916 2553	2.4E 2.1F 2.5E	17 W	0155 0851 1435 2105	0536 1109 1757 2322	2.1E 1.8F 1.9E 1.8F	2 Tu	0128 0817 1359 2036	0551 1049 1810 2304	2.7E 2.2F 2.6E 2.2F	17 W	0054 0749 1327 1954	0445 0958 1655 2209	2.1E 1.8F 1.9E 2.0F	
3 Su	0157 0841 1443 2132	0618 1107 1855 2340	2.3E 2.3F 2.6E 1.7F	18 M	0148 0831 1424 2102	0520 1053 1756 2311	1.9E 1.8F 1.9E 1.4F	3 W		0011 0328 1020 1601 2244	1.9F 2.3E 2.0F 2.3E	18 Th	0239 0941 1520 2152	0615 1155 1832 2152	2.1E 1.7F 1.9E	3 W	0217 0909 1445 2123	0636 1144 1851 2354	2.7E 2.1F 2.5E 2.1F	18 Th	0137 0835 1408 2035	0539 1045 1740 2257	2.2E 1.8F 2.0E 2.1F	
4 M	0249 0936 1533 2222	0705 1200 1942	2.2E 2.2F 2.4E	19 Tu	0223 0911 1504 2141	0546 1134 1816 2351	1.9E 1.8F 1.9E 1.5F	4 Th	0059 0425 1118 1653 2335	1.9F 2.2E 1.7F 2.2E	19 F	0008 0334 1037 1609 2243	1.9F 2.0E 1.6F 1.9E	4 Th	0309 1004 1535 2214	0723 1233 1934	2.5E 1.9F 2.3E	19 F	0225 0927 1451 2124	0623 1134 1819 2347	2.2E 1.7F 2.0E 2.2F			
5 Tu		0028 0347 1034 1625 2313	1.7F 2.1E 2.0F 2.3E	20 W	0304 1000 1550 2225	0620 1217 1848	1.9E 1.7F 1.9E	5 F	0157 0523 1216 1743	1.8F 2.2E 1.5F 2.1E	20 Sa	0056 0435 1135 1659 2336	1.9F 1.8E 1.4F 1.7E	5 F	0404 1059 1625 2305	0040 0819 2027	2.0F 2.3E 2.1E	20 Sa	0320 1023 1540 2217	0711 1221 1859	2.1E 1.5F 1.9E			
6 W	0446 1134 1717	0119 0908 1351 2135	1.7F 2.0E 1.7F 2.2E	21 Th	0355 1054 1638 2312	0033 0701 1301 1933	1.6F 1.8E 1.6F 1.8E	6 Sa	0028 0621 1317 1835	0326 1040 1615 2245	1.7F 2.1E 1.4F 2.1E	21 Su	0538 1236 1752	0148 0958 2151	1.8F 1.8E 1.7E	6 Sa	0459 1154 1714 2358	0920 1440 2125	2.1E 1.4F 2.0E	21 Su	0421 1121 1634 2313	0035 0829 1310 2001	2.1F 1.9E 1.3F 1.7E	
7 Th	0005 0545 1235 1810	0225 1009 1522	1.6F 2.1E 1.6F 2.2E	22 F	0453 1151 1726	0804 1352 2047	1.7E 1.4F 1.7E	7 Su	0125 0724 1420 1931	0433 1133 1712 2334	1.7F 2.0E 1.4F 2.0E	22 M	0034 0646 1343 1854	0250 1058 1534 2251	1.7F 1.8E 1.0F 1.7E	7 Su	0553 1249 1804	1014 1552 2215	2.0E 1.3F 1.9E	22 M	0521 1219 1730	0945 1406 2141	1.9E 1.1F 1.7E	
8 F	0059 0648 1341 1906	0351 1103 1633 2314	1.6F 2.1E 1.5F 2.1E	23 Sa	0003 0555 1253 1819	0213 1003 1453 2203	1.6F 1.7E 1.2F 1.7E	8 M	0224 0826 1518 2026	0535 1233 1815	1.6F 1.9E 1.3F	23 Tu	0138 0759 1450 2003	0354 1204 1636	1.7F 1.9E 1.0F	8 M	0052 0648 1347 1857	0407 1102 1646 2300	1.5F 1.8E 1.2F 1.8E	23 Tu	0012 0623 1322 1832	0226 1043 1513 2243	1.8F 1.9E 1.0F 1.7E	
9 Sa	0156 0755 1446 2004	0455 1202 1737	1.7F 2.1E 1.4F	24 Su	0059 0707 1403 1921	0315 1108 1555 2258	1.6F 1.7E 1.0F 1.7E	9 Tu		0031 0320 0918 1611 2116	1.9E 1.6F 1.8E 1.3F	24 W	0000 0243 0904 1550 2107	1.7E 1.6F 2.0E 1.0F	9 Tu	0150 0744 1443 1952	0503 1152 1742	1.4F 1.7E 1.1F 1.7E	24 W	0116 0731 1426 1944	0333 1141 1619 2348	1.7F 2.0E 1.0F 1.7E		
10 Su	0253 0857 1547 2057	0009 0605 1306 1845	2.1E 1.8F 2.1E 1.5F	25 M	0202 0822 1511 2026	0416 1225 1656	1.6F 1.8E 1.0F	10 W	0411 1002 1659 2201	0129 0739 2002	1.9E 1.7F 1.4F	25 Th	0346 0959 1647 2203	0118 0614 1411 1940	1.9E 1.7F 2.2E 1.3F	10 W	0246 0835 1532 2044	0608 1248 1844	1.3F 1.5E 1.1F	25 Th	0224 0836 1525 2051	0437 1246 1729	1.6F 2.1E 1.1F	
11 M	0348 0950 1643 2146	0109 0711 1401 1940	2.1E 1.9F 2.1E 1.5F	26 Tu	0304 0926 1613 2123	0011 0517 1337 1815	1.8E 1.7F 2.0E 1.0F	11 Th	0459 1043 1742 2245	0819 1457 2038	1.7F 1.8E 1.4F	26 F	0446 1051 1739 2257	0219 0745 1500 2017	2.1E 1.9F 2.4E 1.6F	11 Th	0337 0920 1616 2130	0710 1338 1936	1.3F 1.5E 1.2F	26 F	0329 0932 1619 2149	0554 1345 1921	1.6F 2.2E 1.4F	
12 Tu	0440 1038 1734 2231	0200 0801 1448 2024	2.1E 2.0F 2.1E 1.6F	27 W	0403 1022 1712 2217	0132 0636 1432 1950	1.9E 1.8F 2.2E 1.2F	12 F	0542 1123 1818 2326	0849 1530 2103	1.7F 1.8E 1.4F	27 Sa	0545 1142 1827 2350	0312 0828 1549 2050	2.3E 2.1F 2.5E 1.8F	12 F	0423 1001 1656 2212	0139 0754 1415 2012	1.6E 1.3F 1.5E 1.2F	27 Sa	0432 1024 1711 2243	0739 1436 2004	1.8F 2.4E 1.7F	
13 W	0529 1122 1818 2316	0244 0840 1532 2101	2.1E 2.0F 2.1E 1.6F	28 Th	0502 1116 1805 2311	0230 0748 1523 2025	2.1E 2.0F 2.4E 1.4F	13 Sa	0620 1201 1849	0320 0903 2107	1.8E 1.7F 1.4F	28 Su	0638 1230 1910	0407 0908 2128	2.4E 2.2F 2.0F	13 Sa	0506 1042 1733 2252	0216 0824 1442 2030	1.6E 1.4F 1.6E 1.3F	28 Su	0532 1115 1759 2336	0258 1523 2039	2.4E 2.0F 2.5E 2.0F	
14 Th	0613 1202 1855 2359	0323 0912 1614 2133	2.1E 2.0F 2.0E 1.5F	29 F	0558 1206 1852	0324 0832 1615 2100	2.2E 2.2F 2.5E 1.6F	14 Su	0005 0655 1239 1919	0344 0915 1628 2124	1.9E 1.7F 1.8E 1.5F	29 M	0548 1124 1808 2333	0244 0833 1504 2029	1.7E 1.5F 1.7E 1.4F	14 Su	0548 1124 1808 2333	0244 0833 1504 2029	1.7E 1.5F 1.7E 1.4F	29 M	0627 1204 1845	0350 1612 2115	2.6E 2.1F 2.2F	
15 F	0650 1238 1927	0401 0933 1652 2151	2.0E 1.9F 1.9E 1.4F	30 Sa	0004 0650 1252 1935	0421 0914 1706 2141	2.3E 2.3F 2.6E 1.8F	15 M	0041 0729 1316 1950	0406 0944 1655 2156	1.9E 1.8F 1.8E 1.6F	30 Tu	0628 1206 1841	0309 0848 2052	1.9E 1.6F 1.8E 1.7F	15 M	0628 1206 1841	0309 0848 2052	1.9E 1.6F 1.8E 1.7F	30 Tu	0026 0717 1251 1927	0445 0947 1701 2157	2.7E 2.1F 2.6E 2.3F	
				31 Su	0055 0739 1337 2018	0517 1001 1751 2230	2.4E 2.3F 2.7E 1.9F						31 W	0805 1335 2010	0535 1039 1746 2247	2.8E 2.1F 2.6E 2.3F								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Reedy Point, Delaware Bay, 2010

F—Flood, Dir. 351° True E—Ebb, Dir. 163° True

April				May				June															
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots												
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m												
1 Th	0201 0854 1419 2056	0620 1133 1826 2337	2.8E 2.0F 2.5E 2.3F	16 F	0125 0822 1341 2012	0539 1023 1727 2236	2.3E 1.7F 2.0E 2.3F	1 Sa	0230 0923 1436 2116	0643 1203 1839 2316	2.6E 1.7F 2.3E	16 Su	0203 0857 1403 2043	0618 1054 1807 2309	2.4E 1.5F 2.1E 2.4F	1 Tu	0325 1019 1533 2213	0723 1234 1858	1.8F 1.9E 1.2F 1.7E	16 W	0326 1020 1536 2220	0737 1217 1945	2.3E 1.5F 1.9E
2 F	0250 0945 1506 2145	0704 1221 1905	2.6E 1.8F 2.3E	17 Sa	0214 0913 1424 2101	0625 1114 1812 2327	2.3E 1.6F 2.0E 2.3F	2 Su	0316 1010 1522 2204	0723 1242 1913	2.3E 1.5F 2.0E	17 M	0254 0950 1453 2137	0705 1145 1854	2.3E 1.5F 2.0E	2 W	0405 1058 1617 2255	0745 1256 1905	1.6F 1.7E 1.1F 1.5E	17 Th	0419 1112 1637 2320	0835 1307 2058	2.2E 1.5F 1.8E
3 Sa	0342 1037 1555 2235	0751 1306 1949	2.3E 1.6F 2.1E	18 Su	0308 1008 1514 2156	0714 1203 1854	2.2E 1.5F 1.9E	3 M	0401 1057 1610 2251	0808 1319 1950	2.0E 1.3F 1.8E	18 Tu	0347 1044 1553 2236	0759 1234 1954	2.2E 1.4F 1.8E	3 Th	0446 1136 1700 2338	0739 1327 1936	1.5E 1.0F 1.4E	18 F	0512 1204 1738	0935 1405 2202	2.2E 1.4F 1.9E
4 Su	0433 1128 1644 2326	0848 1403 2045	2.1E 1.4F 1.9E	19 M	0405 1104 1612 2253	0817 1251 1957	2.1E 1.3F 1.7E	4 Tu	0445 1140 1657 2337	0858 1358 2044	1.7E 1.1F 1.5E	19 W	0441 1138 1655 2335	0903 1326 2116	2.1E 1.3F 1.7E	4 F	0527 1214 1744	0821 1408 2035	1.5E 1.0F 1.4E	19 Sa	0606 1259 1841	1027 1523 2259	2.2E 1.5F 2.0E
5 M	0521 1217 1732	0943 1522 2140	1.8E 1.2F 1.7E	20 Tu	0502 1200 1712 2353	0927 1345 2130	2.0E 1.2F 1.7E	5 W	0526 1222 1743	0943 1531 2137	1.5E 0.9F 1.4E	20 Th	0535 1232 1757	1001 1429 2219	2.1E 1.3E 1.8E	5 Sa	0611 1256 1832	0931 1458 2151	1.5E 1.0F 1.4E	20 Su	0704 1356 1950	1117 1635 2359	2.2E 1.6F 2.1E
6 Tu	0607 1307 1821	1027 1617 2224	1.7E 1.1F 1.6E	21 W	0559 1258 1815	1024 1452 2233	1.8F 2.1E 1.7E	6 Th	0608 1305 1830	1014 1532 2210	1.4E 0.8F 1.3E	21 F	0631 1329 1905	1052 1545 2317	2.2E 1.3F 1.9E	6 Su	0704 1344 1932	1013 1550 2240	1.6E 1.1F 1.5E	21 M	0805 1452 2055	1213 1749	2.2E 1.7F
7 W	0655 1358 1913	1105 1705 2300	1.5E 1.0F 1.5E	22 Th	0700 1359 1926	1117 1603 2334	2.1E 1.2F 1.8E	7 F	0655 1350 1921	1032 1557 2232	1.4E 0.8F 1.3E	22 Sa	0734 1427 2014	1145 1653	2.1E 1.4F	7 M	0802 1435 2034	1055 1640 2345	1.6E 1.3F 1.5E	22 Tu	0901 1546 2151	1313 1905	2.2E 2.0F
8 Th	0745 1445 2007	1141 1801 2333	1.0F 0.9F 1.4E	23 F	0805 1456 2035	1216 1711	2.1E 1.3F	8 Sa	0747 1434 2015	1048 1633 2305	1.4E 0.9F 1.4E	23 Su	0835 1521 2116	1246 1819	2.2E 1.6F	8 Tu	0856 1526 2131	1148 1737	1.6E 1.4F	23 W	0951 1639 2244	1405 1957	2.3E 2.2F
9 F	0834 1527 2055	1224 1901	1.3E 0.9F	24 Sa	0904 1550 2134	1317 1853	2.2E 1.5F	9 Su	0840 1518 2105	1124 1719	1.5E 1.0F	24 M	0929 1613 2210	1342 1927	2.3E 2.0F	9 W	0945 1617 2226	1318 1846	1.8E 1.7F	24 Th	1040 1731 2335	1452 2039	2.4E 2.4F
10 Sa	0920 1606 2138	1313 1940	1.4E 1.0F	25 Su	0956 1641 2227	1410 1947	2.3E 1.9F	10 M	0929 1602 2153	1231 1819	1.6E 1.3F	25 Tu	1019 1705 2303	1431 2012	2.4E 2.3F	10 Th	1033 1710 2321	1418 1944	1.9E 2.0F	25 F	1127 1820	1537 2117	2.4E 2.4F
11 Su	1004 1645 2221	1350 1940	1.5E 1.2F	26 M	1047 1732 2320	1457 2027	2.5E 2.2F	11 Tu	1016 1648 2243	1346 1919	1.7E 1.6F	26 W	1108 1755 2355	1517 2052	2.5E 2.5F	11 F	1122 1802	1508 2029	2.1E 2.3F	26 Sa	1213 1903	1625 2155	2.3E 2.3F
12 M	1049 1726 2305	1420 1954	1.7E 1.5F	27 Tu	1137 1819	1544 2103	2.5E 2.4F	12 W	1102 1735 2335	1431 2004	1.9E 2.0F	27 Th	1156 1841	1605 2131	2.5E 2.5F	12 Sa	1211 1851	1607 2113	2.1E 2.5F	27 Su	1256 1942	1709 2232	2.2E 2.1F
13 Tu	1134 1806 2351	1452 2026	1.8E 1.8F	28 W	1224 1903	1634 2143	2.5E 2.5F	13 Th	1149 1822	1516 2045	2.0E 2.3F	28 F	1241 1924	1653 2213	2.5E 2.4F	13 Su	1258 1939	1710 2200	2.2E 2.5F	28 M	1336 2020	1745 2302	2.1E 1.9F
14 W	1218 1847	1531 2104	1.9E 2.1F	29 Th	1309 1947	1720 2230	2.5E 2.5F	14 F	1234 1908	1615 2128	2.1E 2.4F	29 Sa	1324 2006	1736 2258	2.4E 2.3F	14 M	1346 2028	1802 2252	2.1E 2.4F	29 Tu	1414 2057	1810 2329	1.9E 1.7F
15 Th	1300 1928	1630 2147	2.0E 2.3F	30 F	1352 2030	1802 2319	2.4E 2.3F	15 Sa	1317 1954	1718 2217	2.1E 2.5F	30 Su	1406 2048	1813 2337	2.2E 2.0F	15 Tu	1437 2122	1850 2345	2.1E 2.3F	30 W	1453 2135	1819 2358	1.8E 1.6F
												31 M	0245 0937 1448 2131	0653 1212 1841	2.2E 1.4F 2.0E								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Chesapeake Bay Entrance, Virginia, 2010

F—Flood, Dir. 300° True E—Ebb, Dir. 129° True

January				February				March															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m								
1 F	0507 1129 1801 2324	0754 1455 2028 2324	1.7E 1.4F 1.7E 1.1F	16 Sa	0600 1200 1848 2355	0845 1524 2109 2355	0.9F 1.2E 0.7F	1 M	0641 1236 1910	0918 1603 2149	1.3F 1.8E 1.4F	16 Tu	0657 1222 1912	0930 1545 2148	1.2E 0.8F 1.3E 0.8F	1 M	0536 1122 1753	0810 1454 2039	1.9E 1.3F 1.8E 1.5F	16 Tu	0557 1114 1758	0828 1443 2045	0.8F 1.4E 1.0F
2 Sa	0559 1217 1850	0845 1541 2119	1.8E 1.4F 1.7E 1.1F	17 Su	0639 1230 1922	0921 1550 2144	0.9F 1.2E 0.7F	2 Tu	0740 1320 2000	1008 1652 2240	1.2F 1.7E 1.3F	17 W	0738 1250 1944	1004 1619 2219	1.2E 0.7F 1.3E 0.8F	2 Tu	0630 1207 1840	0900 1537 2125	1.9E 1.2F 1.8E 1.5F	17 W	0636 1145 1829	0903 1515 2115	0.7F 1.4E 1.0F
3 Su	0656 1302 1940	0935 1629 2211	1.4F 1.7E 1.2F	18 M	0720 1259 1957	0957 1620 2221	0.8F 1.2E 0.7F	3 W	0839 1404 2051	1102 1747 2334	1.0F 1.5E 1.2F	18 Th	0820 1317 2018	1040 1659 2254	0.6F 1.2E 0.8F	3 W	0727 1251 1929	0948 1623 2212	1.1F 1.6E 1.4F	18 Th	0718 1216 1903	0937 1549 2146	0.7F 1.3E 1.0F
4 M	0753 1349 2032	1027 1723 2306	1.2F 1.6E 1.1F	19 Tu	0801 1327 2030	1034 1655 2259	0.7F 1.1E 0.6F	4 Th	0944 1451 2148	1159 1844	0.7F 1.3E	19 F	0909 1343 2057	1121 1745 2335	0.5F 1.1E 0.8F	4 Th	0823 1336 2019	1039 1714 2303	0.9F 1.4E 1.2F	19 F	0801 1336 1941	1013 1629 2221	0.6F 1.2E 1.0F
5 Tu	0855 1435 2126	1123 1820	1.0F 1.5E	20 W	0845 1353 2105	1114 1736 2339	0.6F 1.1E 0.6F	5 F	0407 1057 1546 2249	0738 1259 1943	1.2E 0.5F 1.1E	20 Sa	1005 1412 2143	1208 1836	0.4F 1.0E	5 F	0924 1420 2113	1134 1812 2357	0.7F 1.2E 1.0F	20 Sa	0850 1318 2024	1055 1717 2304	0.5F 1.1E 0.9F
6 W	1002 1526 2222	1223 1916	0.8F 1.4E	21 Th	0936 1418 2143	1157 1821	0.5F 1.1E	6 Sa	0518 1214 1656 2358	0849 1404 2049	1.1E 0.4F 1.0E	21 Su	1110 1454 2241	1300 1929	0.3F 1.0E	6 Sa	1031 1509 2216	1232 1911	0.5F 1.0E	21 Su	0944 1353 2115	1144 1812 2355	0.4F 1.1E 0.8F
7 Th	1118 1626 2323	1324 2015	0.6F 1.2E	22 F	1036 1448 2228	1243 1908	0.4F 1.0E	7 Su	0627 1332 1807	1005 1545 2204	1.0E 0.3F 0.9E	22 M	1218 1604 2347	1402 2030	0.3F 1.0E	7 Su	1147 1613 2328	1333 2014	0.3F 0.9E	22 M	1048 1441 2216	1240 1911	0.3F 1.0E
8 F	1236 1733	1437 2121	0.4F 1.1E	23 Sa	1142 1532 2320	1334 1958	0.3F 1.0E	8 M	0733 1440 1911	1109 1700 2307	1.1E 0.3F 1.0E	23 Tu	1319 1739	1520 2142	0.4F 1.1E	8 M	1302 1730	1456 2131	0.9E 0.8E	23 Tu	1151 1558 2326	1342 2014	0.3F 1.0E
9 Sa	1351 1837	1611 2228	0.4F 1.1E	24 Su	1249 1643	1439 2057	0.3F 1.0E	9 Tu	0832 1529 2008	1202 1743 2358	1.1E 0.4F 1.0E	24 W	1411 1859	1627 2249	0.5F 1.3E	9 Tu	1411 1840	1639 2241	0.3F 0.9E	24 W	1251 1740	1458 2127	0.4F 1.1E
10 Su	1457 1937	1710 2325	0.4F 1.1E	25 M	1348 1800	1551 2203	0.4F 1.1E	10 W	0920 1607 2058	1249 1819	1.1E 0.5F	25 Th	1459 2011	1719 2349	0.8F 1.5E	10 W	1501 1942	1724 2334	0.4F 0.9E	25 Th	1345 1901	1612 2238	0.6F 1.2E
11 M	1545 2031	1752 2301	0.5F	26 Tu	1439 1909	1647 2304	0.5F 1.3E	11 Th	0957 1639 2142	1329 1856	1.1E 0.6F	26 F	1541 2116	1808 2116	1.0F	11 Th	1537 2038	1759 2038	0.5F	26 F	1432 2011	1705 2339	0.9F 1.4E
12 Tu	1625 2117	1831 2117	0.5F	27 W	1523 2017	1735 2017	0.7F	12 F	1028 1709 2222	1402 1934	1.2E 0.6F	27 Sa	1625 2213	1859	1.2F	12 F	1606 2125	1833 2125	0.6F	27 Sa	1518 2112	1752	1.2F
13 W	1701 2157	1912 2157	0.5F	28 Th	1607 2120	1825 2120	0.9F	13 Sa	1057 1739 2302	1428 2011	1.2E 0.7F	28 Su	1709 2308	1950	1.4F	13 Sa	1633 2208	1908 2208	0.7F	28 Su	1559 2206	1839 2206	1.4F
14 Th	1737 2235	1953 2235	0.6F	29 F	1650 2219	1917 2219	1.1F	14 Su	1125 1810 2342	1452 2045	1.3E 0.8F	29 M	1719 2308	1950	1.4F	14 Su	1700 2247	1942 2247	0.8F	29 M	1641 2257	1928	1.5F
15 F	1811 2314	2032 2314	0.6F	30 Sa	1735 2316	2010 2316	1.3F	15 M	1154 1841	1517 2117	1.3E 0.8F	30Tu	1729 2325	2015	0.9F	15 M	1044 2325	1414	1.3E 0.9F	30 Tu	1054 2345	1431	1.7E 1.6F
				31 Su	1151 1822	1518 2100	1.8E 1.4F													31 W	0619 1138 1811	0841 1513 2101	1.0F 1.7E 1.5F

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 * Current weak and variable.

Chesapeake Bay Entrance, Virginia, 2010

F—Flood, Dir. 300° True E—Ebb, Dir. 129° True

April				May				June							
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum	
	h	m	knots		h	m	knots		h	m	knots		h	m	knots
1	0033	0356	1.7E	16	0018	0335	1.3E	1	0101	0428	1.4E	16	0042	0401	1.4E
Th	0712	0929	0.9F	F	0659	0912	0.6F	Sa	0751	0955	0.7F	Su	0725	0932	0.6F
	1222	1556	1.5E		1145	1525	1.4E		1239	1617	1.3E		1206	1551	1.4E
	1900	2147	1.4F		1831	2120	1.1F		1926	2211	1.2F		1856	2143	1.2F
2	0120	0447	1.5E	17	0057	0417	1.2E	2	0146	0520	1.3E	17	0127	0452	1.3E
F	0808	1017	0.8F	Sa	0745	0952	0.6F	Su	0843	1045	0.6F	M	0815	1021	0.6F
	1308	1643	1.3E		1222	1607	1.3E		1321	1707	1.1E		1258	1643	1.3E
	1950	2234	1.2F		1915	2159	1.1F		2018	2302	1.0F		1949	2232	1.2F
3	0208	0545	1.3E	18	0138	0508	1.2E	3	0231	0617	1.1E	18	0213	0549	1.3E
Sa	0904	1109	0.6F	Su	0833	1036	0.5F	M	0940	1139	0.4F	Tu	0908	1116	0.6F
	1350	1739	1.1E		1303	1657	1.2E		1407	1805	1.0E		1356	1745	1.2E
	2044	2327	1.0F		2003	2245	1.0F		2114	2356	0.8F		2045	2327	1.0F
4	0258	0646	1.2E	19	0223	0606	1.1E	4	0319	0709	1.0E	19	0301	0646	1.3E
Su	1007	1206	0.5F	M	0928	1129	0.5F	Tu	1040	1235	0.4F	W	1002	1217	0.6F
	1436	1839	1.0E		1349	1757	1.1E		1458	1901	0.8E		1504	1850	1.2E
	2144				2058	2339	0.9F		2215				2148		
5		0025	0.8F	20	0315	0704	1.1E	5		0051	0.7F	20		0026	0.9F
M	0357	0745	1.0E	Tu	1028	1228	0.4F	W	0410	0759	0.9E	Th	0355	0740	1.3E
	1115	1303	0.3F		1449	1859	1.1E		1140	1333	0.3F		1100	1318	0.7F
	1531	1938	0.9E		2200				1609	1957	0.8E		1629	1954	1.1E
	2253								2321				2259		
6		0124	0.6F	21		0038	0.8F	6		0146	0.5F	21		0125	0.8F
Tu	0503	0850	0.9E	W	0418	0802	1.1E	Th	0501	0849	0.9E	F	0452	0837	1.3E
	1224	1409	0.3F		1128	1330	0.5F		1235	1449	0.3F		1156	1423	0.7F
☉	1648	2046	0.8E	☉	1617	2003	1.1E		1731	2104	0.7E		1749	2106	1.1E
7	0006	0237	0.5F	22		0140	0.8F	7	0027	0251	0.4F	22	0011	0230	0.7F
W	0604	0958	0.9E	Th	0522	0904	1.2E	F	0546	0941	0.9E	Sa	0548	0937	1.3E
	1328	1559	0.3F		1224	1442	0.6F		1321	1611	0.4F		1249	1535	0.9F
	1806	2202	0.8E		1749	2117	1.1E		1840	2213	0.7E		1858	2218	1.2E
8	0113	0405	0.5F	23	0022	0251	0.7F	8	0129	0357	0.4F	23	0122	0344	0.6F
Th	0655	1050	0.9E	F	0620	1005	1.3E	Sa	0627	1022	1.0E	Su	0641	1034	1.4E
	1418	1656	0.4F		1317	1556	0.8F		1400	1652	0.6F		1339	1633	1.0F
	1912	2300	0.8E		1903	2229	1.2E		1940	2306	0.8E		2000	2320	1.3E
9	0213	0453	0.5F	24	0132	0404	0.8F	9	0223	0443	0.5F	24	0230	0445	0.7F
F	0737	1128	1.0E	Sa	0713	1059	1.4E	Su	0706	1057	1.1E	M	0733	1125	1.4E
	1454	1731	0.6F		1406	1650	1.0F		1432	1722	0.7F		1429	1719	1.2F
	2012	2346	0.9E		2009	2330	1.4E		2032	2349	0.9E		2057		
10	0301	0528	0.6F	25	0238	0501	0.8F	10	0310	0521	0.5F	25		0016	1.4E
Sa	0815	1159	1.1E	Su	0805	1147	1.5E	M	0747	1132	1.2E	Tu	0328	0534	0.7F
	1523	1801	0.7F		1451	1735	1.2F		1502	1751	0.9F		0826	1214	1.4E
	2103				2106				2117				1515	1802	1.3F
11		0028	1.0E	26		0026	1.5E	11		0032	1.0E	26		0110	1.5E
Su	0342	0602	0.6F	M	0334	0550	0.9F	Tu	0350	0557	0.6F	W	0419	0622	0.7F
	0850	1228	1.2E		0855	1235	1.6E		0829	1210	1.3E		0916	1304	1.4E
	1550	1832	0.8F		1536	1820	1.4F		1533	1822	1.0F		1600	1847	1.3F
	2146				2157				2157				2232		
12		0108	1.1E	27		0121	1.6E	12		0114	1.1E	27		0200	1.5E
M	0419	0637	0.7F	Tu	0427	0640	0.9F	W	0429	0637	0.6F	Th	0508	0712	0.7F
	0925	1259	1.3E		0941	1323	1.6E		0911	1252	1.4E		1002	1351	1.4E
	1618	1904	0.9F		1619	1906	1.4F		1607	1857	1.1F		1644	1935	1.3F
	2225				2244				2236			☉	2317		
13		0146	1.2E	28		0211	1.7E	13		0156	1.2E	28		0245	1.5E
Tu	0456	0716	0.7F	W	0517	0731	0.9F	Th	0509	0720	0.6F	F	0555	0803	0.7F
	0959	1333	1.3E		1027	1409	1.6E		0953	1337	1.4E		1046	1435	1.4E
	1647	1937	1.0F	☉	1702	1954	1.5F	●	1642	1935	1.2F		1730	2022	1.3F
	2302				2330				2316						
14		0222	1.2E	29		0257	1.7E	14		0237	1.3E	29		0328	1.4E
W	0533	0756	0.7F	Th	0608	0822	0.8F	F	0550	0804	0.6F	Sa	0644	0850	0.6F
	1033	1409	1.4E		1110	1452	1.5E		1035	1421	1.5E		1128	1515	1.3E
	1718	2010	1.1F		1748	2040	1.4F		1722	2017	1.2F		1817	2107	1.2F
	2339								2358						
15		0258	1.3E	30		0341	1.6E	15		0317	1.4E	30		0410	1.3E
Th	0615	0834	0.7F	F	0659	0909	0.8F	Sa	0637	0848	0.7F	Su	0733	0935	0.6F
	1109	1447	1.4E		1155	1534	1.4E		1118	1505	1.5E		1211	1554	1.2E
	1752	2044	1.1F		1836	2125	1.3F		1807	2059	1.3F		1906	2152	1.1F
												31	0127	0454	1.2E
												M	0821	1021	0.5F
													1257	1638	1.1E
													1954	2238	1.0F

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Chesapeake Bay Entrance, Virginia, 2010

F—Flood, Dir. 300° True E—Ebb, Dir. 129° True

July				August				September																	
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum											
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m										
1 Th	0206 0918 1413 2102	0539 1133 1748 2343	1.1E 0.5F 0.9E 0.7F	16 F	0216 0902 1456 2125	0554 1138 1824 2355	1.6E 1.1F 1.4E 1.0F	1 Su	0225 0944 1525 2210	0612 1218 1853	1.1E 0.6F 0.8E	16 M ☉	0331 1028 1648 2326	0033 0720 1306 2012	0.7F 1.3E 1.0F 1.2E	1 W ☉	0257 1031 1649 2339	0046 0713 1305 2010	0.4F 1.1E 0.6F 0.8E	16 Th	0012 0515 1220 1834	0215 0905 1507 2206	0.4F 1.0E 0.6F 1.0E		
2 F	0236 0959 1507 2152	0617 1221 1839 2152	1.1E 0.5F 0.8E	17 Sa	0303 0959 1605 2232	0649 1236 1927	1.5E 1.0F 1.3E	2 M ☉	0256 1027 1628 2309	0656 1259 1942	1.1E 0.6F 0.7E	17 Tu	0433 1132 1758	0820 1411 2123	1.2E 0.8F 1.1E	2 Th	0352 1130 1755	0807 1402 2116	1.1E 0.7F 0.8E	17 F	0119 0617 1327 1933	0341 1034 1632 2305	0.4F 1.0E 0.6F 1.0E		
3 Sa	0307 1040 1612 2249	0655 1306 1927	1.1E 0.5F 0.7E	18 Su ☉	0356 1057 1716 2344	0744 1334 2033	1.4E 1.0F 1.2E	3 Tu	0333 1112 1731	0741 1345 2039	1.1E 0.6F 0.7E	18 W	0038 0537 1239 1904	0241 0929 1536 2232	0.4F 1.1E 0.7F 1.0E	3 F	0038 0504 1229 1854	0238 0909 1512 2220	0.4F 1.2E 0.8F 0.9E	18 Sa	0219 0713 1425 2023	0444 1110 1717 2352	0.4F 1.1E 0.7F 1.0E		
4 Su ☉	0341 1121 1718 2349	0734 1351 2019	1.1E 0.5F 0.7E	19 M	0455 1156 1823	0843 1439 2145	1.3E 0.9F 1.1E	4 W	0009 0424 1202 1829	0208 0832 1442 2146	0.3F 1.1E 0.7F 0.8E	19 Th	0146 0636 1343 2007	0403 1035 1649 2331	0.4F 1.1E 0.8F 1.0E	4 Sa	0132 0614 1329 1950	0347 1014 1616 2314	0.5F 1.3E 0.9F 1.1E	19 Su	0305 0806 1512 2102	0525 1158 1750	0.5F 1.1E 0.7F		
5 M	0421 1202 1816	0817 1443 2122	1.1E 0.6F 0.7E	20 Tu	0057 0555 1257 1927	0303 0949 1556 2252	0.5F 1.2E 0.9F 1.1E	5 Th	0109 0524 1255 1926	0311 0932 1547 2247	0.3F 1.2E 0.8F 0.9E	20 F	0248 0730 1441 2101	0500 1130 1735	0.4F 1.1E 0.8F	5 Su	0222 0722 1427 2041	0443 1113 1708	0.7F 1.4E 1.1F	20 M	0341 0855 1553 2134	0600 1241 1823	1.0E 0.6F 0.7F		
6 Tu	0049 0509 1245 1909	0254 0908 1540 2225	0.3F 1.1E 0.7F 0.8E	21 W	0206 0652 1356 2028	0417 1050 1655 2349	0.4F 1.2E 0.9F 1.2E	6 F	0203 0625 1349 2022	0412 1032 1641 2339	0.4F 1.3E 1.0F 1.1E	21 Sa	0336 0822 1529 2145	0022 0541 1219 1814	1.1E 0.5F 1.2E 0.8F	6 M	0310 0829 1521 2129	0533 1211 1757	0.9F 1.6E 1.2F	21 Tu	0412 0939 1630 2204	0636 1322 1859	0.7F 1.2E 0.8F		
7 W	0148 0600 1330 2002	0354 1004 1627 2317	0.4F 1.2E 0.8F 0.9E	22 Th	0307 0746 1450 2123	0510 1144 1742	0.5F 1.2E 0.9F	7 Sa	0253 0728 1442 2113	0503 1128 1729	0.6F 1.4E 1.1F	22 Su	0415 0909 1610 2219	0109 0620 1304 1852	1.1E 0.5F 1.2E 0.8F	7 Tu	0354 0931 1613 2214	0622 1308 1848	1.1F 1.7E 1.3F	22 W	0442 1020 1707 2233	0714 1359 1937	0.7F 1.2E 0.8F		
8 Th	0239 0652 1418 2054	0443 1057 1709	0.4F 1.3E 1.0F	23 F	0357 0837 1539 2209	0554 1235 1825	0.5F 1.2E 0.9F	8 Su	0339 0833 1535 2201	0551 1224 1817	0.8F 1.6E 1.3F	23 M	0450 0953 1649 2250	0148 0702 1345 1931	1.1E 0.6F 1.2E 0.9F	8 W ☉	0439 1030 1707 2259	0715 1404 1942	1.3F 1.8E 1.3F	23 Th ☉	0513 1100 1744 2305	0752 1432 2016	0.8F 1.2E 0.8F		
9 F	0326 0749 1505 2142	0528 1149 1752	1.1E 0.5F 1.2F	24 Sa	0439 0923 1622 2249	0637 1322 1910	0.5F 1.2E 1.0F	9 M ☉	0424 0937 1627 2246	0643 1322 1909	0.9F 1.7E 1.4F	24 Tu ☉	0523 1036 1727 2318	0219 0745 1422 2009	1.1E 0.6F 1.2E 0.9F	9 Th	0527 1126 1800 2346	0808 1455 2034	1.4F 1.9E 1.3F	24 F	0546 1138 1823 2338	0828 1505 2052	0.8F 1.2E 0.7F		
10 Sa	0410 0848 1552 2229	0614 1243 1839	1.2E 0.6F 1.3F	25 Su ☉	0520 1006 1704 2325	0724 1404 1954	0.5F 1.2E 1.0F	10 Tu	0510 1038 1719 2331	0738 1417 2003	1.1F 1.8E 1.4F	25 W	0558 1118 1806 2348	0245 0825 1455 2045	1.2E 0.7F 1.2E 0.9F	10 F	0615 1221 1858	0315 0858 2125	1.8E 1.4F 1.2F	25 Sa	0619 1217 1904	0901 1539 2128	1.3E 1.2E 0.7F		
11 Su ☉	0454 0947 1641 2315	0706 1339 1931	0.7F 1.6E 1.4F	26 M	0600 1048 1745 2358	0810 1441 2034	0.5F 1.2E 1.0F	11 W	0558 1138 1813	0832 1509 2054	1.2F 1.8E 1.4F	26 Th	0631 1200 1846	0310 0902 2121	1.2E 0.7F 0.8F	11 Sa	0034 0707 1316 1954	0401 0948 1641 2217	1.7E 1.4F 1.7E 1.0F	26 Su	0012 0657 1255 1947	0337 0934 1617 2205	1.2E 0.8F 1.1E 0.6F		
12 M	0541 1047 1732	0801 1432 2023	0.9F 1.7E 1.4F	27 Tu	0639 1132 1826	0852 1515 2111	0.6F 1.2E 0.9F	12 Th	0017 1238 1911	0341 1602 2145	1.8E 1.7E 1.3F	27 F	0019 0707 1242 1927	0338 0937 1602 2157	1.2E 0.7F 1.1E 0.7F	12 Su	0122 0800 1410 2053	0454 1041 1742 2313	1.5E 1.3F 1.5E 0.9F	27 M	0046 0735 1334 2030	0416 1009 1703 2245	1.2E 0.8F 1.0E 0.5F		
13 Tu	0001 0630 1148 1827	0321 0854 1523 2113	1.6E 1.0F 1.7E 1.4F	28 W	0029 0718 1219 1908	0348 0932 1549 2149	1.2E 0.6F 1.1E 0.9F	13 F	0102 0739 1337 2009	0430 1015 1701 2238	1.7E 1.3F 1.6E 1.1F	28 Sa	0050 0741 1322 2009	0410 1012 1642 2235	1.2E 0.7F 1.0E 0.6F	13 M	0212 0858 1508 2156	0554 1138 1846	1.4E 1.1F 1.3E	28 Tu	0119 0818 1415 2119	0502 1051 1758 2331	1.1E 0.8F 0.9E 0.5F		
14 W	0047 0720 1250 1923	0408 0946 1617 2203	1.7E 1.0F 1.6E 1.3F	29 Th	0059 0754 1305 1950	0417 1012 1627 2227	1.2E 0.6F 1.0E 0.8F	14 Sa	0149 0830 1435 2110	0524 1110 1804 2335	1.6E 1.2F 1.5E 0.9F	29 Su	0120 0818 1401 2052	0449 1048 1731 2316	1.2E 0.7F 0.9E 0.5F	14 Tu	0306 1000 1615 2303	0655 1238 1948	1.2E 0.9F 1.2E	29 W	0153 0906 1506 2214	0556 1141 1854	1.1E 0.7F 0.9E		
15 Th	0131 0811 1352 2022	0459 1040 1718 2257	1.6E 1.1F 1.5E 1.1F	30 F	0128 0830 1349 2033	0451 1053 1713 2308	1.2E 0.6F 0.9E 0.7F	15 Su	0238 0927 1538 2216	0622 1208 1908	1.5E 1.1F 1.3E	30 M	0150 0857 1444 2141	0534 1130 1823	1.1E 0.7F 0.8E	15 W ☉	0407 1109 1727	0756 1342 2056	1.1E 0.7F 1.0E	30 Th ☉	0236 1001 1613 2313	0652 1235 1949	1.1E 0.7F 0.9E		
				31 Sa	0157 0907 1434 2119	0530 1136 1803 2351	1.1E 0.6F 0.8E 0.6F					31 Tu	0220 0940 1539 2238	0000 0624 1215 1915	0.5F 1.1E 0.6F 0.8E										

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Chesapeake Bay Entrance, Virginia, 2010

F—Flood, Dir. 300° True E—Ebb, Dir. 129° True

October				November				December																
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum										
	h	m	knots		h	m	knots		h	m	knots		h	m	knots									
1 F	0338	0749	1.1E	16 Sa	0043	0302	0.4F	1 M	0037	0308	0.7F	16 Tu	0132	0426	0.6F	1 W	0100	0351	1.0F	16 Th	0119	0421	0.6F	
	1105	1335	0.7F		0551	0943	0.9E		0621	0952	1.2E		0719	1100	0.9E		0720	1047	1.3E		0734	1106	0.8E	
	1723	2050	0.9E		1259	1548	0.5F		1301	1531	0.7F		1421	1639	0.4F		1401	1619	0.6F		1438	1641	0.4F	1843
2 Sa	0011	0217	0.4F	17 Su	0139	0417	0.5F	2 Tu	0127	0410	0.9F	17 W	0211	0502	0.7F	2 Th	0152	0445	1.1F	17 F	0201	0458	0.8F	
	0502	0853	1.1E		0651	1044	1.0E		0726	1056	1.4E		0810	1143	1.0E		0818	1144	1.4E		0822	1148	0.9E	
	1210	1443	0.7F		1359	1642	0.6F		1407	1633	0.8F		1508	1716	0.5F		1500	1712	0.7F		1519	1720	0.4F	1934	2318	1.1E
3 Su	0104	0327	0.6F	18 M	0223	0501	0.6F	3 W	0215	0500	1.2F	18 Th	0248	0533	0.8F	3 F	0244	0531	1.2F	18 Sa	0241	0532	0.9F	
	0617	1001	1.2E		0746	1132	1.0E		0825	1152	1.5E		0854	1222	1.0E		0911	1238	1.5E		0906	1230	1.1E	
	1313	1553	0.8F		1450	1717	0.6F		1505	1724	0.9F		1546	1752	0.5F		1551	1801	0.8F		1555	1758	0.5F	2025
4 M	0154	0427	0.8F	19 Tu	0300	0534	0.7F	4 Th	0302	0546	1.3F	19 F	0320	0605	0.9F	4 Sa	0333	0617	1.3F	19 Su	0321	0608	1.0F	
	0725	1103	1.4E		0836	1214	1.1E		0919	1247	1.6E		0935	1301	1.1E		1000	1331	1.6E		0948	1313	1.2E	
	1414	1650	1.0F		1531	1750	0.6F		1558	1812	0.9F		1621	1829	0.6F		1639	1850	0.8F		1630	1838	0.6F	2115
5 Tu	0241	0516	1.1F	20 W	0014	1.0E	5 F	0053	1.5E	20 Sa	0037	1.2E	5 Su	0129	1.4E	20 M	0052	1.3E						
	0828	1200	1.6E		0331	0606		0.8F	0349		0632	1.4F		0354	0639		1.0F	0421	0706	1.3F	0401	0648	1.1F	
	1511	1739	1.1F		0920	1254		1.1E	1009		1340	1.7E		1013	1341		1.2E	1046	1419	1.6E	1030	1355	1.3E	
6 W	0026	1.5E	21 Th	0044	1.1E	6 Sa	0143	1.6E	21 Su	0121	1.3E	6 M	0217	1.5E	21 Tu	0142	1.4E							
	0327	0603		1.3F	0400		0639	0.8F		0436	0722		1.4F	0430		0717	1.0F	0510	0756	1.3F	0444	0733	1.2F	
	0926	1257		1.7E	1000		1332	1.2E		1057	1429		1.8E	1052		1419	1.3E	1131	1502	1.6E	1111	1437	1.4E	
7 Th	0115	1.6E	22 F	0118	1.2E	7 Su	0231	1.6E	22 M	0205	1.4E	7 Tu	0301	1.4E	22 W	0229	1.5E							
	0411	0652		1.4F	0431		0714	0.9F		0524	0812		1.4F	0509		0758	1.1F	0559	0845	1.2F	0529	0819	1.2F	
	1020	1351		1.8E	1037		1407	1.2E		1145	1516		1.7E	1132		1457	1.3E	1217	1544	1.5E	1154	1517	1.5E	
8 F	0204	1.7E	23 Sa	0154	1.3E	8 M	0317	1.5E	23 Tu	0248	1.4E	8 W	0343	1.3E	23 Th	0315	1.5E							
	0458	0743		1.5F	0503		0751	0.9F		0616	0902		1.3F	0550		0840	1.1F	0650	0931	1.1F	0619	0904	1.2F	
	1111	1442		1.8E	1115		1442	1.2E		1233	1602		1.6E	1214		1537	1.3E	1300	1627	1.3E	1237	1600	1.5E	
9 Sa	0251	1.7E	24 Su	0232	1.3E	9 Tu	0403	1.4E	24 W	0331	1.4E	9 Th	0427	1.2E	24 F	0404	1.5E							
	0547	0834		1.5F	0539		0827	1.0F		0709	0950		1.2F	0638		0922	1.1F	0741	1018	1.0F	0710	0950	1.2F	
	1202	1530		1.8E	1153		1517	1.2E		1322	1653		1.4E	1257		1622	1.3E	1340	1713	1.2E	1319	1648	1.5E	
10 Su	0337	1.6E	25 M	0310	1.3E	10 W	0455	1.2E	25 Th	0419	1.3E	10 F	0518	1.1E	25 Sa	0500	1.4E							
	0638	0923		1.4F	1232		1556	1.2E		1410	1750		1.2E	1341		1713	1.2E	1418	1801	1.1E	0807	1040	1.1F	
	1253	1621		1.6E	1924		2138	0.6F		2106	2318		0.6F	2033		2247	0.7F	2122	2341	0.6F	2052	2322	0.9F	
11 M	0057	0427	1.4E	26 Tu	0016	0351	1.3E	11 Th	0207	0555	1.1E	26 F	0133	0516	1.2E	11 Sa	0228	0615	0.9E	26 Su	0231	0604	1.3E	
	0732	1013	1.2F		0701	0942	0.9F		0902	1140	0.8F		0821	1058	1.0F		0929	1159	0.7F		0907	1136	0.9F	
	1345	1718	1.4E		1314	1641	1.1E		1459	1847	1.1E		1425	1810	1.2E		1455	1844	1.0E		1444	1836	1.4E	
12 Tu	0146	0524	1.3E	27 W	0055	0438	1.2E	12 F	0015	0.5F	27 Sa	0233	0619	1.2E	12 Su	0034	0.5F	27 M	0019	0.9F				
	0830	1109	1.0F		0749	1025	0.9F		0300	0655		1.0E	0921	1154		0.8F	0326		0710	0.8E	0340	0708	1.2E	
	1438	1820	1.3E		1357	1736	1.1E		1007	1238		0.7F	1513	1904		1.2E	1030		1250	0.5F	1014	1234	0.7F	
13 W	0237	0628	1.1E	28 Th	0138	0534	1.1E	13 Sa	0112	0.5F	28 Su	0041	0.7F	13 M	0126	0.5F	28 Tu	0116	0.9F					
	0932	1210	0.8F		0840	1116	0.8F		0406	0754		0.9E	0348		0722	1.1E		0438	0805	0.8E	0455	0814	1.2E	
	1538	1921	1.1E		1445	1834	1.0E		1114	1335		0.5F	1029		1253	0.7F		1137	1342	0.4F	1129	1336	0.6F	
14 Th	0045	0.5F	29 F	0002	0.5F	14 Su	0214	0.4F	29 M	0140	0.8F	14 Tu	0223	0.5F	14 W	0218	0.9E	29 Th	0218	1.2E				
	0335	0729		1.0E	0230		0634	1.1E		0519	0859		0.8E	0508		0829	1.1E		0545	0911	0.7E	0605	0928	1.2E
	1040	1312		0.7F	0939		1214	0.8F		1221	1441		0.4F	1141		1356	0.6F		1242	1445	0.3F	1244	1449	0.5F
15 F	0146	0.4F	30 Sa	0059	0.5F	15 M	0049	0.5F	30 Tu	0007	0.9F	15 W	0035	0.6F	30 Th	0037	0.6F							
	0833	1.0E		0343	0735		1.1E	0623		1007	0.8E		0618	0941		1.2E	0643	1017	0.8E	0708	1037	1.3E		
	1151	1422		0.6F	1045		1313	0.7F		1325	1550		0.4F	1253		1509	0.6F	1346	1552	0.3F	1355	1609	0.5F	
31 Su	0146	0.4F	31 Su	0200	0.6F	31 Su	1818	2209	0.9E	31 F	1809	2157	1.3E	31 F	1754	2141	0.9E	31 F	0137	0433	1.0F			
	0833	1.0E		0509	0841		1.1E	0623	1007		0.8E	0618	0941		1.2E	0643	1017		0.8E	0808	1136	1.3E		
	1151	1422		0.6F	1154		1418	0.7F	1748		2125	1.1E	1457		1707	0.6F	1457		1707	0.6F	1951	2334	1.3E	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Baltimore Harbor Approach (off Sandy Pt.), Maryland, 2010

F—Flood, Dir. 025° True E—Ebb, Dir. 190° True

January				February				March															
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots												
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m												
1 F	0311 0800 1333 2047	0530 1056 1719	0.5F 0.7E 1.2F	16 Sa	0335 0903 1422 2112	0612 1147 1755	0.6F 0.5E 1.0F	1 M	0335 0939 1535 2147	0634 1237 1843	0.9F 0.9E 1.0F	16 Tu	0346 1000 1555 2153	0650 1255 1855	0.8F 0.7E 0.7F	1 M	0212 0827 1439 2040	0518 1131 1739 2346	1.0F 1.0E 0.9F 1.0E	16 Tu	0222 0847 1503 2049	0534 1151 1755 2353	0.9F 0.8E 0.7F 0.8E
2 Sa	0345 0859 1432 2130	0616 1151 1808	1.1E 0.6F 0.7E 1.2F	17 Su	0407 0950 1510 2147	0651 1232 1836	1.0E 0.6F 0.5E 0.9F	2 Tu	0412 1036 1638 2230	0721 1333 1934	1.1E 1.0F 0.9E 0.8F	17 W	0414 1044 1648 2226	0726 1341 1937	0.8E 0.8F 0.7E 0.6F	2 Tu	0250 0919 1537 2122	0604 1224 1828	1.1F 1.0E 0.8F	17 W	0250 0927 1553 2123	0609 1234 1836	0.9F 0.8E 0.6F
3 Su	0419 0957 1533 2212	0703 1249 1858	0.7F 0.7E 1.0F	18 M	0438 1036 1600 2222	0729 1318 1917	0.7F 0.5E 0.8F	3 W	0452 1133 1743 2314	0810 1432 2028	1.1F 0.9E 0.7F	18 Th	0443 1130 1746 2259	0804 1429 2022	0.9F 0.7E 0.5F	3 W	0329 1012 1636 2206	0650 1317 1919	1.2F 1.0E 0.7F	18 Th	0318 1009 1645 2157	0646 1318 1918	1.0F 0.8E 0.5F
4 M	0456 1057 1638 2256	0751 1348 1951	0.8F 0.7E 0.9F	19 Tu	0508 1123 1654 2257	0808 1406 2000	0.7F 0.5E 0.6F	4 Th	0535 1233 1853	0901 1533 2126	1.1F 0.8E 0.5F	19 F	0514 1220 1851 2334	0846 1522 2111	0.9F 0.7E 0.3F	4 Th	0411 1105 1736 2252	0739 1412 2012	1.2F 1.0E 0.6F	19 F	0349 1054 1741 2233	0724 1405 2003	1.0F 0.8E 0.4F
5 Tu	0534 1159 1748 2340	0841 1450 2047	0.9F 0.7E 0.7F	20 W	0537 1211 1754 2332	0848 1458 2046	0.8F 0.5E 0.5F	5 F	0621 1333 2007	0956 1637 2229	1.1F 0.8E 0.4F	20 Sa	0549 1313 2002	0931 1620 2206	0.9F 0.7E 0.3F	5 F	0456 1201 1840 2342	0829 1509 2108	1.1F 0.9E 0.5F	20 Sa	0423 1840 2313	0806 2052	1.0F 0.3F
6 W	0615 1301 1903	0933 1555 2147	1.0F 0.7E 0.6F	21 Th	0608 1303 1903	0930 1554 2137	0.8F 0.6E 0.4F	6 Sa	0710 1434 2123	1053 1743 2336	1.1F 0.8E 0.3F	21 Su	0630 1409	1022 1720 2308	0.9F 0.7E *	6 Sa	0545 1258 1946	0923 1608 2209	1.1F 0.9E 0.4F	21 Su	0503 1233 1941	0853 1549 2147	1.0F 0.8E 0.3F
7 Th	0658 1404 2023	1028 1702 2251	1.1F 0.8E 0.5F	22 F	0641 1356 2020	1015 1654 2233	0.9F 0.6E 0.3F	7 Su	0804 1534 2233	1153 1847	1.1F 0.8E	22 M	0719 1506	1118 1821	1.0F 0.7E	7 Su	0638 1357 2052	1021 1711 2315	1.0F 0.8E 0.4F	22 M	0553 1328 2039	0947 1645 2248	0.9F 0.8E 0.3F
8 F	0745 1505 2144	1124 1810 2358	1.1F 0.8E 0.4F	23 Sa	0717 1451	1104 1756 2336	0.9F 0.6E *	8 M	0901 1631 2334	1252 1947	1.0F 0.9E	23 Tu	0818 1601 2311	1217 1918	1.0F 0.8E	8 M	0737 1456 2154	1122 1812	0.9F 0.8E	23 Tu	0653 1425 2130	1047 1743 2349	0.9F 0.8E 0.3F
9 Sa	0834 1604 2300	1221 1914	1.1F 0.9E	24 Su	0758 1544	1155 1856	1.0F 0.7E	9 Tu	0959 1722	1348 2040	1.0F 0.9E	24 W	1654 2351	2009 2351	0.8E	9 Tu	0840 1553 2248	1223 1911	0.9F 0.8E	24 W	0804 1522 2214	1150 1839	0.9F 0.8E
10 Su	0925 1659	1317 2014	1.2F 0.9E	25 M	0845 1636	1247 1953	1.1F 0.8E	10 W	1809	2127	0.9E	25 Th	1743	2056	0.9E	10 W	1645 2335	2003 2335	0.8E	25 Th	1617 2253	1930 2253	0.8E
11 M	1017 1750	1411 2108	1.2F 1.0E	26 Tu	0938 1726	1341 2044	1.1F 0.9E	11 Th	1150 1852	1528 2210	1.0F 0.9E	26 F	1136 1830	1507 2140	1.0F 1.0E	11 Th	1047 1734	1416 2050	0.8F 0.8E	26 F	1034 1709 2331	1355 2018	0.9F 0.8E
12 Tu	1109 1836	1501 2156	1.1F 1.0E	27 W	1035 1813	1433 2130	1.2F 1.0E	12 F	1241 1932	1613 2248	1.0F 1.0E	27 Sa	1239 1914	1559 2223	1.0F 1.0E	12 F	1144 1818	1505 2131	0.8F 0.9E	27 Sa	1143 1757	1451 2104	0.9F 0.9E
13 W	1159 1919	1548 2239	1.1F 1.0E	28 Th	1135 1858	1524 2213	1.2F 1.0E	13 Sa	1330 2009	1655 2324	0.9F 0.9E	28 Su	1340 1957	1650 2304	1.0F 1.0E	13 Sa	1236 1859	1550 2210	0.8F 0.9E	28 Su	1247 1844	1545 2148	0.8F 0.9E
14 Th	1248 1959	1632 2320	1.1F 1.0E	29 F	1235 1941	1614 2255	1.2F 1.1E	14 Su	1418 2045	1735 2359	0.9F 0.9E	29 M	1326 1938	1633 2245	0.8F 0.8E	14 Su	1326 1938	1633 2245	0.8F 0.8E	29 M	1346 1929	1636 2232	0.8F 0.9E
15 F	1335 2036	1714 2357	1.0F 1.0E	30 Sa	1334 2023	1704 2336	1.1F 1.1E	15 M	1505 2119	1815	0.8F	30 Tu	1415 2014	1714	0.8F 0.8E	15 M	1415 2014	1714	0.8F 0.8E	30 Tu	1443 2013	1725 2315	0.8F 0.9E
				31 Su	1434 2105	1753	1.1F													31 W	1538 2058	1815	0.7F

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

* Current weak and variable.

Baltimore Harbor Approach (off Sandy Pt.), Maryland, 2010

F—Flood, Dir. 025° True E—Ebb, Dir. 190° True

April				May				June															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 Th	0249	0622	1.2F	16 F	0227	0610	1.1F	1 Sa	0300	0642	1.2F	16 Su	0229	0623	1.2F	1 Tu	0416	0752	0.9F	16 W	0411	0742	1.0F
	0948	1300	1.1E		0940	1257	1.0E		1011	1331	1.1E		0957	1320	1.1E		1108	1435	1.0E		1058	1419	1.0E
	1632	1905	0.6F		1643	1902	0.4F		1715	1943	0.5F		1714	1930	0.4F		1815	2102	0.6F		1750	2042	0.7F
	2145				2131				2225				2200				2349				2349		
2 F	0333	0709	1.2F	17 Sa	0302	0650	1.1F	2 Su	0348	0730	1.1F	17 M	0318	0710	1.1F	2 W	0513	0840	0.7F	17 Th	0520	0836	0.8F
	1038	1351	1.0E		1023	1342	1.0E		1057	1419	1.0E		1041	1404	1.0E		1149	1519	0.9E		1142	1504	1.0E
	1728	1957	0.6F		1733	1948	0.4F		1803	2035	0.5F		1754	2018	0.5F		1853	2151	0.6F		1827	2133	0.8F
	2236				2214				2324				2258										
3 Sa	0420	0758	1.1F	18 Su	0343	0734	1.0F	3 M	0440	0820	0.9F	18 Tu	0415	0800	1.0F	3 Th	0617	0932	0.6F	18 F	0635	0935	0.7F
	1128	1444	1.0E		1109	1429	0.9E		1143	1507	0.9E		1126	1450	1.0E		1232	1603	0.8E		1228	1552	0.9E
	1824	2052	0.5F		1823	2037	0.4F		1850	2130	0.5F		1832	2109	0.5F		1931	2239	0.7F		1907	2227	0.9F
	2331				2303																		
4 Su	0511	0851	1.0F	19 M	0431	0823	1.0F	4 Tu	0538	0913	0.8F	19 W	0521	0856	0.9F	4 Th	0728	1028	0.5F	19 Sa	0757	1039	0.5F
	1221	1538	0.9E		1158	1519	0.9E		1231	1557	0.8E		1214	1537	0.9E		1318	1648	0.8E		1318	1642	0.8E
	1920	2151	0.5F		1911	2130	0.4F		1936	2225	0.6F		1911	2202	0.6F		2008	2327	0.8F		1949	2321	1.0F
5 M	0607	0947	0.9F	20 Tu	0530	0918	0.9F	5 W	0643	1010	0.7F	20 Th	0637	0957	0.7F	5 Sa	0844	1127	0.4F	20 Su	0921	1146	0.4F
	1315	1635	0.8E		1249	1611	0.8E		1320	1648	0.8E		1304	1627	0.9E		1405	1733	0.7E		1411	1735	0.8E
	2016	2252	0.5F		1956	2227	0.4F		2020	2319	0.6F		1950	2257	0.8F		2045				2035		
6 Tu	0710	1047	0.8F	21 W	0641	1020	0.8F	6 Th	0755	1110	0.6F	21 F	0800	1102	0.6F	6 Su	1000	1228	0.4F	21 M	1041	1254	0.4F
	1410	1732	0.8E		1344	1704	0.8E		1411	1738	0.8E		1356	1718	0.8E		1455	1819	0.7E		1509	1830	0.7E
	2108	2353	0.5F		2038	2324	0.5F		2102				2031	2351	0.9F		2121				2123		
7 W	0819	1149	0.7F	22 Th	0801	1126	0.7F	7 F	0909	1210	0.5F	22 Sa	0925	1209	0.5F	7 M	1111	1327	0.3F	22 Tu	1152	1359	0.4F
	1505	1827	0.8E		1439	1758	0.8E		1502	1826	0.7E		1451	1810	0.8E		1546	1904	0.6E		1611	1926	0.7E
	2156				2119				2141				2113				2157				2212		
8 Th	0929	1249	0.7F	23 F	0923	1232	0.7F	8 Sa	1019	1308	0.5F	23 Su	1044	1315	0.5F	8 Tu	1216	1424	0.3F	23 W	1253	1500	0.4F
	1558	1917	0.8E		1535	1849	0.8E		1554	1912	0.7E		1547	1902	0.8E		1637	1949	0.6E		1714	2021	0.6E
	2239				2200				2218				2157				2233				2303		
9 F	1035	1345	0.7F	24 Sa	1041	1335	0.7F	9 Su	1124	1403	0.5F	24 M	1155	1417	0.5F	9 W	1313	1517	0.3F	24 Th	1344	1555	0.4F
	1648	2004	0.8E		1629	1939	0.8E		1643	1956	0.7E		1643	1954	0.7E		1728	2033	0.6E		1816	2116	0.6E
	2317				2240				2253				2242				2311				2353		
10 Sa	1135	1436	0.7F	25 Su	1150	1434	0.6F	10 M	1224	1455	0.5F	25 Tu	1257	1515	0.5F	10 Th	1404	1606	0.3F	25 F	1430	1647	0.5F
	1735	2046	0.8E		1721	2027	0.8E		1731	2037	0.7E		1739	2044	0.7E		1818	2118	0.5E		1915	2208	0.6E
	2352				2321				2326				2328				2352				1915	2208	0.6E
11 Su	1230	1524	0.7F	26 M	1254	1530	0.6F	11 Tu	1319	1544	0.5F	26 W	1353	1609	0.5F	11 Th	1449	1653	0.4F	26 Sa	1511	1734	0.5F
	1819	2125	0.7E		1811	2114	0.8E		1816	2116	0.6E		1834	2134	0.7E		1908	2204	0.5E		2011	2259	0.6E
12 M	1323	1609	0.6F	27 Tu	1351	1622	0.6F	12 W	1411	1630	0.4F	27 Th	1443	1701	0.5F	12 Sa	1529	1738	0.4F	27 Su	1549	1820	0.6F
	1900	2202	0.7E		1900	2201	0.8E		1859	2155	0.6E		1929	2224	0.7E		1958	2251	0.6E		2105	2348	0.5E
13 Tu	1413	1653	0.6F	28 W	1445	1713	0.6F	13 Th	1500	1715	0.4F	28 F	1530	1750	0.5F	13 Su	1605	1822	0.5F	28 M	1625	1903	0.6F
	1939	2237	0.7E		1949	2247	0.8E		1941	2234	0.6E		2023	2313	0.6E		2052	2341	0.6E		2157		
14 W	1503	1735	0.5F	29 Th	1537	1802	0.6F	14 F	1547	1800	0.4F	29 Sa	1614	1839	0.5F	14 M	1640	1907	0.5F	29 Tu	1700	1945	0.6F
	2016	2312	0.6E		2038	2334	0.7E		2024	2315	0.5E		2118				2148				2249		
15 Th	1553	1818	0.5F	30 F	1626	1852	0.6F	15 Sa	1632	1844	0.4F	30 Su	1655	1926	0.5F	15 Tu	1714	1954	0.6F	30 W	1733	2028	0.7F
	2053	2348	0.6E		2130				2109	2359	0.5E		2214				2247				2340		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Baltimore Harbor Approach (off Sandy Pt.), Maryland, 2010

F—Flood, Dir. 025° True E—Ebb, Dir. 190° True

July				August				September																
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum										
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m									
		knots				knots				knots				knots										
1 Th	0454 1113 1807	0811 1439 2111	0.5E 0.7F 0.9F	16 F	0519 1113 1745	0818 1432 2102	0.8F 1.0E 1.0F	1 Su	0643 1151 1820	0918 1514 2153	0.4F 0.7E 0.9F	16 M	0100 0735 1226 1840	0405 0959 1543 2222	0.9E 0.5F 0.7E 1.1F	1 W	0142 1048 1609 2253	0455 * 0.5E 0.9F	16 Th	0225 0923 1434 2017	0543 1153 1733 2357	0.8E 0.4F 0.5E 0.9F		
2 F	0032 0554 1151 1840	0311 0858 1519 2155	0.5E 0.6F 0.8E 0.8F	17 Sa	0028 0631 1158 1827	0323 0916 1519 2155	0.8E 0.6F 0.9E 1.1F	2 M	0132 0757 1230 1856	0431 1013 1556 2241	0.6E 0.3F 0.6E 0.9F	17 Tu	0201 0849 1326 1935	0510 1105 1642 2322	0.8E 0.4F 0.7E 1.1F	2 Th	0239 1151 1710 2352	0555 * 0.5E 0.9F	17 F	0324 1017 1544 2126	0642 1256 1841 2357	0.8E 0.5F 0.5E		
3 Sa	0125 0702 1230 1914	0408 0950 1600 2240	0.5E 0.5F 0.7E 0.8F	18 Su	0130 0749 1247 1913	0429 1018 1610 2252	0.8E 0.5F 0.8E 1.1F	3 Tu	0227 1114 1644 1937	0532 * 0.5E 2333	0.6E * 0.5E 0.9F	18 W	0303 1000 1435 2035	0615 1214 1747 2352	0.8E 0.4F 0.6E	3 F	0335 1045 1507 2059	0652 1252 1816 2359	0.7E 0.3F 0.5E	18 Sa	0420 1105 1647 2232	0737 1352 1943 2532	0.8E 0.6F 0.6E	
4 Su	0218 0818 1313 1950	0508 1047 1643 2327	0.5E 0.4F 0.7E 0.9F	19 M	0232 0909 1342 2003	0536 1124 1705 2350	0.8E 0.4F 0.7E 1.1F	4 W	0321 1219 1737 2024	0633 * 1737 2052	0.7E * 0.5E	19 Th	0402 1102 1547 2137	0718 1321 1853 2317	0.9E 0.4F 0.6E	4 Sa	0428 1126 1616 2207	0744 1348 1922 2507	0.8E 0.4F 0.6E	19 Su	0511 1147 1742 2332	0826 1441 2039 2532	0.8E 0.7F 0.6E	
5 M	0310 0939 1359 2027	0609 1148 1728	0.6E 0.3F 0.6E	20 Tu	0333 1027 1444 2056	0642 1234 1805	0.8E 0.3F 0.7E	5 Th	0414 1322 1835	0026 0.8E 0.5E	1.0F	20 F	0457 1154 1656 2239	0814 1421 1956	0.9E 0.4F 0.6E	5 Su	0518 1201 1719 2314	0832 1437 2023	0.8E 0.5F 0.7E	20 M	0557 1224 1829	0909 1524 2128	0.8E 0.7F 0.7E	
6 Tu	0400 1252 1816 2106	0708 1252 1816	1.0F 0.7E 0.6E	21 W	0431 1135 1553 2151	0745 1341 1906	0.9E 0.3F 0.6E	6 F	0504 1222 1623 2215	0823 1419 1935	0.8E 0.3F 0.5E	21 Sa	0547 1239 1756 2337	0904 1513 2053	0.9E 0.5F 0.6E	6 M	0605 1234 1816	0915 1523 2121	0.9E 0.7F 0.8E	21 Tu	0640 1258 1912	0949 1604 2214	0.8E 0.8F 0.8E	
7 W	0449 1353 1907 2149	0804 1353 1907	1.0F 0.8E 0.5E	22 Th	0525 1232 1702 2247	0842 1443 2006	1.0E 0.4F 0.6E	7 Sa	0552 1259 1728 2314	0910 1510 2033	0.9E 0.4F 0.6E	22 Su	0633 1317 1849	0948 1559 2145	0.9E 0.6F 0.6E	7 Tu	0650 1308 1909	0957 1608 2215	0.9E 0.9F 0.9E	22 W	0719 1330 1952	1026 1641 2256	0.8E 0.9F 0.8E	
8 Th	0536 1449 1958 2236	0854 1449 1958	1.1F 0.9E 0.5E	23 F	0614 1320 1806 2342	0933 1538 2103	1.0E 0.4F 0.6E	8 Su	0637 1331 1828	0952 1556 2130	1.0E 0.5F 0.7E	23 M	0714 1352 1937	1028 1640 2232	0.9E 0.7F 0.7E	8 W	0732 1343 2001	1038 1652 2307	1.0E 1.0F 1.0E	23 Th	0757 1400 2031	1101 1716 2338	0.8E 0.9F 0.9E	
9 F	0620 1342 1745 2326	0941 1540 2050	1.2F 1.0E 0.5E	24 Sa	0700 1401 1904	1018 1627 2157	1.0E 0.5F 0.6E	9 M	0720 1402 1924	1033 1640 2225	1.0E 0.6F 0.8E	24 Tu	0753 1424 2020	1105 1718 2316	0.9E 0.7F 0.7E	9 Th	0815 1420 2052	1119 1736 2359	0.9E 1.0E 1.0E	24 F	0833 1429 2111	1135 1751 2357	0.7E 1.0F 1.0F	
10 Sa	0704 1419 1843	1024 1626 2143	1.2F 1.0E 0.6E	25 Su	0741 1438 1957	1100 1711 2246	1.0E 0.6F 0.6E	10 Tu	0802 1434 2018	1113 1723 2318	1.0E 0.8F 0.8E	25 W	0829 1454 2102	1140 1755 2358	0.9E 0.8F 0.7E	10 F	0857 1459 2144	1202 1822	0.9E 1.2F	25 Sa	0908 1458 2151	1208 1827	0.7E 1.0F	
11 Su	0746 1452 1939	1105 1711 2236	1.1E 0.5F 0.6E	26 M	0820 1512 2045	1139 1753 2333	1.0E 0.6F 0.6E	11 W	0842 1508 2112	1153 1807 2112	1.1E 0.9F	26 Th	0903 1524 2143	1214 1831 2143	0.8E 0.8F	11 Sa	0941 1541 2236	1246 1910	0.9E 1.2F	26 Su	0944 1528 2234	1243 1905	0.6E 1.0F	
12 M	0827 1524 2035	1145 1754 2329	1.1E 0.6F 0.7E	27 Tu	0857 1544 2132	1215 1832	1.0E 0.7F	12 Th	0923 1543 2206	1234 1853	1.0E 1.0F	27 F	0937 1552 2225	1247 1907	0.8E 0.9F	12 Su	1027 1626 2331	1333 2000	0.8E 1.2F	27 M	1020 1602 2319	1319 1946	0.5E 1.0F	
13 Tu	0908 1556 2131	1225 1838	1.1E 0.7F	28 W	0932 1615 2217	1250 1910 2217	1.0E 0.7F	13 F	1005 1622 2302	1316 1940	1.0E 1.1F	28 Sa	1011 1622 2309	1321 1945	0.7E 0.9F	13 M	1118 1715	1424 2054	0.7E 1.1F	28 Tu	1100 1641	1401 2031	0.5E 0.9F	
14 W	0949 1630 2229	1306 1924	1.1E 0.8F	29 Th	1006 1646 2303	1325 1948	0.9E 0.8F	14 Sa	1048 1704	1401 2031	0.9E 1.1F	29 Su	1045 1653 2357	1356 2025	0.7E 0.9F	14 Tu	1216 1810	1521 2152	0.6E 1.0F	29 W	1149 1728	1449 2122	0.4E 0.9F	
15 Th	1031 1706 2327	1348 2012	1.0E 0.9F	30 F	1040 1716 2350	1400 2028	0.8E 0.8F	15 Su	1134 1750	1450 2124	0.8E 1.1F	30 M	1121 1727	1434 2109	0.6E 0.9F	15 W	1322 1911	1624 2253	0.6E 0.9F	30 Th	1248 1826	1548 2219	0.4E 0.9F	
				31 Sa	0539 1115 1747	0829 1436 2109	0.6E 0.5F 0.8F						31 Tu	0048 0739 1201 1808	0357 0948 1518 2159	0.7E 0.3F 0.5E 0.9F								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 * Current weak and variable.

Chesapeake and Delaware Canal (Chesapeake City), 2010

F—Flood, Dir. 097° True E—Ebb, Dir. 278° True

January				February				March											
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum					
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m				
1																			
F	0337	0640	2.3F	16	0426	0702	1.6F	1	0518	0819	2.8F	16	0519	0810	2.1E	1	0411	0714	2.9F
	0928	1253	3.0E	Sa	0954	1310	2.1E	M	1131	1435	2.7E	Tu	1119	1417	2.0E	M	1031	1329	2.6E
	1702	1955	2.5F		1653	1953	2.2F		1817	2057	2.5F		1724	2025	2.4F	M	1705	1945	2.4F
	2327				2328								2326			M	2248		
2		0146	1.5E	17	0200	0507	1.7F	2	0009	0255	2.2E	17	0236	0604	2.3E	2	0142	0507	2.4E
Sa	0433	0736	2.5F	Su	0747	1038	2.1E	Tu	0616	0912	2.8F	W	0855	1210	1.5E	Tu	0809	1130	2.4E
	1027	1351	3.0E		1355	1725	2.3F		1232	1526	2.5E		1502	1801	1.4E	W	1421	1749	2.0E
	1752	2040	2.6F		2025	2356			1901	2139	2.4F		2104	2358		W	2027	2329	
3	0008	0234	1.7E	18	0237	0549	1.9F	3	0051	0343	2.3E	18	0315	0651	2.4E	3	0229	0604	2.8F
Su	0531	0830	2.6F	M	0831	1125	1.9E	W	0714	1007	2.6F	Th	0942	1304	1.6E	W	0901	1229	1.5E
	1129	1445	2.9E		1439	1759	2.4F		1333	1618	2.2E		1549	1839	2.1E	Th	1510	1832	2.3F
	2124	2345	2.6F		2100				1943	2224	2.2F		2146			Th	2109		
4	0049	0321	1.9E	19	0314	0633	1.9F	4	0134	0433	2.3E	19	0356	0740	2.0F	4	0315	0701	2.6F
M	0629	0924	2.6F	Tu	0916	1215	2.0E	Th	0814	1107	2.3F	F	1034	1402	1.4E	Th	0955	1328	1.6E
	1232	1539	2.7E		1523	1834	2.4F		1436	1714	1.8E		1640	1920	1.4E	F	1600	1914	2.1F
	1926	2209	2.5F		2138				2026	2311	2.1F		2232			F	2151		
5	0130	0411	2.0E	20	0354	0719	1.9F	5	0219	0526	2.3E	20	0443	0833	1.9F	5	0402	0756	2.3E
Tu	0727	1021	2.5F	W	1004	1308	1.8E	F	0917	1211	2.1F	Sa	1131	1507	1.7E	F	1052	1427	1.6E
	1337	1636	2.4E		1611	1910	2.3F	☉	1542	1809	1.5E		1736	2005	2.3E	F	1654	1958	1.8F
	2012	2257	2.3F		2219			☊	2359		1.8F		2146			F	2237		
6	0213	0504	2.1E	21	0436	0809	1.8F	6	0307	0619	2.1E	21	0535	0934	1.8F	6	0452	0852	2.0F
W	0829	1123	2.4F	Th	1057	1406	1.6E	Sa	1023	1317	1.8F	Su	1229	1619	1.8E	Sa	1153	1528	1.7E
	1443	1734	2.1E		1703	1948	2.3F		1651	1905	1.2E		1833	2058	1.0E	Sa	1749	2046	1.6F
	2058	2345	2.2F		2305				2205			☉	2058			Sa	2325		
7	0258	0558	2.2E	22	0523	0904	1.7F	7	0048	0359	1.6F	22	0017	0252	1.9F	7	0543	0949	1.8F
Th	0936	1227	2.2F	F	1153	1514	1.3E	Su	0710	1126	1.4E	M	0630	1040	1.8F	Su	1253	1629	1.8E
	1554	1831	1.8E		1757	2030	2.3F		1435	1755	1.1E		1330	1727	1.9E	☉	1843	2142	
☉	2146				2353				2004	2303			1931	2202		☉	2142		
8	0347	0651	2.2E	23	0611	1006	1.7F	8	0138	0453	1.4F	23	0114	0354	1.9F	8	0015	0316	1.4F
F	1045	1334	2.0F	Sa	1251	1631	1.8E	M	0804	1222	1.7F	Tu	0728	1146	1.8F	M	0633	1045	1.6F
	1706	1928	1.4E	☉	1853	2119	1.1E		1551	1853	1.0E		1436	1827	1.0E		1353	1726	1.1E
	2237								2107				2034	2311			1936	2243	
9	0437	0745	1.9F	24	0043	0327	2.4E	9	0232	0545	1.3F	24	0215	0504	1.9F	9	0106	0413	1.2F
Sa	1152	1455	2.2E	Su	0700	1110	1.7F	Tu	0900	1312	1.7F	W	0833	1248	1.9F	Tu	0723	1135	1.6F
	1815	2030	1.2E		1353	1746	0.9E		1640	1944	1.1E		1541	1919	1.2E	W	1455	1815	1.1E
	2329				1952	2217			2201				2134			W	2032	2341	
10	0527	0842	2.1E	25	0136	0421	2.4E	10	0328	0656	1.3F	25	0119	0416	2.1F	10	0200	0513	1.1F
Su	1252	1612	1.9F	M	0755	1212	1.7F	W	0950	1355	1.8F	Th	0940	1347	1.6E	W	0817	1220	1.6F
	1920	2134	1.1E		1501	1853	0.9E		1713	2027	1.2E		1636	2005	2.2E	Th	1538	1858	2.1E
					2320				2244				2227			Th	2124		
11	0616	0938	2.1E	26	0234	0519	1.9F	11	0418	0725	1.3F	26	0420	0725	2.3F	11	0257	0609	1.5E
M	1347	1708	2.0F	Tu	0855	1312	1.9F	Th	1033	1432	1.8F	F	1725	1442	2.2F	Th	0912	1300	1.6F
	2018	2228	1.1E		1605	1952	1.0E		2103	2322	1.4E		2048	2314	1.7E	Th	1607	1935	2.2E
					2156											Th	2207		
12	0703	1023	2.1E	27	0335	0620	2.6E	12	0504	0812	1.5F	27	0518	0831	2.6F	12	0351	0704	1.3F
Tu	1434	1754	2.0F	W	0955	1410	2.1F	F	1115	1507	1.9F	Sa	1136	1532	2.3F	F	1002	1339	1.8F
	2107	2315	1.1E		2249	2043	1.1E		2135				2128			F	1637	2008	1.6E
																F	2244		
13	0747	1103	2.1E	28	0433	0724	2.8E	13	0000	0315	1.5E	28	0002	0315	2.0E	13	0439	0756	1.6F
W	1514	1831	2.0F	Th	1051	1504	2.3F	Sa	0550	0859	1.9E	Su	0616	0932	2.7E	Sa	1047	1416	1.7E
	2148	2358	1.2E		2338	2127	1.3E	☉	1158	1540	2.0F	☉	2046	1620	2.4F	Sa	1710	2037	1.9E
									2203				1900			Sa	2320		
14	0830	1142	2.1E	29	0529	0828	2.9E	14	0039	0355	1.7E	29	0031	0315	2.8F	14	0526	0847	1.8F
Th	1549	1859	2.0F	F	1146	1555	2.4F	Su	0637	0944	2.0E	M	0616	0932	2.7E	Su	1132	1454	2.0F
	2225				2208				2230			☉	2046	2105	2.1E	☉	1747	2105	2.1E
													2357			☉	2357		
15	0912	1225	2.1E	30	0627	0930	2.9E	15	0118	0436	1.9E	30	0614	0935	2.0F	15	0614	0935	2.0F
☉	1621	1924	2.1F	Sa	1244	1644	2.5F	M	0724	1030	2.0F	M	1218	1531	2.1F	M	1218	1531	2.1F
	2258			☉	1930	2248			2257				2132				1827		
				31	0120	0421	1.8E	31	0039	0355	1.7E	31	0031	0315	2.8F	31	0031	0315	2.8F
				Su	0724	1030	2.9E	W	0637	0944	2.0E	W	0616	0932	2.7E	W	0614	0935	2.0F
					2208				2230			☉	2046	2105	2.1E	☉	1827		
					2328														

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Charleston Harbor (off Ft. Sumter), South Carolina, 2010

F—Flood, Dir. 313° True E—Ebb, Dir. 127° True

January				February				March																					
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots																		
1 F	h m 0210 0845 1501 2056	h m 0452 1153 1720	2.4F 3.2E 1.9F	16 Sa	h m 0248 0907 1520 2106	h m 0517 1216 1732	1.6F 2.4E 1.6F	1 M	h m 0343 1003 1615 2228	h m 0617 1309 1846	3.2E 2.3F 3.2E 2.1F	16 Tu	h m 0339 0945 1557 2159	h m 0611 1255 1829	2.2E 1.7F 2.3E 1.7F	1 M	h m 0237 0853 1502 2119	h m 0508 1158 1735	2.3F 3.2E 2.2F	16 Tu	h m 0242 0842 1450 2059	h m 0506 1151 1722	1.7F 2.4E 1.8F						
2 Sa	0302 0935 1550 2150	0007 0544 1242 1812	3.0E 2.4F 3.2E 1.9F	17 Su	0325 0941 1557 2144	0021 0556 1252 1815	2.0E 1.6F 2.3E 1.6F	2 Tu	0436 1049 1703 2321	0135 0705 1356 2.9E 1935	3.1E 2.2F 2.9E 2.0F	17 W	0415 1016 1628 2236	0111 0650 1327 1909	2.2E 1.6F 2.2E 1.7F	2 Tu	0328 0938 1547 2208	0025 0555 1245 1822	3.4E 2.2F 3.1E 2.2F	17 W	0318 0916 1521 2135	0011 0544 1224 1800	2.4E 1.7F 2.3E 1.9F						
3 Su	0356 1024 1640 2245	0059 0635 1231 1905	3.0E 2.3F 3.1E 1.9F	18 M	0401 1014 1633 2223	0057 0636 1327 1857	2.0E 1.6F 2.2E 1.6F	3 W	0530 1135 1753	0227 0753 2024	2.9E 1.9F 2.6E 1.8F	18 Th	0452 1047 1701 2314	0148 0731 1401 1951	2.1E 1.6F 2.0E 1.7F	3 W	0418 1022 1633 2257	0114 0640 1330 1907	3.2E 2.1F 2.8E 2.0F	18 Th	0354 0948 1553 2212	0048 0623 1258 1840	2.4E 1.7F 2.2E 1.8F						
4 M	0451 1113 1731 2341	0152 0727 1313 1958	2.9E 2.2F 2.9E 1.8F	19 Tu	0438 1047 1707 2302	0134 0718 1401 1940	1.9E 1.6F 2.1E 1.5F	4 Th	0014 0626 1221 1846	0321 0842 1536 2115	2.6E 1.7F 2.2E 1.6F	19 F	0534 1119 1739 2357	0229 0814 1438 2035	2.0E 1.5F 1.9E 1.6F	4 Th	0508 1106 1721 2347	0275 0725 1417 1953	1.9F 2.4E 1.8F	19 F	0432 1021 1628 2252	0704 1334 1921	1.6F 2.1E 1.8F						
5 Tu	0549 1202 1824	0247 0818 1327 2052	2.7E 2.0F 2.7E 1.7F	20 W	0518 1119 1742 2343	0212 0800 1435 2024	1.9E 1.5F 1.9E 1.5F	5 F	0110 0724 1309 1942	0418 0931 1631 2206	2.3E 1.4F 1.9E 1.4F	20 Sa	0624 1157 1825	0317 0902 2124	1.9E 1.4F 1.6F	5 F	0600 1149 1812	0811 1505 2041	1.6F 2.0E 1.5F	20 Sa	0515 1056 1710 2336	0748 1415 2007	1.5F 2.0E 1.7F						
6 W	0649 1252 1919	0345 0910 1537 2146	2.5E 1.7F 2.4E 1.6F	21 Th	0602 1153 1821	0255 0845 1513 2110	1.8E 1.4F 1.8E 1.5F	6 Sa	0208 0823 1400 2041	0517 1021 1730 2300	2.1E 1.2F 1.6E 1.2F	21 Su	0048 0722 1244 1922	0413 0953 1618 2219	1.9E 1.3F 1.7E 1.6F	6 Sa	0038 0655 1235 1908	0349 0859 1557 2131	2.3E 1.4F 1.7E 1.3F	21 Su	0605 1138 1800	0837 1503 2058	1.4F 1.9E 1.7F						
7 Th	0751 1344 2015	0445 1002 1703 2241	2.4E 1.5F 2.1E 1.5F	22 F	0028 0653 1231 1906	0344 0933 1557 2159	1.7E 1.3F 1.7E 1.5F	7 Su	0308 0922 1455 2142	0618 1113 1832 2357	1.9E 1.1F 1.5E 1.1F	22 M	0150 0827 1346 2027	0518 1049 1726 2317	1.9E 1.2F 1.7E 1.6F	7 Su	0133 0751 1323 2009	0446 0949 1655 2224	2.0E 1.2F 1.4E 1.1F	22 M	0029 0703 1232 1900	0354 0930 1602 2154	2.1E 1.3F 1.8E 1.6F						
8 F	0852 1437 2112	0546 1054 1802 2336	2.2E 1.3F 1.9E 1.4F	23 Sa	0121 0752 1317 1959	0442 1024 1650 2251	1.7E 1.2F 1.7E 1.5F	8 M	0409 1019 1555 2240	0717 1206 1934 2540	1.9E 1.0F 1.5E	23 Tu	0300 0936 1502 2139	0627 1148 1841 2439	2.0E 1.2F 1.8E	8 M	0230 0850 1419 2112	0545 1042 1759 2321	1.8E 1.1F 1.3E 1.0F	23 Tu	0131 0808 1339 2010	0457 1027 1712 2255	2.0E 1.3F 1.8E 1.6F						
9 Sa	0951 1532 2209	0647 1146 1902	2.2E 1.2F 1.8E	24 Su	0221 0857 1414 2059	0547 1119 1755 2347	1.7E 1.2F 1.7E 1.6F	9 Tu	0507 1114 1656 2334	0057 0813 1301 2030	1.1F 1.9E 1.0F 1.6E	24 W	0411 1042 1621 2248	0018 0734 1250 1952	1.7F 2.2E 1.3F 2.1E	9 Tu	0330 0947 1521 2213	0645 1136 1903	1.7E 1.0F 1.3E	24 W	0239 0915 1456 2124	0604 1128 1826 2357	2.1E 1.3F 1.9E 1.6F						
10 Su	1048 1629 2303	0033 0745 1238 2000	1.3F 2.2E 1.1F 1.8E	25 M	0328 1004 1524 2203	0655 1215 1905	1.9E 1.2F 1.8E	10 W	0559 1204 1752	0330 0904 2120	1.2F 2.1E 1.7E	25 Th	0519 1142 1734 2352	0121 0835 1352 2055	1.8F 2.5E 1.5F 2.5E	10 W	0428 1042 1624 2309	0021 0741 2302	1.0F 1.8E 1.0F 1.5E	25 Th	0348 1018 1612 2234	0710 1230 1935	2.2E 1.4F 2.2E						
11 M	1141 1725 2355	0157 0839 1330 2053	1.3F 2.2E 1.1F 1.8E	26 Tu	0437 1107 1638 2306	0045 0759 1314 2011	1.7F 2.2E 1.3F 2.1E	11 Th	0023 0646 1251 1842	0411 0950 1449 2204	1.3F 2.2E 1.2F 1.9E	26 F	0620 1237 1838	0223 0931 2152	2.0F 2.8E 2.9E	11 Th	0522 1133 1723 2359	0833 1329 2052	1.9E 1.1F 1.7E	26 F	0454 1117 1721 2338	0811 1332 2038	1.7F 1.6F 2.6E						
12 Tu	1231 1816	0350 0929 1422 2142	1.3F 2.3E 1.2F 1.9E	27 W	0542 1206 1748	0144 0858 1413 2112	1.8F 2.5E 1.4F 2.4E	12 F	0108 0727 1334 1926	0342 1032 1540 2244	1.4F 2.3E 1.4F 2.1E	27 Sa	0050 0715 1327 1935	0322 1022 1551 2245	2.1F 3.1E 1.9F 3.2E	12 F	0609 1220 1815	0919 1424 2137	2.0E 1.3F 1.9E	27 Sa	0554 1211 1823	0907 1433 2135	2.7E 1.8F 2.9E						
13 W	1317 1903	0317 1015 1513 2226	1.4F 2.4E 1.3F 1.9E	28 Th	0006 0641 1300 1851	0243 0953 1512 2208	2.0F 2.8E 1.6F 2.7E	13 Sa	0150 0804 1414 2007	0418 1111 1626 2322	1.5F 2.4E 1.6F 2.2E	28 Su	0145 0805 1415 2028	0417 1111 1645 2336	2.3F 3.2E 2.1F 3.4E	13 Sa	0044 0652 1302 1900	0308 1001 1514 2218	1.3F 2.2E 1.5F 2.1E	28 Su	0036 0650 1301 1919	0300 0959 1531 2227	2.0F 2.9E 2.0F 3.2E						
14 Th	1400 1946	0358 1058 1601 2306	1.5F 2.4E 1.4F 2.0E	29 F	0104 0736 1351 1949	0341 1044 1609 2301	2.2F 3.1E 1.8F 3.0E	14 Su	0228 0839 1451 2046	0455 1148 1709 2359	1.6F 2.4E 1.7F 2.2E	29 M	0126 0731 1342 1942	0349 1040 1600 2257	1.5F 2.3E 1.6F 2.3E	14 Su	0205 0808 1418 2021	0428 1116 1642 2334	1.6F 2.4E 1.8F 2.4E	29 M	0130 0740 1349 2010	0353 1048 1623 2317	2.1F 3.0E 2.1F 3.4E						
15 F	1441 2027	0437 1138 1647 2344	1.6F 2.5E 1.5F 2.1E	30 Sa	0158 0827 1440 2044	0436 1133 1704 2353	2.4F 3.3E 2.0F 3.2E	15 M	0304 0913 1525 2123	0533 1222 1749	1.7F 2.4E 1.7F	30 Tu	0205 0808 1418 2021	0428 1116 1642 2334	1.6F 2.4E 1.8F 2.4E	15 M	0205 0808 1418 2021	0428 1116 1642 2334	1.6F 2.4E 1.8F 2.4E	30 Tu	0221 0827 1435 2059	0442 1135 1710	2.1F 3.0E 2.2F						
				31 Su	0251 0915 1527 2136	0528 1221 1756	2.4F 3.3E 2.1F					31 W					31 W											0006 0528 1220 1755 2146	3.4E 2.0F 2.8E 2.1F

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Savannah River Entrance (between jetties), Georgia, 2010

F—Flood, Dir. 286° True E—Ebb, Dir. 110° True

January				February				March																
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots									
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m									
1 F	0250 0922 1541 2144	0539 1237 1811	2.9F 2.7E 2.3F	16 Sa	0332 0957 1606 2208	0611 1332 1832	1.6E 1.8F 2.0E 1.8F	1 M	0423 1039 1646 2308	0135 1351 1924	2.7E 2.8E 2.7F	16 Tu	0423 1034 1639 2244	0655 1331 1912	1.8E 1.9F 1.8E 2.1F	1 M	0315 0930 1534 2156	0555 1244 1815	2.7F 2.7E 2.7F	16 Tu	0317 0928 1529 2136	0551 1230 1804	1.9E 1.9F 1.8E 2.2F	
2 Sa	0344 1011 1522 2237	0630 1325 1859	2.4E 3.0F 2.8E 2.4F	17 Su	0412 1031 1640 2244	0646 1359 1907	1.8F 1.9E 1.9F	2 Tu	0515 1127 1732	0226 1435 2011	2.8E 2.7F 2.7E	17 W	0501 1109 1714 2321	0732 1359 1951	1.9F 1.8E 2.1F	2 Tu	0406 1016 1619 2245	0642 1328 1900	2.7F 2.6E 2.8F	17 W	0356 1005 1606 2214	0628 1256 1843	2.0F 1.8E 2.3F	
3 Su	0438 1101 1713 2330	0720 1413 1947	2.9F 2.8E 2.5F	18 M	0450 1104 1714 2319	0721 1412 1943	1.8F 1.8E 1.9F	3 W	0607 1216 1820	0840 1521 2101	2.5F 2.5E 2.6F	18 Th	0540 1146 1752	0811 1436 2033	1.8F 1.7E 2.1F	3 W	0456 1102 1705 2336	0728 1412 1946	2.6F 2.3E 2.7F	18 Th	0436 1042 1644 2255	0707 1331 1924	1.9F 1.8E 2.3F	
4 M	0532 1152 1800	0811 1500 2037	2.7F 2.7E 2.5F	19 Tu	0528 1139 1749 2356	0759 1432 2022	1.7F 1.7E 1.9F	4 Th	0702 1307 1911	0932 1610 2156	2.2F 2.2E 2.3F	19 F	0625 1228 1834	0856 1518 2120	1.6F 1.6E 2.0F	4 Th	0545 1148 1753	0814 1456 2034	2.4F 2.3E 2.5F	19 F	0518 1121 1724 2343	0747 1411 2007	1.8F 1.8E 2.2F	
5 Tu	0628 1243 1849	0904 1548 2130	2.5F 2.5E 2.4F	20 W	0608 1218 1826	0840 1506 2104	1.6F 1.7E 1.9F	5 F	0800 1400 2008	1029 1705 2256	1.9F 2.0E 2.1F	20 Sa	0718 1317 1924	0947 1605 2215	1.4F 1.5E 1.9F	5 F	0637 1237 1843	0903 1542 2126	2.1F 2.1E 2.3F	20 Sa	0606 1205 1809	0832 1456 2056	1.7F 1.7E 2.1F	
6 W	0727 1337 1942	1001 1641 2227	2.2F 2.3E 2.3F	21 Th	0653 1300 1908	0926 1547 2152	1.5F 1.6E 1.9F	6 Sa	0901 1456 2108	1129 1815	1.7F 1.8E	21 Su	0821 1414 2022	1045 1658 2315	1.3F 1.5E 1.9F	6 Sa	0732 1329 1939	0957 1633 2224	1.8F 1.9E 2.0F	21 Su	0700 1258 1901	0924 1546 2151	1.5F 1.6E 2.0F	
7 Th	0828 1433 2039	1102 1741 2328	2.0F 2.0E 2.2F	22 F	0746 1349 1956	1018 1633 2245	1.4F 1.5E 1.9F	7 Su	0354 1004 1554 2208	0728 1230 1932	2.0E 2.0E 1.7E	22 M	0929 1518 2125	1148 1800	1.3F 1.4E	7 Su	0831 1425 2038	1056 1737 2328	1.6F 1.6E 1.8F	22 M	0802 1400 2002	1023 1642 2253	1.3F 1.5E 2.0F	
8 F	0931 1529 2137	0648 1203 1851	2.2E 1.8F 1.9E	23 Sa	0847 1443 2051	1115 1725 2342	1.4F 1.5E 1.9F	8 M	0454 1103 1653 2306	0830 1329 2039	2.0E 1.5F 1.6E	23 Tu	0405 1034 1624 2229	0657 1251 1914	1.6E 1.3F 1.5E	8 M	0323 0932 1523 2140	0658 1157 1900	1.8E 1.5F 1.5E	23 Tu	0244 0908 1506 2109	0528 1129 1749 2358	1.7E 1.3F 1.5E 2.0F	
9 Sa	0420 1033 1626 2236	0755 1302 2002	2.1F 2.1E 1.7F 1.8E	24 Su	0951 1541 2149	1214 1823	1.3F 1.5E	9 Tu	0551 1158 1750	0926 1424 2136	2.0E 1.5F 1.7E	24 W	0508 1132 1728 2331	0830 1352 2041	1.8E 1.5F 1.7E	9 Tu	0421 1030 1622 2239	0759 1256 2010	1.7F 1.8E 1.5F 1.5E	24 W	0347 1011 1612 2216	0650 1234 1918	1.7E 1.4F 1.6E	
10 Su	0520 1131 1723 2332	0856 1359 2104	2.2E 1.6F 1.8E	25 M	0423 1054 1642 2248	0710 1313 1929	2.0F 1.7E 1.4F 1.5E	10 W	0643 1247 1845	1016 1517 2227	2.1E 1.5F 1.7E	25 Th	0607 1226 1828	0933 1451 2150	2.3F 2.1E 2.0E	10 W	0514 1122 1719 2334	0853 1350 2107	1.9E 1.5F 1.6E	25 Th	0448 1107 1714 2319	0812 1334 2041	2.1F 1.6F 1.8E	
11 M	0618 1226 1819	0951 1453 2200	2.2E 1.5F 1.8E	26 Tu	0525 1153 1744 2346	0834 1412 2041	1.8E 1.5F 1.7E	11 Th	0729 1333 1934	1101 1604 2314	2.1E 1.6F 1.7E	26 F	0702 1315 1924	1025 1547 2247	2.3E 2.0F 2.3E	11 Th	0604 1209 1811	0941 1439 2157	1.9E 1.6F 1.7E	26 F	0546 1158 1812	0912 1430 2141	2.2E 1.9F 2.1E	
12 Tu	0712 1317 1913	1043 1546 2252	2.2E 1.5F 1.7E	27 W	0625 1249 1844	0945 1510 2151	2.1E 1.6F 1.9E	12 F	0810 1415 2019	1144 1646 2355	2.1E 1.7F 1.7E	27 Sa	0754 1403 2017	1113 1639 2340	2.5E 2.3F 2.5E	12 F	0649 1253 1859	1025 1524 2240	1.9E 1.8F 1.7E	27 Sa	0640 1246 1906	1003 1524 2235	2.2E 2.1F 2.4E	
13 W	0800 1405 2003	0416 1131 1635 2340	1.9F 2.2E 1.5F 1.7E	28 Th	0721 1341 1941	1041 1607 2253	2.4E 1.9F 2.1E	13 Sa	0848 1454 2058	1222 1724	2.0E 1.9F	28 Su	0843 1449 2107	1159 1728	2.6E 2.5F	13 Sa	0732 1334 1942	1104 1606 2317	1.9E 1.9F 1.8E	28 Su	0732 1334 1958	1051 1615 2326	2.3E 2.3F 2.6E	
14 Th	0843 1449 2048	0459 1216 1718	1.9F 2.1E 1.6F	29 F	0813 1430 2035	1132 1701 2350	2.6E 2.2F 2.4E	14 Su	0307 0925 1530 2135	0029 1254 1800	1.7E 1.8F 1.9E 2.0F	29 M	0127 0754 1403 2017	0412 1113 1639 2340	2.6F 2.5E 2.3F 2.5E	14 Su	0156 0812 1413 2021	0434 1140 1647 2345	1.8F 1.9E 2.0F 1.8E	29 M	0208 0821 1421 2048	0446 1138 1704	2.4F 2.4E 2.5F	
15 F	0250 0921 1529 2130	0024 0536 1257 1756	1.7E 1.8F 2.1E 1.7F	30 Sa	0236 0903 1516 2127	0523 1220 1751	2.9F 2.7E 2.4F	15 M	0346 1000 1605 2210	0049 1316 1836	1.7E 1.9F 1.9E 2.1F	30 Tu	0237 0851 1451 2059	0513 1208 1726	1.8F 1.9E 2.1F	15 M	0237 0851 1451 2059	0513 1208 1726	1.8F 1.9E 2.1F	30 Tu	0259 0908 1508 2137	0016 0535 1224 1751	2.7E 2.5F 2.4E 2.6F	
31 Su	0330 0951 1601 2217	0043 0614 1306 1838	2.6E 2.9F 2.8E 2.6F	31 Su	0330 0951 1601 2217	0043 0614 1306 1838	2.6E 2.9F 2.8E 2.6F						31 W	0349 0953 1555 2226	0105 0621 1309 1837	2.7E 2.4F 2.4E 2.6F								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Savannah River Entrance (between jetties), Georgia, 2010

F–Flood, Dir. 286° True E–Ebb, Dir. 110° True

July				August				September							
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum	
	h	m	knots		h	m	knots		h	m	knots		h	m	knots
1	0004	0315	1.7E	16	0016	0318	2.6E	1	0044	0328	1.5E	16	0134	0437	2.1E
Th	0612	0841	1.8F	F	0621	0901	2.5F	Su	0650	0931	1.8F	M	0741	1028	2.3F
	1223	1502	1.5E		1252	1604	2.5E		1306	1546	1.6E		1426	1750	2.2E
	1830	2059	1.5F		1858	2132	2.3F		1926	2156	1.4F		2035	2302	1.8F
2	0043	0333	1.6E	17	0109	0409	2.4E	2	0129	0411	1.5E	17	0231	0543	1.9E
F	0650	0924	1.8F	Sa	0713	0956	2.4F	M	0735	1023	1.8F	Tu	0841	1135	2.1F
	1304	1538	1.5E		1350	1706	2.4E		1358	1636	1.6E		1529	1859	2.1E
	1915	2145	1.4F		1958	2231	2.1F		2022	2251	1.3F		2138		
3	0125	0406	1.5E	18	0204	0504	2.1E	3	0220	0500	1.4E	18		0006	1.6F
Sa	0732	1011	1.8F	Su	0808	1057	2.3F	Tu	0828	1118	1.8F	W	0330	0702	1.8E
	1348	1621	1.5E		1450	1814	2.2E		1456	1732	1.6E		0943	1243	2.0F
	2006	2237	1.4F		2101	2332	1.9F		2124	2349	1.3F		1631	2004	2.1E

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

St. Johns River Entrance, Florida, 2010

F—Flood, Dir. 262° True E—Ebb, Dir. 082° True

July				August				September															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m								
1 Th	0113	0352	1.9E	16 F	0124	0405	2.4E	1 Su	0155	0436	1.9E	16 M	0248	0535	2.1E	1 W	0233	0534	1.9E	16 Th	0416	0755	1.7E
	0801	1027	1.7F		0809	1050	2.4F		0835	1119	2.1F		0927	1211	2.4F		0928	1223	2.3F		1057	1336	1.9F
	1338	1604	1.7E		1403	1645	2.1E		1427	1701	1.9E		1533	1915	1.9E		1533	1810	1.8E		1707	2101	1.7E
	2009	2243	1.7F		2044	2317	2.2F		2115	2340	1.6F		2224				2226				2351		
2 F	0153	0431	1.9E	17 Sa	0218	0501	2.3E	2 M	0231	0521	1.9E	17 Tu	0344	0650	1.9E	2 Th	0322	0629	1.9E	17 F	0518	0900	1.7E
	0841	1111	1.8F		0901	1143	2.5F		0917	1204	2.2F		1023	1305	2.3F		1022	1316	2.2F		1154	1439	1.7F
	1423	1650	1.7E		1500	1805	2.0E		1514	1750	1.8E		1634	2025	1.9E		1633	1909	1.8E		1804	2151	1.8E
	2100	2328	1.6F		2146				2204				2322				2321						
3 Sa	0232	0515	1.8E	18 Su	0012	0206	2.0F	3 Tu	0025	0205	1.5F	18 W	0442	0811	1.9E	3 F	0425	0729	1.9E	18 Sa	0044	0338	1.3F
	0920	1154	1.9F		0313	0604	2.2E		1002	1251	2.2F		1120	1404	2.1F		1120	1412	2.2F		0618	0955	1.7E
	1509	1740	1.7E		1558	1936	2.0E		1606	1843	1.8E		1736	2124	1.9E		1735	2010	1.9E		1856	2237	1.8E
	2150				2245				2255				2322				2321						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

St. Johns River Entrance, Florida, 2010

F—Flood, Dir. 262° True E—Ebb, Dir. 082° True

October				November				December																
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots									
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m									
1 F	0309 1002 1606 2259	0604 1253 1844	1.5F 1.8E 2.2F 1.9E	16 Sa	0452 1126 1722	0837 1355 2112	1.4F 1.6E 1.5F 1.7E	1 M	0522 1159 1743	0810 1431 2030	2.0F 2.0E 2.2E	16 Tu	0608 1239 1816	0931 1456 2127	1.7F 1.6E 1.3F 1.8E	1 W	0606 1249 1819	0918 1515 2108	2.5F 2.2E 1.9F 2.3E	16 Th	0611 1250 1815	0855 1501 2103	1.9F 1.7E 1.2F 1.8E	
2 Sa	0418 1104 1708 2353	0709 1350 1948	1.5F 1.8E 2.2F 2.0E	17 Su	0004 0552 1222 1814	0236 0930 1454 2153	1.4F 1.6E 1.5F 1.8E	2 Tu	0019 0624 1303 1841	0301 0920 1535 2127	2.3F 2.2E 2.0F 2.3E	17 W	0047 0655 1332 1905	0324 1007 1552 2201	1.8F 1.7E 1.3F 1.8E	2 Th	0045 0703 1350 1915	0338 1017 1620 2202	2.6F 2.4E 1.9F 2.3E	17 F	0044 0700 1343 1904	0327 0939 1556 2147	2.0F 1.8E 1.2F 1.8E	
3 Su	0531 1209 1808	0817 1451 2050	1.7F 1.9E 2.2F 2.1E	18 M	0051 0646 1316 1902	0337 1016 1557 2230	1.6F 1.7E 1.4F 1.8E	3 W	0110 0721 1404 1937	0401 1021 1638 2220	2.5F 2.4E 2.1F 2.4E	18 Th	0131 0740 1422 1951	0413 1037 1644 2236	2.0F 1.9E 1.4F 1.8E	3 F	0138 0757 1447 2008	0437 1113 1720 2253	2.7F 2.5E 1.9F 2.3E	18 Sa	0132 0748 1435 1950	0420 1023 1649 2231	2.2F 1.9E 1.3F 1.9E	
4 M	0047 0638 1314 1906	0322 0923 1554 2147	2.0F 2.1E 2.2F 2.3E	19 Tu	0135 0734 1407 1948	0425 1058 1650 2303	1.7F 1.8E 1.5F 1.9E	4 Th	0201 0814 1502 2029	0458 1117 1735 2311	2.8F 2.6E 2.2F 2.5E	19 F	0214 0822 1509 2033	0459 1108 1729 2312	2.2F 2.0E 1.5F 1.9E	4 Sa	0231 0850 1541 2057	0532 1207 1812 2343	2.9F 2.5E 1.9F 2.3E	19 Su	0219 0834 1524 2034	0511 1107 1739 2315	2.3F 2.0E 1.4F 2.0E	
5 Tu	0139 0737 1417 2000	0423 1026 1656 2241	2.3F 2.4E 2.3F 2.5E	20 W	0217 0816 1455 2031	0504 1131 1730 2331	1.9F 1.9E 1.6F 1.9E	5 F	0251 0905 1555 2119	0549 1209 1827	3.0F 2.7E 2.2F	20 Sa	0255 0903 1553 2112	0543 1142 1811 2350	2.3F 2.1E 1.6F 1.9E	5 Su	0322 0940 1631 2145	0622 1259 1858	2.9F 2.4E 1.9F	20 M	0306 0920 1611 2119	0559 1153 1826	2.5F 2.0E 1.5F	
6 W	0229 0832 1515 2051	0519 1124 1752 2332	2.6F 2.6E 2.4F 2.6E	21 Th	0257 0855 1538 2111	0540 1155 1807 2357	2.1F 2.0E 1.7F 1.9E	6 Sa	0340 0955 1646 2206	0000 0638 1259 1914	2.5E 3.0F 2.6E 2.1F	21 Su	0336 0944 1636 2150	0626 1221 1852	2.5F 2.1E 1.6F	6 M	0411 1029 1718 2232	0030 0709 1347 1942	2.3E 2.8F 2.3E 1.8F	21 Tu	0351 1004 1656 2206	0001 0646 1239 1912	2.0E 2.6F 2.1E 1.6F	
7 Th	0317 0923 1609 2141	0610 1219 1843	2.9F 2.7E 2.4F	22 F	0334 0933 1620 2149	0616 1219 1843 2149	2.3F 2.1E 1.7F	7 Su	0429 1045 1735 2254	0725 1347 2000	3.0F 2.5E 1.9F	22 M	0416 1026 1719 2229	0709 1302 1935	2.5F 2.2E 1.6F	7 Tu	0500 1117 1805 2320	0754 1428 2026	2.6F 2.2E 1.6F	22 W	0438 1050 1741 2257	0733 1326 2001	2.6F 2.2E 1.7F	
8 F	0405 1014 1701 2230	0659 1310 1933	2.6F 3.0F 2.7E 2.3F	23 Sa	0410 1010 1700 2225	0028 0654 1251 1921	1.9E 2.4F 2.2E 1.7F	8 M	0518 1136 1826 2343	0814 1432 2048	2.8F 2.3E 1.7F	23 Tu	0457 1110 1804 2312	0754 1345 2021	2.5F 2.2E 1.5F	8 W	0549 1203 1851	0840 1503 2113	2.4F 2.0E 1.6F	23 Th	0527 1136 1828 2352	0823 1413 2053	2.5F 2.3E 1.8F	
9 Sa	0452 1104 1753 2319	0747 1359 2022	2.5E 3.0F 2.6E 2.2F	24 Su	0446 1049 1741 2301	0735 1327 2001	2.4F 2.2E 1.6F	9 Tu	0610 1227 1917	0903 1516 2138	2.2E 2.5F 1.6F	24 W	0541 1156 1852	0842 1431 2112	2.5F 2.2E 1.5F	9 Th	0639 1248 1937	0927 1536 2200	2.2F 1.9E 1.5F	24 F	0621 1224 1916	0915 1502 2147	2.4F 2.4E 1.9F	
10 Su	0542 1156 1846	0836 1446 2112	2.8F 2.4E 1.9F	25 M	0523 1130 1824 2337	0818 1407 2045	1.9E 2.2E 1.5F	10 W	0033 0704 1317 2010	0309 0955 1603 2230	2.0E 2.2F 1.8E 1.5F	25 Th	0003 0632 1244 1943	0243 0934 1519 2205	1.9E 2.4F 2.2E 1.6F	10 F	0102 0732 1332 2023	0332 1014 1613	1.7E 1.9F 1.8E 1.6F	25 Sa	0050 0721 1314 2006	0322 1009 1552 2241	2.0E 2.3F 2.4E 2.1F	
11 M	0009 0635 1249 1941	0247 0928 1535 2205	2.3E 2.6F 2.2E 1.7F	26 Tu	0603 1215 1911	0905 1450 2132	1.9E 2.4F 2.1E 1.5F	11 Th	0127 0802 1406 2101	0359 1046 1658 2321	1.8E 2.0F 1.7E 1.4F	26 F	0059 0731 1334 2034	0335 1027 1610 2300	1.9E 2.3F 2.2E 1.8F	11 Sa	0154 0827 1414 2106	0421 1100 1656 2332	1.6E 1.7F 1.8E 1.7F	26 Su	0148 0825 1406 2057	0419 1104 1646 2334	2.0E 2.2F 2.3E 2.3F	
12 Tu	0100 0732 1343 2038	0336 1022 1631 2258	2.0E 2.3F 1.9E 1.5F	27 W	0018 0650 1303 2003	0304 0955 1537 2223	1.9E 2.3F 2.1E 1.4F	12 F	0223 0900 1455 2149	0455 1135 1824	1.6E 1.8F 1.6E	27 Sa	0159 0835 1426 2124	0431 1122 1705 2353	1.8E 2.2F 2.2E 2.0F	12 Su	0246 0920 1458 2149	0514 1146 1744	1.5E 1.6F 1.7E	27 M	0247 0928 1500 2147	0522 1159 1744	1.9E 2.1F 2.2E	
13 W	0153 0832 1438 2133	0429 1116 1812 2351	1.8E 2.1F 1.7E 1.4F	28 Th	0107 0745 1353 2055	0352 1047 1628 2316	1.8E 2.3F 2.0E 1.5F	13 Sa	0321 0957 1543 2235	0009 0612 1223 1928	1.5F 1.4E 1.6F 1.6E	28 Su	0301 0940 1520 2213	0534 1216 1804	1.8E 2.1F 2.2E	13 M	0338 1013 1543 2231	0015 0612 1231 1836	1.7F 1.5E 1.5F 1.7E	28 Tu	0346 1030 1557 2238	0026 0638 1254 1847	2.4F 2.0E 2.0F 2.2E	
14 Th	0250 0931 1533 2226	0533 1209 1931	1.6E 1.9F 1.6E	29 F	0203 0846 1446 2147	0445 1140 1723	1.8E 2.0E	14 Su	0419 1052 1633 2319	0057 0755 1311 2013	1.5F 1.4E 1.5F 1.7E	29 M	0404 1044 1619 2303	0647 1312 1908	2.2F 1.9E 2.0F 2.2E	14 Tu	0429 1105 1632 2314	0059 0714 1318 1928	1.8F 1.5E 1.4F 1.7E	29 W	0446 1131 1657 2330	0806 1352 1952	2.1E 1.8F 2.1E	
15 F	0350 1030 1628 2316	0044 0728 1301 2026	1.4F 1.5E 1.7F 1.7E	30 Sa	0307 0950 1542 2238	0009 0546 1234 1824	1.6F 1.8E 2.2F 2.0E	15 M	0515 1146 1724	0144 0848 1402 2052	1.6F 1.5E 1.4F 1.7E	30 Tu	0506 1146 1719 2353	0141 0809 1412 2010	2.3F 2.0E 1.9F 2.2E	15 W	0520 1157 1723 2358	0146 0808 1407 2017	1.9F 1.6E 1.3F 1.7E	30 Th	0546 1232 1757	0914 1455 2054	2.5F 2.2E 2.1E	
				31 Su	0414 1054 1642 2328	0104 0656 1330 2119	1.8F 1.8E 2.1F 2.1E										31 F	0024 0646 1333 1854	0317 1014 1604 2151	2.5F 2.2E 1.6F 2.1E				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Miami Harbor Entrance, Florida, 2010

F—Flood, Dir. 293° True E—Ebb, Dir. 112° True

April					May					June																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
Slack		Maximum			Slack		Maximum			Slack		Maximum			Slack		Maximum																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	h	m	h	m	knots		h	m	h	m	knots		h	m	h	m	knots		h	m	h	m	knots																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
1 Th	0508	0801	2.0F	2.0E		16 F	0453	0706	1.7F	1.6E		1 Sa	0529	0811	1.6F	1.7E		16 Su	0517	0730	1.8F	1.6E		1 Tu	0011	0356	1.4E	1.4E		16 W	0010	0315	1.9E	1.9E		17 Th	0638	0917	1.9F	1.9E		17 Th	0059	0406	1.8E	1.8E		18 F	0829	1114	1.9F	1.9E		18 F	0829	1114	1.9F	1.9E		19 Sa	0925	1234	1.9F	1.9E		19 Sa	0925	1234	1.9F	1.9E		20 Su	0340	0752	1.8E	1.8E		20 Su	0340	0752	1.8E	1.8E		21 M	0438	0847	1.8E	1.8E		21 M	0438	0847	1.8E	1.8E		22 Tu	0537	0928	1.7E	1.7E		22 Tu	0537	0928	1.7E	1.7E		23 W	0631	1041	1.8E	1.8E		23 W	0631	1041	1.8E	1.8E		24 Th	0723	1138	1.8E	1.8E		24 Th	0723	1138	1.8E	1.8E		25 F	0810	1226	1.8E	1.8E		25 F	0810	1226	1.8E	1.8E		26 Sa	0942	1346	1.7E	1.7E		26 Sa	0942	1346	1.7E	1.7E		27 Su	1615	1935	1.9F	1.9E		27 Su	1615	1935	1.9F	1.9E		28 M	0401	0713	1.5F	1.5F		28 M	0401	0713	1.5F	1.5F		29 Tu	0526	0751	1.5F	1.5F		29 Tu	0526	0751	1.5F	1.5F		30 W	1111	1439	1.4E	1.4E		30 W	1111	1439	1.4E	1.4E		31 Th	1623	1853	2.1F	2.1F		31 Th	1623	1853	2.1F	2.1F		1 Tu	0547	0811	1.9F	1.9E		1 Tu	0547	0811	1.9F	1.9E		2 W	0731	1048	1.9E	1.9E		2 W	0731	1048	1.9E	1.9E		3 Th	0811	1123	2.0E	2.0E		3 Th	0811	1123	2.0E	2.0E		4 Th	0811	1123	2.0E	2.0E		4 Th	0811	1123	2.0E	2.0E		5 M	0811	1123	2.0E	2.0E		5 M	0811	1123	2.0E	2.0E		6 M	0811	1123	2.0E	2.0E		6 M	0811	1123	2.0E	2.0E		7 M	0811	1123	2.0E	2.0E		7 M	0811	1123	2.0E	2.0E		8 M	0811	1123	2.0E	2.0E		8 M	0811	1123	2.0E	2.0E		9 M	0811	1123	2.0E	2.0E		9 M	0811	1123	2.0E	2.0E		10 M	0811	1123	2.0E	2.0E		10 M	0811	1123	2.0E	2.0E		11 M	0811	1123	2.0E	2.0E		11 M	0811	1123	2.0E	2.0E		12 M	0811	1123	2.0E	2.0E		12 M	0811	1123	2.0E	2.0E		13 M	0811	1123	2.0E	2.0E		13 M	0811	1123	2.0E	2.0E		14 M	0811	1123	2.0E	2.0E		14 M	0811	1123	2.0E	2.0E		15 M	0811	1123	2.0E	2.0E		15 M	0811	1123	2.0E	2.0E		16 M	0811	1123	2.0E	2.0E		16 M	0811	1123	2.0E	2.0E		17 M	0811	1123	2.0E	2.0E		17 M	0811	1123	2.0E	2.0E		18 M	0811	1123	2.0E	2.0E		18 M	0811	1123	2.0E	2.0E		19 M	0811	1123	2.0E	2.0E		19 M	0811	1123	2.0E	2.0E		20 M	0811	1123	2.0E	2.0E		20 M	0811	1123	2.0E	2.0E		21 M	0811	1123	2.0E	2.0E		21 M	0811	1123	2.0E	2.0E		22 M	0811	1123	2.0E	2.0E		22 M	0811	1123	2.0E	2.0E		23 M	0811	1123	2.0E	2.0E		23 M	0811	1123	2.0E	2.0E		24 M	0811	1123	2.0E	2.0E		24 M	0811	1123	2.0E	2.0E		25 M	0811	1123	2.0E	2.0E		25 M	0811	1123	2.0E	2.0E		26 M	0811	1123	2.0E	2.0E		26 M	0811	1123	2.0E	2.0E		27 M	0811	1123	2.0E	2.0E		27 M	0811	1123	2.0E	2.0E		28 M	0811	1123	2.0E	2.0E		28 M	0811	1123	2.0E	2.0E		29 M	0811	1123	2.0E	2.0E		29 M	0811	1123	2.0E	2.0E		30 M	0811	1123	2.0E	2.0E		30 M	0811	1123	2.0E	2.0E		31 M	0811	1123	2.0E	2.0E		31 M	0811	1123	2.0E	2.0E	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Miami Harbor Entrance, Florida, 2010

F—Flood, Dir. 293° True E—Ebb, Dir. 112° True

July				August				September							
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum	
	h	m	knots		h	m	knots		h	m	knots		h	m	knots
1	0020	0312	1.4E	16	0037	0356	2.1E	1	0102	0330	1.5E	16	0150	0519	1.7E
Th	0650	0914	1.5F	F	0709	1014	2.2F	Su	0741	1007	1.7F	M	0831	1142	1.9F
	1239	1511	1.3E		1311	1627	1.8E		1340	1554	1.3E	☉	1440	1841	1.4E
	1906	2132	1.6F		1932	2223	2.0F		2007	2223	1.5F		2100	2341	1.5F
2	0100	0333	1.4E	17	0126	0445	1.9E	2	0146	0411	1.5E	17	0244	0703	1.5E
F	0736	0958	1.5F	Sa	0803	1105	2.1F	M	0830	1051	1.6F	Tu	0929	1258	1.7F
	1327	1548	1.2E		1409	1736	1.6E	☉	1432	1639	1.2E		1540	1954	1.3E
	1955	2213	1.5F		2029	2309	1.8F		2059	2308	1.4F		2159		
3	0141	0407	1.4E	18	0218	0555	1.8E	3	0233	0456	1.4E	18		0124	1.3F
Sa	0823	1040	1.5F	Su	0859	1209	1.9F	Tu	0922	1140	1.6F	W	0342	0812	1.5E
	1510	1716	1.1E	☉	1508	1909	1.5E		1529	1731	1.0E		1027	1407	1.6F
	2046	2255	1.4F		2127				2152	2358	1.3F		1645	2051	1.3E
4	0227	0447	1.3E	19		0013	1.6F	4	0328	0552	1.4E	19		0231	1.2F
Su	0911	1125	1.5F	M	0311	0728	1.7E	W	1018	1236	1.5F	Th	0445	0908	1.5E
☉	1510	1716	1.0E		0955	1327	1.8F		1629	1846	1.0E		1126	1506	1.6F
	2138	2341	1.3F		1609	2015	1.4E		2250				1752	2146	1.3E
5	0315	0535	1.3E	20		0148	1.4F	5		0057	1.2F	20	0000	0330	1.3F
M	1001	1216	1.5F	Tu	0409	0830	1.7E	Th	0427	0706	1.3E	F	0549	1005	1.5E
	1607	1821	0.9E		1051	1431	1.8F		1116	1343	1.6F		1224	1602	1.6F
	2230				1714	2111	1.4E		1731	2029	1.0E		1850	2242	1.4E
6		0034	1.2F	21		0252	1.4F	6		0202	1.3F	21	0057	0426	1.3F
Tu	0407	0640	1.3E	W	0510	0925	1.6E	F	0530	0821	1.4E	Sa	0648	1101	1.5E
	1052	1317	1.5F		1150	1529	1.8F		1217	1454	1.7F		1318	1655	1.7F
	1706	2025	1.0E		1819	2208	1.4E		1831	2148	1.2E		1935	2334	1.5E
7		0133	1.2F	22	0023	0351	1.4F	7	0050	0310	1.4F	22	0146	0516	1.5F
W	0501	0750	1.3E	Th	0610	1024	1.6E	Sa	0632	0929	1.6E	Su	0737	1151	1.6E
	1149	1420	1.6F		1248	1626	1.8F		1313	1629	1.9F		1405	1740	1.7F
	1805	2106	1.1E		1912	2306	1.5E		1924	2315	1.5E		2013		
8	0024	0232	1.2F	23	0120	0448	1.4F	8	0146	0440	1.6F	23		0018	1.6E
Th	0559	0843	1.5E	F	0704	1122	1.6E	Su	0730	1111	1.7E	M	0230	0559	1.6F
	1243	1524	1.7F		1339	1717	1.8F		1408	1727	2.1F		0820	1234	1.6E
	1859	2244	1.2E		1959	2358	1.5E		2013				1449	1819	1.8F
9	0119	0332	1.3F	24	0210	0537	1.5F	9		0003	1.7E	24		0056	1.6E
F	0654	0939	1.6E	Sa	0752	1211	1.7E	M	0237	0542	1.9F	Tu	0311	0635	1.7F
	1337	1648	1.9F		1427	1802	1.9F	☉	0826	1210	2.0E		0901	1310	1.6E
	1949	2344	1.4E		2040				1459	1809	2.3F		1529	1851	1.8F
10	0210	0442	1.5F	25		0042	1.6E	10		0043	2.0E	25		0128	1.6E
Sa	0748	1107	1.7E	Su	0256	0620	1.5F	Tu	0327	0625	2.2F	W	0350	0703	1.7F
	1428	1738	2.1F	☉	0839	1253	1.7E		0920	1255	2.1E		0942	1339	1.6E
	2039				1510	1841	1.9F		1549	1847	2.4F		1609	1905	1.7F
11		0024	1.6E	26		0122	1.6E	11		0120	2.2E	26		0147	1.6E
Su	0300	0542	1.7F	M	0339	0656	1.6F	W	0416	0707	2.4F	Th	0428	0703	1.7F
☉	0840	1211	1.9E		0922	1330	1.6E		1015	1340	2.2E		1023	1349	1.5E
	1518	1816	2.2F		1552	1915	1.8F		1639	1926	2.4F		1648	1908	1.7F
	2128				2159				2239				2239		
12		0059	1.8E	27		0157	1.6E	12		0201	2.3E	27		0135	1.6E
M	0349	0626	2.0F	Tu	0419	0726	1.6F	Th	0502	0756	2.4F	F	0504	0725	1.8F
	0935	1256	2.0E		1007	1402	1.6E		1108	1428	2.1E		1102	1344	1.5E
	1608	1854	2.3F		1633	1934	1.7F		1728	2014	2.3F		1725	1940	1.7F
	2216				2236				2324				2314		
13		0136	2.0E	28		0226	1.5E	13		0247	2.3E	28		0146	1.6E
Tu	0438	0712	2.1F	W	0458	0727	1.6F	F	0551	0857	2.4F	Sa	0540	0803	1.8F
	1030	1342	2.1E		1049	1416	1.5E		1159	1521	2.0E		1142	1407	1.5E
	1658	1938	2.3F		1712	1938	1.7F		1817	2112	2.1F		1802	2020	1.6F
	2302				2311								2350		
14		0219	2.1E	29		0224	1.5E	14		0334	2.2E	29		0217	1.6E
W	0527	0806	2.1F	Th	0537	0755	1.6F	Sa	0641	0956	2.3F	Su	0619	0848	1.8F
	1123	1435	2.0E		1129	1412	1.4E		1250	1613	1.8E		1223	1442	1.4E
	1747	2032	2.2F		1751	2012	1.7F		1909	2204	2.0F		1844	2106	1.6F
	2349				2348										
15		0307	2.1E	30		0224	1.5E	15		0422	2.0E	30		0256	1.6E
Th	0617	0914	2.2F	F	0615	0837	1.6F	Su	0736	1046	2.1F	M	0702	0935	1.8F
	1218	1532	1.9E		1210	1438	1.4E		1343	1712	1.6E		1309	1524	1.4E
	1838	2132	2.1F		1832	2055	1.6F		2003	2249	1.7F		1931	2153	1.5F
				31		0024	1.5E	31		0110	1.6E	31		0339	1.6E
				Sa	0657	0923	1.7F			0752	1.7F	Tu		1022	1.7F
					1253	1514	1.3E			1359	1.609			1609	1.3E
					1918	2139	1.6F			2025	2.239			2239	1.4F

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Key West, Florida, 2010

F—Flood, Dir. 020° True E—Ebb, Dir. 195° True

January				February				March																
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum										
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m									
1 F	0445 1047 1717 2223	0742 1347 1945	1.8F 2.1E 1.2F	16 Sa	0514 1054 1735 2234	0803 1357 1957	1.2F 1.7E 0.9F	1 M	0604 1141 1827	0848 1452 2109	1.6F 2.3E 1.5F	16 Tu	0556 1112 1805 2332	0821 1429 2035	1.1F 1.9E 1.2F	1 M	0502 1031 1716 2301	0746 1345 2007	1.6F 2.5E 1.8F	16 Tu	0500 1009 1700 2240	0726 1326 1940	1.1F 2.0E 1.4F	
2 Sa	0532 1129 1804 2316	0825 1432 2034	1.8F 2.1E 1.3F	17 Su	0548 1123 1807 2310	0826 1428 2027	1.2F 1.7E 0.9F	2 Tu	0002 0651 1218 1915	0314 0928 1535 2157	2.3E 1.4F 2.3E 1.4F	17 W	0629 1134 1840	0849 1503 2111	1.0F 2.0E 1.2F	2 Tu	0545 1107 1800 2348	0823 1424 2049	1.5F 2.5E 1.7F	17 W	0531 1032 1733 2317	0750 1358 2012	1.0F 2.1E 1.4F	
3 Su	0621 1211 1853	0909 1517 2124	1.6F 2.1E 1.2F	18 M	0622 1150 1841 2348	0852 1507 2101	1.1F 1.7E 0.9F	3 W	0054 0740 1255 2009	0401 1009 1619 2249	1.9E 1.1F 2.1E 1.2F	18 Th	0011 0706 1157 1922	0328 0922 1542 2153	1.8E 0.9F 1.9E 1.1F	3 W	0628 1142 1846	0859 1504 2132	1.2F 2.3E 1.5F	18 Th	0604 1105 1810 2357	0819 1433 2048	1.0F 2.1E 1.4F	
4 M	0011 0713 1252 1945	0331 0954 1604 2219	2.2E 1.4F 2.0E 1.1F	19 Tu	0659 1216 1919	0922 1537 2139	1.0F 1.7E 0.9F	4 Th	0149 0836 1333 2109	0452 1053 1708 2352	1.6E 0.8F 1.9E 0.9F	19 F	0055 0748 1222 2012	0412 1000 1626 2241	1.6E 0.7F 1.9E 1.0F	4 Th	0035 0714 1216 1936	0336 0935 1546 2219	1.9E 1.0F 2.1E 1.2F	19 F	0641 1120 1852	0853 1513 2130	0.9F 2.1E 1.3F	
5 Tu	0109 0807 1334 2043	0424 1042 1653 2320	2.0E 1.1F 1.9E 1.0F	20 W	0029 0739 1241 2002	0356 0957 1617	1.7E 0.9F 1.7E 0.9F	5 F	0250 0942 1414 2220	0549 1145 1803	1.3E 0.5F 1.7E	20 Sa	0149 0842 1255 2114	0503 1045 1717 2342	1.3E 0.6F 1.9E 0.9F	5 F	0124 0806 1250 2034	0422 1015 1632 2313	1.5E 0.7F 1.9E 0.9F	20 Sa	0042 0725 1150 1944	0350 0933 1558 2219	1.6E 0.7F 2.0E 1.1F	
6 W	0212 0908 1418 2147	0522 1135 1747	1.6E 0.8F 1.8E	21 Th	0116 0825 1308 2054	0442 1036 1702 2315	1.5E 0.7F 1.7E 0.8F	6 Sa	0400 1106 1505 2338	0701 1259 1910	1.0E 0.3F 1.5E	21 Su	0259 0954 1340 2228	0604 1142 1819	1.1E 0.4F 1.7E	6 Sa	0219 0909 1327 2143	0514 1102 1724	1.2E 0.4F 1.6E	21 Su	0135 0821 1229 2048	0441 1021 1652 2320	1.4E 0.6F 1.8E 0.9F	
7 Th	0320 1018 1506 2256	0627 1238 1847	0.9F 1.4E 0.6F 1.7E	22 F	0215 0922 1341 2155	0535 1123 1754	1.3E 0.5F 1.6E	7 Su	0515 0839 1452 2032	0251 0939 1452	0.7F 0.9E 1.5E	22 M	0423 1121 1457 2346	0059 0718 1327 1932	0.8F 1.0E 0.3F 1.7E	7 Su	0322 1208 2305	0032 0619 1830	0.7F 1.0E 1.4E	22 M	0241 0934 1324 2204	0543 1122 1756	1.2E 0.4F 1.7E	
8 F	0434 1138 1601	0745 1359 1954	0.9F 1.2E 1.6E	23 Sa	0330 1032 1426 2303	0637 1220 1854	1.1E 0.4F 1.6E	8 M	0052 0626 1402 1734	0401 1002 1608 2149	0.8F 1.0E 0.3F 1.5E	23 Tu	0544 1240 1647	0843 1434 2051	1.1E 0.4F 1.8E	8 M	0434 1422 1955	0216 0754 1355	0.6F 0.9E 1.3E	23 Tu	0358 1100 1458 2325	0657 1244 1913	0.8F 0.3F 1.6E	
9 Sa	0005 0547 1300 1701	0317 0910 1519 2104	0.9F 1.1E 0.4F 1.7E	24 Su	0453 1151 1534	0750 1330 2001	1.1E 0.3F 1.7E	9 Tu	0152 0724 1444 1842	0457 1058 1702 2246	0.9F 1.1E 0.4F 1.7E	24 W	0055 0650 1339 1818	0404 0959 1603 2203	1.1F 1.4E 0.6F 2.0E	9 Tu	0026 0545 1336 1709	0332 0927 1544 2123	0.7F 1.0E 0.3F 1.4E	24 W	0513 1216 1648	0820 1429 2036	1.2E 0.5F 1.7E	
10 Su	0109 0654 1406 1803	0421 1020 1624 2207	1.0F 1.2E 0.4F 1.7E	25 M	0011 0610 1303 1703	0306 0908 1452 2110	0.9F 1.1E 0.4F 1.9E	10 W	0238 0811 1514 1938	0542 1139 1745 2330	1.1F 1.3E 0.6F 1.8E	25 Th	0155 0745 1427 1929	0501 1056 1705 2304	1.3F 1.7E 1.0F 2.3E	10 W	0130 0645 1413 1822	0428 1025 1639 2224	0.8F 1.1E 0.5F 1.5E	25 Th	0037 0618 1314 1814	0340 0933 1555 2150	1.0F 1.5E 0.8F 1.9E	
11 M	0203 0750 1454 1900	0514 1115 1716 2259	1.1F 1.2E 0.5F 1.8E	26 Tu	0113 0716 1400 1825	0421 1018 1610 2215	1.1F 1.3E 0.6F 2.1E	11 Th	0317 0850 1542 2025	0620 1212 1821	1.2F 1.5E 0.8F	26 F	0246 0832 1510 2029	0548 1143 1756 2356	1.5F 2.0E 1.3F 2.4E	11 Th	0216 0732 1442 1920	0513 1106 1721 2308	0.9F 1.3E 0.7F 1.7E	26 F	0138 0712 1402 1922	0437 1030 1654 2251	1.2F 1.8E 1.1F 2.1E	
12 Tu	0250 0836 1532 1951	0600 1157 1759 2342	1.2F 1.3E 0.6F 1.9E	27 W	0208 0811 1448 1933	0517 1115 1712 2314	1.4F 1.6E 0.8F 2.3E	12 F	0351 0923 1609 2107	0006 0652 1239 1849	1.9E 1.2F 1.6E 0.9F	27 Sa	0333 0915 1552 2123	0630 1226 1842	1.6F 2.2E 1.6F	12 F	0254 0812 1509 2008	0551 1138 1756 2344	1.0F 1.5E 0.9F 1.8E	27 Sa	0230 0758 1446 2021	0524 1117 1743 2342	1.3F 2.1E 1.5F 2.3E	
13 W	0330 0916 1604 2037	0639 1232 1835	1.3F 1.4E 0.7F	28 Th	0259 0859 1531 2033	0604 1203 1804	1.6F 1.8E 1.1F	13 Sa	0422 0954 1636 2145	0038 0717 1303 1913	2.0E 1.2F 1.7E 1.0F	28 Su	0418 0954 1634 2213	0043 0709 1306 1925	2.5E 1.7F 2.4E 1.7F	13 Sa	0327 0846 1535 2049	0621 1204 1824	1.1F 1.7E 1.0F	28 Su	0317 0841 1528 2113	0606 1159 1827	1.4F 2.3E 1.7F	
14 Th	0406 0951 1634 2119	0019 0712 1302 1904 2119	2.0E 1.3F 1.5E 0.8F	29 F	0347 0943 1614 2128	0006 0648 1247 1852	2.5E 1.8F 2.1E 1.3F	14 Su	0453 1023 1704 2221	0109 0738 1329 1937	2.1E 1.2F 1.8E 1.1F	14 Su	0429 0944 1631 2204	0046 0705 1257 1912	2.0E 1.1F 1.9E 1.3F	14 Su	0358 0917 1603 2128	0016 0646 1230 1848	1.9E 1.1F 1.8E 1.2F	29 M	0401 0920 1610 2201	0028 0645 1239 1909	2.3E 1.4F 2.5E 1.8F	
15 F	0441 1024 1704 2157	0053 0740 1329 1930	2.0E 1.3F 1.6E 0.8F	30 Sa	0433 1024 1657 2221	0055 0729 1329 1938	2.6E 1.8F 2.2E 1.5F	15 M	0524 1048 1733 2256	0141 0758 1358 2004	2.1E 1.2F 1.9E 1.2F	15 M	0429 0944 1631 2204	0046 0705 1257 1912	2.0E 1.1F 1.9E 1.3F	15 M	0429 0944 1631 2204	0046 0705 1257 1912	2.0E 1.1F 1.9E 1.3F	30 Tu	0443 0957 1652 2246	0721 1318 1949	1.4F 2.5E 1.8F	
				31 Su	0519 1103 1741 2312	0809 1411 2023	1.8F 2.3E 1.6F										31 W	0525 1032 1735 2331	0756 1356 2029	2.2E 2.5E 1.7F				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 * Current weak and variable.

Tampa Bay Entrance (Egmont Channel), Florida, 2010

F—Flood, Dir. 120° True E—Ebb, Dir. 298° True

January				February				March															
Slack	Maximum			Slack	Maximum			Slack	Maximum			Slack	Maximum										
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0111	0508	2.7E	16 Sa	0149	0539	2.0E	1 M	0314	0635	1.9E	16 Tu	0314	0623	1.5E	1 M	0227	0534	1.8E	16 Tu	0233	0525	1.2E
	0929	1240	2.0F		0940	1249	1.6F		1006	1314	1.8F		0938	1247	1.5F		0854	1158	1.8F		0828	1135	1.5F
		1806	*		1642	1829	0.4E		1626	1908	1.2E		1554	1847	1.3E		1456	1754	1.6E		1428	1736	1.5E
		2321	1.4F		2019	2346	1.2F		2209				2156				2110				2102		
2 Sa	0205	0559	2.6E	17 Su	0230	0613	1.9E	2 Tu	0417	0719	1.5E	17 W	0404	0656	1.2E	2 Tu	0326	0615	1.4E	17 W	0320	0557	1.0E
	1009	1321	1.9F		1003	1314	1.5F		1029	1346	1.7F		0956	1312	1.5F		0914	1225	1.7F		0843	1156	1.5F
	1723	1853	0.3E		1654	1900	0.6E		1652	1951	1.5E		1614	1917	1.5E		1521	1833	1.9E		1447	1804	1.8E
	2030				2112				2319				2244				2206				2142		
3 Su	0304	0649	2.3E	18 M	0315	0647	1.8E	3 W	0525	0802	1.0E	18 Th	0458	0732	0.9E	3 W	0429	0656	1.0E	18 Th	0413	0632	0.8E
	1047	1401	1.8F		1026	1340	1.5F		1046	1417	1.5F		1012	1339	1.4F		0929	1252	1.6F		0858	1221	1.4F
	1741	1940	0.6E		1709	1932	0.8E		1722	2035	1.6E		1638	1950	1.6E		1550	1912	2.0E		1512	1837	1.9E
	2154				2207								2338				2306				2227		
4 M	0407	0738	1.9E	19 Tu	0404	0723	1.5E	4 Th	0036	0336	1.0F	19 F	0603	0810	0.6E	4 Th	0538	0737	0.6E	19 F	0515	0710	0.5E
	1121	1439	1.7F		1048	1406	1.5F		1052	1448	1.4F		1023	1409	1.3F		0939	1322	1.5F		0911	1250	1.3F
	1804	2029	0.9E		1726	2004	1.0E		1755	2126	1.6E		1707	2030	1.7E		1623	1954	1.9E		1543	1914	2.0E
	2321				2304												2320				2320		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (F) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

Tampa Bay Entrance (Egmont Channel), Florida, 2010

F—Flood, Dir. 120° True E—Ebb, Dir. 298° True

July				August				September															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 Th	0638	0836	0.5E	16 F	0604	0846	1.1E	1 Su	0554	0856	1.2E	16 M	0612	0956	1.5E	1 W	0608	0956	1.0F	16 Th	0736	1237	1.2E
	1047	1408	1.0F		1203	1512	1.1F		1238	1542	0.9F		1450	1757	0.8F		1451	1821	0.8F		1706	2035	1.1F
	1652	2023	1.5E		1802	2055	1.1E		1846	2110	0.6E			2235	*			2318	0.3F				
2 F	0003	0323	1.3F	17 Sa	0636	0942	1.3E	2 M	0624	0943	1.2E	17 Tu	0705	1122	1.4E	2 Th	0710	1130	1.5E	17 F	0919	1355	1.3E
	0656	0919	0.6E		1336	1631	0.9F		1356	1656	0.7F		1626	1951	0.9F		1622	2004	1.0F		1802	2118	1.2F
	1203	1507	0.8F		1930	2151	0.6E			2207	*												
	1747	2105	1.1E																				
3 Sa	0028	0352	1.3F	18 Su	0014	0403	1.3F	3 Tu	0702	1047	1.3E	18 W	0813	1301	1.5E	3 F	0834	1300	1.7E	18 Sa	1044	1446	1.4E
	0716	1006	0.8E		0713	1047	1.4E		1526	1843	0.7F		1746	2107	1.1F		1734	2102	1.3F		1842	2148	1.3F
	1323	1612	0.7F		1512	1806	0.8F			2333	*												
	1855	2154	0.8E		2301	*																	
4 Su	0051	0422	1.2F	19 M	0759	1202	1.5E	4 W	0753	1205	1.5E	19 Th	0937	1418	1.6E	4 Sa	1003	1407	1.9E	19 Su	0518	0856	1.0F
	0742	1059	1.0E		1645	1956	0.9F		1655	2032	0.9F		1842	2152	1.3F		1827	2139	1.5F		1911	2210	1.3F
	1446	1729	0.6F																				
	2036	2258	0.4E																				
5 M	0108	0456	1.1F	20 Tu	0854	1315	1.7E	5 Th	0859	1317	1.7E	20 F	1050	1511	1.7E	5 Su	1116	1500	2.1E	20 M	0611	0937	1.3F
	0814	1156	1.2E		1802	2116	1.1F		1804	2131	1.3F		1924	2225	1.4F		1908	2210	1.7F		1229	1553	1.5E
	1609	1915	0.7F																		1932	2228	1.3F
6 Tu	0854	1251	1.4E	21 W	0956	1420	1.8E	6 F	1010	1418	2.0E	21 Sa	1145	1550	1.8E	6 M	0134	0328	0.5E	21 Tu	0652	1012	1.5F
	1723	2047	0.9F		1859	2207	1.4F		1857	2211	1.5F		1955	2252	1.5F		1218	1547	2.1E		1309	1619	1.4E
7 W	0940	1342	1.7E	22 Th	1054	1513	1.9E	7 Sa	1113	1511	2.3E	22 Su	1229	1620	1.8E	7 Tu	0644	1020	1.8F	22 W	0728	1045	1.6F
	1824	2144	1.2F		1944	2246	1.5F		1940	2245	1.7F		2019	2313	1.5F		1314	1631	2.0E		1348	1646	1.3E
8 Th	1030	1430	2.0E	23 F	1144	1556	2.0E	8 Su	1210	1559	2.4E	23 M	1308	1647	1.8E	8 W	0741	1107	2.0F	23 Th	0802	1117	1.6F
	1913	2228	1.5F		2020	2319	1.5F		2017	2316	1.8F		2039	2332	1.4F		1411	1713	1.8E		1428	1714	1.2E
9 F	1119	1517	2.3E	24 Sa	1227	1632	2.1E	9 M	1304	1646	2.4E	24 Tu	1346	1713	1.7E	9 Th	1509	1755	1.4E	9 F	1511	1745	1.0E
	1957	2306	1.7F		2050	2348	1.5F		2052	2347	1.8F		2056	2349	1.4F		2057	2359	1.6F		2032	2336	1.3F
10 Sa	1208	1605	2.5E	25 Su	1307	1704	2.1E	10 Tu	1359	1731	2.3E	25 W	1424	1742	1.6E	10 F	1611	1838	1.0E	10 Sa	0913	1231	1.6F
	2038	2344	1.8F		2116				2123				2112				2115				1559	1819	0.8E
11 Su	1258	1653	2.6E	26 M	1346	1735	2.0E	11 W	1456	1816	2.0E	26 Th	1506	1813	1.4E	11 Sa	1720	1921	0.6E	26 Su	1655	1856	0.5E
	2118				2139				2151				2130				2130				2105		
12 M	1350	1742	2.6E	27 Tu	1426	1807	1.9E	12 Th	1557	1900	1.6E	27 F	1552	1846	1.2E	12 Su	1842	2007	0.3E	27 M	1803	1936	0.3E
	2156				2200				2216				2149				2135				2117		
13 Tu	0459	0621	0.3E	28 W	0435	0638	0.5E	13 F	0421	0718	1.5E	28 Sa	0349	0652	1.4E	13 M	0434	0812	1.8E	28 Tu	0353	0729	1.8E
	0748	1153	1.5F		0844	1214	1.3F		1038	1355	1.4F		1012	1329	1.3F		1250	1610	1.1F		1143	1515	1.2F
	1446	1831	2.4E		1508	1841	1.8E		1703	1944	1.1E		1643	1921	1.0E		2100	*			2024	*	
14 W	0515	0708	0.5E	29 Th	0450	0710	0.7E	14 Sa	0453	0804	1.6E	29 Su	0415	0725	1.5E	14 Tu	0521	0910	1.1E	29 W	0437	0820	1.7E
	0912	1253	1.4F		0938	1259	1.3F		1152	1504	1.2F		1103	1421	1.2F		1419	1741	0.9F		1257	1630	1.1F
	1546	1919	2.0E		1554	1915	1.6E		1817	2029	0.7E		1741	1958	0.7E		2221	0.3F			2131	*	
	2306				2244				2250				2224				2221				2131	*	
15 Th	0537	0756	0.8E	30 F	0508	0743	0.9E	15 Su	0530	0854	1.6E	30 M	0446	0804	1.5E	15 W	0618	1038	1.3E	30 Th	0531	0928	1.6E
	1035	1359	1.2F		1033	1348	1.1F		1315	1621	1.0F		1203	1522	1.0F		1550	1923	0.9F		1422	1756	1.1F
	1650	2006	1.6E		1644	1951	1.3E			2121	*		1856	2040	0.3E						2322	0.3F	
	2335				2306								2232										
				31 Sa	0529	0817	1.1E	31 Tu	0523	0851	1.5E		0523	0851	1.5E								
					1132	1442	1.0F		1319	1638	0.9F				*								
					1739	2028	1.0E																
					2326																		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
If three consecutive entries are marked (F) the middle one is not a true maximum but an intermediate value to show the current pattern.
* Current weak and variable.

Tampa Bay (Sunshine Skyway Bridge), Florida, 2010

F—Flood, Dir. 060° True E—Ebb, Dir. 235° True

July				August				September															
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots								
h m	h m	h m		h m	h m	h m		h m	h m	h m		h m	h m	h m									
1 Th	0645	0843	1.3F	16 F	0619	0905	1.0E	1 Su	0559	0851	1.0E	16 M	0622	1005	1.3E	1 W	0615	0940	1.1E	16 Th	0746	1317	1.0E
	1046	1409	1.0F		1207	1511	1.1F		1228	1542	0.8F		1442	1750	0.8F		1457	1835	0.7F		1656	2021	1.0F
	1701	2025	1.2E		1812	2107	1.0E		1850	2111	0.5E		2237				2309	0.3F					
2 F	0318	0920	1.3F	17 Sa	0649	0957	1.1E	2 M	0630	0933	1.0E	17 Tu	0712	1143	1.1E	2 Th	0717	1125	1.1E	17 F	0931	1425	1.2E
	0701	1156	0.5E		1333	1629	0.9F		1349	1703	0.7F		1616	1935	0.9F		1633	2011	1.0F		1751	2109	1.2F
	1758	2106	1.0E		1940	2200	0.5E		2204		*												
3 Sa	0016	0348	1.3F	18 Su	0014	0401	1.4F	3 Tu	0710	1032	1.0E	18 W		0015	0.3F	3 F		0105	0.3F	18 Sa		0237	*
	0722	1002	0.7E		0724	1101	1.2E		1530	1851	0.7F		0819	1339	1.2E		0842	1330	1.3E		1059	1510	1.3E
	1314	1617	0.7F		1506	1801	0.8F		2326		*		1734	2057	1.0F		1740	2108	1.2F		1832	2142	1.3F
	1907	2154	0.7E		2306	*																	
4 Su	0038	0420	1.2F	19 M	0807	1222	1.3E	4 W	0801	1203	1.1E	19 Th		0149	0.3F	4 Sa		0220	*	19 Su	0129	0318	0.4E
	0749	1053	0.8E		1636	1945	0.9F		1702	2033	0.9F		0942	1451	1.3E		1013	1438	1.5E		0512	0845	1.0F
	1442	1739	0.6F										1832	2148	1.2F		1830	2146	1.4F		1904	2208	1.3F
	2046	2254	0.3E																				
5 M	0056	0456	1.1F	20 Tu	0900	1345	1.4E	5 Th	0906	1339	1.3E	20 F		0256	*	5 Su		0310	*	20 M	0136	0351	0.6E
	0822	1154	0.9E		1752	2109	1.1F		1809	2135	1.2F		1059	1540	1.5E		1129	1527	1.7E		0608	0933	1.2F
	1609	1915	0.7F										1915	2224	1.3F		1910	2217	1.6F		1242	1611	1.3E
6 Tu	0902	1259	1.1E	21 W	0959	1453	1.5E	6 F	1017	1447	1.6E	21 Sa	1156	1617	1.5E	6 M	0157	0351	0.5E	21 Tu	0144	0418	0.8E
	1724	2043	0.9F		1851	2206	1.3F		1900	2218	1.4F		1950	2253	1.4F		1944	2245	1.7F		0652	1012	1.4F
7 W	0948	1357	1.4E	22 Th	1058	1547	1.6E	7 Sa	1123	1539	1.8E	22 Su	1241	1645	1.6E	7 Tu	0206	0429	0.8E	22 W	0151	0440	1.0E
	1825	2146	1.2F		1938	2248	1.4F		1943	2253	1.6F		2017	2316	1.4F		2013	2311	1.7F		0730	1047	1.5F
8 Th	1037	1450	1.6E	23 F	1149	1629	1.7E	8 Su	1222	1626	2.0E	23 M	1320	1708	1.5E	8 W	0221	0505	1.1E	23 Th	0159	0459	1.1E
	1916	2234	1.4F		2017	2322	1.5F		2021	2325	1.7F		2039	2336	1.4F		2039	2337	1.7F		0805	1122	1.5F
9 F	1128	1539	1.9E	24 Sa	1234	1703	1.7E	9 M	1317	1710	2.0E	24 Tu	1357	1729	1.5E	9 Th	0240	0542	1.4E	24 F	0158	0458	1.1E
	2002	2315	1.6F		2050	2352	1.5F		2055	2355	1.8F		2056	2353	1.4F		2103				1518	1752	0.9E
10 Sa	1218	1628	2.0E	25 Su	1315	1730	1.7E	10 Tu	1413	1753	2.0E	25 W	1435	1753	1.4E	10 F	0303	0620	1.6E	25 Sa	0229	0540	1.4E
	2043	2354	1.7F		2117				2125				2112				1621	1854	1.0E		1604	1825	0.7E
11 Su	1309	1717	2.1E	26 M	1355	1755	1.6E	11 W	1509	1835	1.7E	26 Th	1515	1820	1.2E	11 Sa	0332	0658	1.7E	26 Su	0254	0608	1.5E
	2123				2140				2153				2127				2142				1656	1901	0.5E
12 M	1403	1805	2.1E	27 Tu	1435	1820	1.6E	12 Th	1609	1917	1.4E	27 F	1558	1850	1.1E	12 Su	0405	0737	1.6E	27 M	0324	0642	1.5E
	2200				2201				2218				2144				2154				1801	1940	0.3E
13 Tu	0518	0649	0.3E	28 W	0451	0652	0.4E	13 F	0438	0739	1.3E	28 Sa	0356	0653	1.1E	13 M	0444	0820	1.5E	28 Tu	0400	0722	1.5E
	0821	1202	1.5F		0851	1219	1.3F		1047	1356	1.4F		1010	1329	1.2F		1246	1604	1.0F		1135	1512	1.0F
	1458	1851	2.0E		1517	1849	1.5E		1712	1958	1.0E		1646	1924	0.9E		2110	*			2027	*	
14 W	0534	0734	0.5E	29 Th	0501	0720	0.6E	14 Sa	0507	0821	1.4E	29 Su	0421	0723	1.2E	14 Tu	0530	0914	1.2E	29 W	0444	0811	1.4E
	0936	1259	1.4F		0941	1302	1.2F		1154	1501	1.2F		1056	1418	1.1F		1411	1733	0.9F		1251	1637	0.9F
	1558	1936	1.8E		1602	1920	1.3E		1824	2042	0.6E		1742	2000	0.6E		2221	*			2132	*	
	2305				2238				2256				2217										
15 Th	0554	0819	0.8E	30 F	0515	0747	0.8E	15 Su	0542	0907	1.4E	30 M	0451	0758	1.3E	15 W	0627	1056	1.0E	30 Th	0538	0916	1.2E
	1049	1401	1.2F		1031	1349	1.1F		1311	1617	1.0F		1152	1519	0.9F		1541	1907	0.9F		1425	1809	0.9F
	1701	2021	1.4E		1650	1953	1.1E			2131	*		1855	2041	0.3E						2316	0.3F	
	2333				2256								2226										
				31 Sa	0534	0817	0.9E					31 Tu	0528	0841	1.2E								
					1125	1440	1.0F						1310	1644	0.7F								
					1744	2030	0.9E							2136	*								
					2314																		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

If three consecutive entries are marked (F) the middle one is not a true maximum but an intermediate value to show the current pattern.

* Current weak and variable.

Tampa Bay (Sunshine Skyway Bridge), Florida, 2010

F—Flood, Dir. 060° True E—Ebb, Dir. 235° True

October				November				December																		
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum												
	h	m	knots		h	m	knots		h	m	knots		h	m	knots											
1 F		0348	0.8F	16 Sa		0106	*	1 M		0408	0.6E	16 Tu		0153	0.8E	1 W		0146	1.4E	16 Th		0134	1.1E			
	0652	1109	1.1E		0906	1331	0.9E		1030	1343	0.9E		0456	0806	0.9F		0524	0839	1.2F		0527	0847	1.0F			
	1550	1927	1.1F		1645	2007	1.1F		1638	1958	1.3F		2317		1134		1401	0.5E	1232		1411	0.3E	1359	*		
2 Sa		0100	*	17 Su		0201	0.4E	2 Tu		0521	1.1E	17 W		0229	1.1E	2 Th		0232	1.7E	17 F		0215	1.3E			
	0834	1309	1.2E		0406	0724	0.8F		0521	0837	1.2F		0549	0904	1.2F		0622	0941	1.5F		0619	0942	1.3F			
	1654	2020	1.2F		1042	1420	0.9E		1156	1437	0.9E		1238	1444	0.5E		1506	*			1452	*				
3 Su		0203	*	18 M		0241	0.7E	3 W		0619	1.4E	18 Th		0257	1.3E	3 F		0315	1.9E	18 Sa		0251	1.5E			
	1019	1415	1.3E		0514	0831	1.0F		0619	0936	1.6F		0633	0950	1.4F		0714	1031	1.7F		0705	1027	1.4F			
	1743	2058	1.4F		1147	1458	0.9E		1306	1525	0.8E		1332	1522	0.4E		1556	*			1540	*				
4 M		0033	0.6E	19 Tu		0313	0.9E	4 Th		0710	1.7E	19 F		0321	1.5E	4 Sa		0355	2.0E	19 Su		0327	1.7E			
	0507	0834	1.2F		0604	0920	1.2F		0710	1026	1.8F		0713	1031	1.5F		0800	1116	1.8F		0747	1108	1.6F			
	1140	1505	1.4E		1238	1529	0.9E		1408	1609	0.6E		1423	1559	0.3E		1643	*			1626	*				
5 Tu		0043	1.0E	20 W		0339	1.1E	5 F		0025	1.9E	20 Sa		0345	1.6E	5 Su		0433	2.0E	20 M		0406	1.8E			
	0612	0934	1.5F		0646	1001	1.4F		0025	1113	1.8F		0005	1110	1.6F		0844	1159	1.7F		0828	1147	1.7F			
	1244	1548	1.3E		1322	1557	0.8E		1509	1652	0.4E		1636	*			1729	*			1712	*				
6 W		0058	1.4E	21 Th		0359	1.3E	6 Sa		0054	2.0E	21 Su		0413	1.7E	6 M		0512	1.9E	21 Tu		0449	1.9E			
	0706	1025	1.8F		0722	1038	1.5F		0844	1158	1.8F		0829	1150	1.6F		0926	1240	1.7F		0908	1226	1.7F			
	1343	1630	1.2E		1404	1626	0.7E		1612	1735	0.3E		1716	*			1814	*			1759	*				
7 Th		0117	1.7E	22 F		0418	1.4E	7 Su		0127	2.0E	22 M		0448	1.8E	7 Tu		0552	1.8E	22 W		0536	2.0E			
	0756	1112	1.9F		0757	1114	1.6F		0929	1244	1.7F		0909	1231	1.6F		1005	1321	1.6F		0947	1305	1.7F			
	1440	1710	1.0E		1447	1656	0.6E		1819		2315		1.4F	1800			2300	1.2F	1858			1845	*			
8 F		0140	1.8E	23 Sa		0439	1.6E	8 M		0204	1.9E	23 Tu		0530	1.9E	8 W		0633	1.7E	23 Th		0625	1.9E			
	0845	1159	1.9F		0831	1151	1.6F		1015	1333	1.5F		0952	1317	1.5F		1042	1402	1.4F		1025	1344	1.7F			
	1539	1751	0.7E		1534	1729	0.5E		1905		2354		1.3F	1848			2341	1.2F	1941			1800	1930	0.3E		
9 Sa		0207	1.9E	24 Su		0505	1.7E	9 Tu		0245	1.7E	24 W		0618	1.8E	9 Th		0027	1.1F	24 F		0035	1.2F			
	0934	1247	1.7F		0908	1231	1.5F		1102	1426	1.4F		1037	1406	1.5F		0318	0714	1.5E		0325	0715	1.8E			
	1642	1833	0.5E		1627	1807	0.3E		1954				1938		1938			2025			1102	1422	1.7F			
10 Su		0240	1.9E	25 M		0539	1.7E	10 W		0332	1.1F	25 Th		0029	1.1F	10 F		0119	1.0F	25 Sa		0135	1.1F			
	1024	1339	1.5F		0949	1316	1.4F		1151	1521	1.2F		0319	0710	1.7E		0410	0756	1.3E		0427	0804	1.5E			
	1751	1916	0.3E		1849		2357			2047	*		1125	1456	1.4F		1925	2109	0.3E		1843	2103	0.7E			
11 M		0022	1.4F	26 Tu		0620	1.7E	11 Th		0425	1.0F	26 F		0126	1.0F	11 Sa		0218	0.9F	26 Su		0244	1.0F			
	0317	0701	1.7E		1037	1409	1.3F		1242	1615	1.1F		0416	0806	1.6E		0508	0840	1.1E		0537	0855	1.2E			
	1118	1439	1.3F		1935		2147			2147	*		1213	1546	1.4F		1222	1553	1.2F		1209	1537	1.5F			
12 Tu		0101	1.2F	27 W		0036	1.2F	12 F		0526	1.0E	27 Sa		0237	0.8F	12 Su		0326	0.7F	27 M		0404	0.9F			
	0400	0745	1.5E		0329	0707	1.6E		0526	0917	1.0E		0525	0909	1.3E		0614	0930	0.9E		0704	0953	0.8E			
	1220	1547	1.1F		1132	1512	1.2F		1334	1707	1.1F		1301	1634	1.3F		1253	1628	1.1F		1238	1615	1.4F			
13 W		0147	1.0F	28 Th		0124	1.0F	13 Sa		0643	0.6F	28 Su		0404	0.7F	13 M		0442	0.7F	28 Tu		0535	0.8F			
	0450	0838	1.2E		0420	0802	1.5E		1424	1755	1.0F		0652	1024	1.0E		0738	1031	0.6E		0904	1105	0.3E			
	1331	1702	1.0F		1237	1620	1.2F		2203				1348	1719	1.3F		1322	1703	1.1F		1300	1655	1.3F			
14 Th		0247	0.8F	29 F		0227	0.8F	14 Su		0218	0.3E	29 M		0542	0.8F	14 Tu		0607	0.7F	29 W		0005	1.3E			
	0552	1001	1.0E		0522	0912	1.3E		0823	1203	0.7E		0847	1149	0.7E		0929	1144	0.3E		0405	0716	0.9F			
	1446	1816	1.0F		1347	1727	1.1F		1510	1839	1.0F		1432	1804	1.2F		1352	1741	1.0F		1230	*				
15 F		0409	0.6F	30 Sa		0355	0.7F	15 M		0108	0.6E	30 Tu		0052	1.0E	15 W		0046	0.9E	30 Th		0115	1.5E			
	0715	1215	0.9E		0645	1051	1.1E		1010	1310	0.6E		0413	0719	0.9F		0425	0734	0.8F		0521	0844	1.2F			
	1552	1919	1.0F		1454	1826	1.2F		1550	1918	1.0F		1051	1306	0.5E		1257	*			1350	*				
16 Su				31 Su		0033	*	16 M		2245		31 Tu		1849	1.2F	16 W		1822	0.9F	31 Th		0218	1.6E			
					0838	1232	1.0E								2137			0948	1.4F							
					1551	1916	1.2F											1458	*							
			2259		2259																					

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (F) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

Old Tampa Bay Entrance (Port Tampa), Florida, 2010

F—Flood, Dir. 025° True E—Ebb, Dir. 207° True

July				August				September															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m								
1 Th	0048	0341	0.9F	16 F	0052	0341	1.2F	1 Su	0032	0328	1.0F	16 M	0041	0355	1.0F	1 W	0034	0403	0.8F	16 Th	0050	0229	*
	0710	0940	0.6E		0700	1008	1.1E		0626	0952	1.0E		0653	1056	1.2E		0641	1027	1.1E		0758	1434	1.0E
	1215	1502	0.9F		1318	1555	1.0F		1343	1629	0.7F		1536	1830	0.7F		1610	1925	0.6F		1755	2054	0.8F
	1750	2125	1.1E		1901	2210	1.0E		1936	2220	0.7E		2325	2325	*		1739	2055	0.8F				
2 F	0111	0403	0.9F	17 Sa	0119	0414	1.1F	2 M	0057	0403	0.9F	17 Tu	0439	088F		2 Th	0009	*		17 F	0210	*	
	0731	1018	0.7E		0728	1056	1.1E		0656	1031	1.0E		0738	1232	1.0E		0741	1154	1.0E		0942	1540	1.1E
	1315	1557	0.8F		1432	1708	0.8F		1459	1746	0.6F		1707	2007	0.7F		1739	2055	0.8F		1850	2145	0.9F
	1847	2208	1.0E		2019	2259	0.6E		2102	2316	0.4E												
3 Sa	0135	0431	0.9F	18 Su	0146	0450	1.0F	3 Tu	0127	0446	0.9F	18 W	0045	*		3 F	0146	*		18 Sa	0113	0322	0.3E
	0753	1058	0.8E		0802	1154	1.2E		0735	1121	1.0E		0840	1456	1.1E		0904	1508	1.1E		0522	0810	0.6F
	1423	1700	0.7F		1556	1840	0.7F		1634	1931	0.6F		1824	2121	0.8F		1844	2152	1.0F		1933	2226	1.0F
	1954	2257	0.8E		2154	2357	0.3E																

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (F) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

St. Andrew Bay Entrance, Florida, 2010

F—Flood, Dir. 046° True E—Ebb, Dir. 225° True

January				February				March																			
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum													
	h	m	knots		h	m	knots		h	m	knots		h	m	knots												
1 F	0907	1235	2.1F	16 Sa	0834	1221	1.4F	1 M	0821	1250	0.7F	16 Tu	0634	0912	1.0F	1 M	0633	0805	0.3F	16 Tu	0445	0750	1.1F				
	1549	1.5F			1607	0.8F			1514	1637	0.3E		1353	1618	0.7E		1101	0.3F		1139	1500	1.2E		1816	2009	0.6F	
	1908	2.3F			1931	1.6F			1749	2042	1.4F		1832	2040	0.7F		1236	1524†	0.9E								
	2246				2232								2313				0055	0341	0.7E								
2 Sa	0951	1314	1.9F	17 Su	0822	1242	1.3F	2 Tu	0037	0434	1.3E	17 W	0625	0919	1.1F	2 Tu	0556	0802	0.8F	17 W	0027	0232	0.3E				
	1630	1.2F			1639	0.5F			0734	1146	0.3F		1347	1643	1.1E		1136	1605	1.4E		0428	0803	1.3F				
	1954	2.2F			2007	1.3F			1305	0.3F			1933	2119	0.5F		1851	2050	0.8F		1133	1531	1.6E				
	2332				2256				1443	1711†	0.8E		2337								1907	2049	0.5F				
3 Su	1027	1350	1.5F	18 M	0807	1302	1.1F	3 W	0144	0453	0.6E	18 Th	0609	0935	1.2F	3 W	0412	*		18 Th	0047	0329	0.3F				
	1707	0.7F			1703	*			0659	0938	1.0F		1346	1713	1.4E		1130	1641	1.8E		0819	1.4F					
	2038	1.8F			2039	1.0F			1413	2232	1.2E		2207	*			2012	2143	0.4F		1142	1606	2.0E				
					2318																2007	2137†	0.3F				
4 M	0013	0457	2.3E	19 Tu	0755	1310	1.0F	4 Th	0058	*		19 F	0046	*		4 Th	0210	0.6F		19 F	0212	0.6F					
	1029	1420	1.2F		1725	*			0303	*			0310	*			0430	0.4F			0419	0.5F					
		1743	0.3F		2114	0.6F			0459	*			0449	*			0846	1.6F			0838	1.6F					
	2127	1.3F			2334				1006	1.4F			0956	1.3F			1209	1715	2.0E		1208	1644	2.2E				
5 Tu	0047	0520	1.6E	20 W	0744	1115	1.0F	5 F	1413	1827	1.5E	20 Sa	0211	1026	1.4F	5 F	0022	0916	1.9F	20 Sa	0314	1.0F					
	0920	1443	0.8F		1607	1753	0.5E		0239	1045	1.6F		1444	1838	1.8E		1258	1749	2.0E		0459	0.9F					
		1825	*		2157	*			1456	1949	1.6E										0900	1.6F					
		2228	0.6F																		1249	1725	2.3E				
6 W	0103	0536	0.9E	21 Th	0729	1129	1.1F	6 Sa	0332	1137	1.8F	21 Su	0248	1116	1.5F	6 Sa	0144	0952	1.9F	21 Su	0057	0417	1.3F				
	0833	1124	0.7E		1609	1830	0.9E		1549	2159	1.9E		1537	1959	1.9E		1356	1831	1.9E		0534	1.2F					
	1646		*		2306	*															0924	1.7F					
		2350	*																		1343	1814	2.3E				
7 Th	0221	*		22 F	0655	1158	1.3F	7 Su	0424	1245	1.9F	22 M	0336	0802	1.5F	7 Su	0242	1045	1.8F	22 M	0156	0811	1.6F				
	0400	*			1619	1927	1.2E		1645	2310	2.1E		1015	1.4F			1500	2140	1.8E		1451	1925	2.2E				
	0529	*											1239	1.5F													
		1152	1.2F										1636	2.1E													
	1638	2.109	1.3E											2.2E													
8 F	0439	1236	1.6F	23 Sa	0435	1240	1.4F	8 M	0511	0924	1.6F	23 Tu	0428	0758	1.7F	8 M	0333	0823	1.6F	23 Tu	0249	0642	1.8F				
	1651	2.217	1.8E		1643	2057	1.6E		1039	1.6F			1109	1.4F			1002	1.5F			1030	1.4F					
									1355	2.0F			1359	1.7F			1207	1.6F			1156	1.5F					
									1747				1744	2.306	2.5E		1603	2256	1.9E		1601	2124	2.2E				
9 Sa	0505	1327	1.9F	24 Su	0438	1332	1.6F	9 Tu	0553	0006	2.3E	24 W	0519	0827	1.8F	9 Tu	0418	0814	1.5F	24 W	0340	0712	1.8F				
	1728	2.315	2.2E		1721	2213	2.0E		0933	1.5F			1151	1.3F			1056	1.2F			1100	1.2F					
									1137	1.4F			1458	1.8F			1335	1.5F			1341	1.4F					
									1452	2.0F							1703	2344	1.9E		1713	2239	2.2E				
									1852				1858														
10 Su	0544	1417	2.2F	25 M	0511	0849	1.4F	10 W	0628	0050	2.3E	25 Th	0606	0004	2.6E	10 W	0455	0814	1.4F	25 Th	0431	0742	1.7F				
	1819				1037	1.4F			0947	1.4F			0902	1.7F			1140	0.9F			1134	0.8F					
					1422	1.8F			1227	1.2F			1231	1.1F			1439	1.4F			1450	1.4F					
					1813	2.318	2.4E		1544	1.9F			1555	1.8F			1803				1836	2.332	2.1E				
									1948				2009														
11 M	0624	0009	2.5E	26 Tu	0553	0909	1.7F	11 Th	0656	0128	2.2E	26 F	0648	0052	2.6E	11 Th	0521	0019	1.8E	26 F	0515	0812	1.4F				
	1914	1505	2.3F		1154	1.5F			1003	1.3F			0939	1.5F			0824	1.3F			1211	0.3F					
					1508	2.0F			1313	1.0F			1312	0.7F			1220	0.6F			1551	1.3F					
					1914				1641	1.7F			1701	1.7F			1533	1.2F			2006						
									2033				2112				1901										
12 Tu	0703	0059	2.6E	27 W	0636	0017	2.8E	12 F	0712	0159	2.1E	27 Sa	0724	0136	2.3E	12 F	0531	0044	1.6E	27 Sa	0545	0018	1.7E				
	2007	1553	2.3F		0950	1.9F			1023	1.2F			1015	1.2F			0839	1.1F			1127	1248	0.3E				
					1246	1.5F			1359	0.7F			1354	*			1258	*			1405	1703	1.1F				
					1600	2.1F			1746	1.5F			1814	1.6F			1629	1.0F			2132						
					2014				2109				2217				1951										
13 W	0739	0147	2.7E	28 Th	0719	0109	3.0E	13 Sa	0710	0220	1.9E	28 Su	0733	0219	1.9E	13 Sa	0521	0057	1.3E	28 Su	0503	0101	1.2E				
		1136	1.6F		1033	1.9F			1043	1.1F			1045</														

St. Andrew Bay Entrance, Florida, 2010

F—Flood, Dir. 046° True E—Ebb, Dir. 225° True

April				May				June															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1	Th		0122 1.1F	16	F		0114 1.2F	1	Sa		0238 1.7F	16	Su		0154 2.0F	1	Tu		0248 1.6F	16	W		0241 1.8F
			0355 0.9F				0346 1.0F				0433 1.6F				0450 1.6F				0546 1.2F				0550 1.0F
			0739 1.9F				0738 1.8F				0749 2.3F				0746 2.2F				0847 1.6F				0906 1.7F
		1049	1617 2.5E			1052	1542 2.7E			1115	1642 2.7E			1117	1622 3.2E			1208	1702 2.2E			1242	1729 2.5E
		2147				2117				2323				2253				2315				2335	
2	F		0243 1.3F	17	Sa		0211 1.5F	2	Su		0311 1.7F	17	M		0238 2.1F	2	W		0310 1.5F	17	Th		0313 1.5F
			0424 1.2F				0440 1.2F				0506 1.6F				0528 1.6F				0635 1.0F				0636 0.6F
			0811 2.1F				0804 1.9F				0825 2.2F				0822 2.1F				0913 1.1F				1002 1.2F
		1134	1653 2.5E			1131	1628 2.8E			1200	1709 2.5E			1205	1706 3.1E			1231	1715 1.9E			1321	1758 1.8E
		2352				2307				2002				2349				2304				2303	
3	Sa		0843 2.1F	18	Su		0301 1.7F	3	M		0012 0341 1.6F	18	Tu		0318 2.1F	3	Th		0329 1.4F	18	F		0338 1.1F
			1223 1725 2.3E				0522 1.5F				0538 1.5F				0611 1.6F				1241 1733 1.6E				0753 *
							0832 1.9F				0857 1.9F				0900 1.9F				2244				1121 0.5F
						1218	1713 2.8E			1242	1730 2.2E			1254	1747 2.8E								1351 1823 1.0E
4	Su		0059 0917 2.0F	19	M		0020 0349 1.9F	4	Tu		0047 0410 1.5F	19	W		0036 0357 1.9F	4	F		0341 1.3F	19	Sa		0342 0.7F
			1316 1756 2.1E				0608 1.6F				0638 1.4F				0724 1.3F			1013	1747 1.2E				0917 0.6E
							0859 1.9F				0919 1.4F				0955 1.5F								1308 *
						1313	1800 2.7E			1322	1751 1.9E			1347	1829 2.3E								1546 *
5	M		0150 0954 1.7F	20	Tu		0116 0441 1.9F	5	W		0105 0438 1.4F	20	Th		0108 0435 1.6F	5	Sa		0315 1.2F	20	Su		0342 0.7F
			1413 1833 1.7E				1416 1858 2.4E				1357 1814 1.5E				0911 0.8F			0756	1057 0.5E				0605 1013 1.4E
															1126 0.9F				1325 0.4E				1711
															1200 0.9F				1723 0.8E				
															1443 1920 1.6E			2139					
6	Tu		0229 0718 1.5F	21	W		0204 0534 1.8F	6	Th		0104 0504 1.3F	21	F		0109 0510 1.2F	6	Su		0249 1.4F	21	M		0146 1.5F
			1021 1.3F				1004 1.2F				1059 0.3F				1002 *			0726	1110 1.0E				1102 2.0E
			1122 1.3F				1134 1.3F				1219 0.4F				1313 0.5F				1454 0.5E				
			1509 2208 1.5E				2031 2.0E			1426	1841 1.2E			1538	2035 0.9E				1646 0.6E				
																		2053					
7	W		0256 0656 1.4F	22	Th		0243 0618 1.6F	7	F		0052 0524 1.2F	22	Sa		0027 0534 0.8F	7	M		0258 1.6F	22	Tu		0222 1.9F
			1059 0.8F				1036 0.7F				1122 *				1043 0.7E			0723	1123 1.4E				1151 2.5E
			1306 0.9F				1325 1.0F				1357 *				1444 *			1905					
			1558 2247 1.4E			1633	2152 1.7E				1912 0.9E				1714 *								
															1828†								
8	Th		0305 0700 1.3F	23	F		0305 0650 1.3F	8	Sa		0031 0513 1.1F	23	Su		0253 0.9F	8	Tu		0316 1.7F	23	W		0301 2.2F
			1134 0.3F				1111 *				0909 1146 0.6E				1123 1.5E			0731	1142 1.9E				1241 2.8E
			1422 0.7F				1444 0.8F				1503 *				2010 0.5F			1848					
			1640 2304 1.1E			1803	2245 1.2E				1819 0.6E				2224 0.4F								
9	F		0258 0713 1.2F	24	Sa		0242 0714 0.9F	9	Su		0848 1206 1.1E	24	M		0306 1.4F	9	W		0341 1.8F	24	Th		0345 2.4F
			1207 *				0941 1147 0.7E				1206 1.1E				1205 2.1E			0749	1214 2.3E				1331 2.9E
			1518 0.5F				1352 1551 0.6F				1605 *				2152 1.0F			1901					
			1720 2232 0.9E				2037 2331 0.6E				1754 0.4E				2249 1.0F								
10	Sa		0244 0723 1.0F	25	Su		0200 0414 0.6F	10	M		0842 1223 1.5E	25	Tu		0332 1.8F	10	Th		0414 1.9F	25	F		0010 1.8F
			1028 1237 0.5E				0555 0.5F				0930				1247 2.6E			0819	1255 2.7E				0100 1.8F
			1443 1615 0.3F				0720 0.5F											1929	2332 1.7F				0439 2.4F
			1808 2243 0.7E			0913	1225 1.3E																1423 2.9E
						1531	2018 0.6F																
11	Su		0228 0703 1.0F	26	M		0015 *	11	Tu		0844 1243 1.9E	26	W		0409 2.1F	11	F		0116 1.6F	26	Sa		0027 1.8F
			1301 0.9E				0425 1.0F				1905				1333 2.8E				0505 2.0F				0211 1.8F
			1732 *				0847 1304 1.9E											0857	1344 3.0E				0545 2.3F
			2318 0.4E			1714	2151 0.9F											2009					1513 2.9E
12	M		0204 0610 1.1F	27	Tu		0058 0.6F	12	W		0855 1313 2.3E	27	Th		0459 2.3F	12	Sa		0003 1.9F	27	Su		0046 1.7F
			1322 1.3E				0457 1.4F				1917 2345 1.1F				1423 3.0E				0249 1.7F				0321 1.6F
			1902 *				0840 1346 2.4E												0606 2.1F				0643 2.2F
							1837 2328 1.2F												1438 3.2E				1553 2.7E
13	Tu		0006 *	28	W		0143 1.1F	13	Th		0035 1.1F	28	F		0111 1.9F	13	Su		0043 2.1F	28	M		0106 1.6F
			0625 1.2F				0541 1.8F				0549 1.7F				0225 1.9F				0353 1.7F				0413 1.3F
			0959 1346 1.7E				0907 1431 2.7E				0918 1352 2.7E				0600 2.4F				0657 2.3F				0729 2.0F
			1814 2256 0.4F				1949				1953				0935 1517 3.0E				1027 1532 3.4E				1046 1615 2.5E
															2120				2144				2140
14	W		0103 0.3F	29	Th		0050 1.5F	14	F		0021 1.5F	29	Sa		0138 1.9F	14	M		0125 2.1F	29	Tu		0128 1.5F
			0648 1.4F				0245 1.5F				0241 1.4F				0341 1.8F				0436 1.6F				0453 0.9F
			1003 1417 2.1E				0628 2.1F				0632 1.9F				0653 2.4F				0740 2.3F				0807 1.7F
			1858				0946 1520 2.9E				0951 1440 2.9E				1020 1603 2.9E				1114 1618 3.3E				1122 2.2E
15	Th		0009 0.8F	30	F		0156 1.7F	15	Sa		0108 1.8F	30	Su		0203 1.8F	15	Tu		0205 2.0F	30	W		0149 1.4F
			0214 0.7F				0350 1.6F				0405 1.6F				0430 1.6F				0512 1.4F				

St. Andrew Bay Entrance, Florida, 2010

F—Flood, Dir. 046° True E—Ebb, Dir. 225° True

July				August				September																				
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum														
h	m	h	m	h	m	h	m	h	m	h	m	h	m	h	m													
1	Th	0209	1.2F	16	F	0428	0.4E	1	Su	0331	1.0E	16	M	0209	1.7E	1	W	0303	0.708	1.9E	16	Th	0331	1.021	1.9E			
		0556	0.3F			0557	0.4E			0604	*			1449	2.258	1.8F			2021	1.5F			1547	1.951	1.5F			
		0911	0.8F			0732	0.8F			1038	*								2213	1.4F				1951	1.5F			
		1146	1.6E			1308	0.9E			1339	0.5E								2347	1.5F				2236	1.3F			
		2049				2012	0.7F			2317	1.3F																	
2	F	0220	1.1F	17	Sa	0409	0.643	2	M	0346	0.647	17	Tu	0309	0.910	1.8E	2	Th	0403	0.854	2.0E	17	F	0434	0.103	1.5F		
		0629	*			1120	*			1621	2.359	1.4F			1547				1555	1.939	1.7F			1626	1.116	1.9E		
		0941	0.3F			1350	*													2259	1.4F				1952	1.4F		
		1140	1.3E			1534	*																		2320	0.9F		
		2027				1734†	*																					
3	Sa	0120	1.1F	18	Su	0358	0.807	3	Tu	0412	0.759	1.5E	18	W	0411	1.040	2.1E	3	F	0508	1.027	2.3E	18	Sa	0534	0.219	1.3F	
		0538	0.3E			1545	2.357	1.5F							1640	2.051	1.6F			1645	2.001	1.8F			1652	1.155	1.7E	
		1035	*												2227	1.6F				2336	1.2F				2001	1.2F		
		1706	0.9E																									
		2005																										
4	Su	0109	1.3F	19	M	0414	0.941	1.7E	4	W	0059	1.5F	19	Th	0125	1.9F	4	Sa	0621	1.129	2.4E	19	Su	0636	0.002	0.4F		
		0534	0.932			1629				0452	0.937	1.8E			0515	1.141	2.3E			1732	2.033	1.7F			1656	0.317	1.1F	
			1251							1652	2.111	1.4F			1727	2.058	1.6F									2015	1.5E	
		1934	0.6E												2321	1.4F											1.1F	
			1515																									
5	M	0132	1.4F	20	Tu	0454	1.048	2.1E	5	Th	0159	1.7F	20	F	0231	1.9F	5	Su	0013	0.9F	20	M	0041	*	0.4F			
		0542	0.959			1716				0544	1.048	2.2E			0624	1.229	2.3E			0738	1.220	2.4E			0413	0.9F		
		1812	1.2E							1731	2.049	1.6F			1806	2.114	1.4F			1814	2.106	1.5F			0439	1.2E		
											2336	1.4F													1635	2.026	0.9F	
																									2333		0.9F	
6	Tu	0202	1.6F	21	W	0547	1.147	2.5E	6	F	0250	1.9F	21	Sa	0009	1.1F	6	M	0051	0.6F	21	Tu	0255	0.118	0.4E			
		0600	1.6E			1800				0646	1.149	2.6E			0730	1.308	2.2E			0848	1.306	2.2E			0520	0.6F		
		1753								1812	2.121	1.8F			1836	2.132	1.3F			1848	2.140	1.1F			1615	2.008	0.8F	
																									2313		0.8F	
7	W	0234	1.8F	22	Th	0648	1.239	2.6E	7	Sa	0027	1.4F	22	Su	0054	0.8F	7	Tu	0131	*	22	W	0427	0.151	0.7E			
		0630	2.1E			1842	2.239	1.7F			0341	2.0F			0423	1.6F			0958	0.554	1.5F			0918	0.630	0.5F		
		1810								0749	1.242	2.8E			1853	2.153	1.1F			1853	2.209	0.7F			1556	1.917	1.0F	
										1853	2.201	1.8F													2306		1.0F	
8	Th	0309	1.9F	23	F	0748	1.328	2.7E	8	Su	0112	1.3F	23	M	0139	0.5F	8	W	0027	0.213	0.5E	23	Th	0539	0.220	1.1E		
		0712	2.5E			1920	2.300	1.6F			0441	2.0F			0528	1.4F			0352	0.659	1.3F			1042	0.723	0.5F		
		1840	1.6F							0847	1.331	2.9E			1846	2.212	1.0F			1119	1.435	1.2E			1526	1.310	0.3E	
										1932	2.240	1.7F								●	1803	1.947	0.4F			1526	1.925	1.2F
																									2303		1.2F	
9	F	0019	1.6F	24	Sa	0839	1.413	2.6E	9	M	0158	1.1F	24	Tu	0224	*	9	Th	0257	1.0E	24	F	0631	0.245	1.4E			
		0351	2.1F			1953	2.319	1.5F			0552	2.0F			0630	1.2F			0525	0.752	1.1F			0806	0.4F			
		0800	2.9E							0943	1.418	2.7E			1422	1.4E			1256	1.521	0.6E			1349	*	0.4F		
		1917	1.9F							●	2008	2.317	1.4F		○	1827	2.224	0.8F		2252	1.727	1.940	0.8F		1941	1.4F		
																								2305		1.4F		
10	Sa	0127	1.7F	25	Su	0922	1.453	2.4E	10	Tu	0246	0.7F	25	W	0307	*	10	F	0340	1.6E	25	Sa	0717	0.313	1.7E			
		0447	2.1F			2014	2.337	1.4F			0652	1.9F			0719	1.0F			0841	0.8F				0846	0.3F			
		0850	3.1E							1040	1.504	2.4E			1424	1.1E			1049	0.6F				1030	*			
		1958	2.0F							2031	2.350	1.1F			1811	2.045	0.8F			1200	0.7F				1257	0.4F		
																									1446†	0.4F		
11	Su	0226	1.6F	26	M	1049	1.537	1.7E	11	W	0332	*	26	Th	0113	0.340	0.6E	11	Sa	0754	0.935	0.4F	26	Su	0813	0.346	2.0E	
		0555	2.2F			1939				0742	1.7F				0546	0.758	0.8F			1043	0.4F				1553	0.7F		
		0940	3.2E							1138	1.546	1.9E								1346	0.8F				2020	1.7F		
		2039								1952					1758	2.042	1.1F			1346	0.8F				2020	1.7F		
12	M	0006	2.0F	27	Tu	1026	1.536	1.9E	12	Th	0017	0.6F	27	F	0106	0.404	0.9E	12	Su	1038	0.455	2.2E	27	M	1052	0.423	2.3E	
		0322	1.4F			1957				0229	0.413	0.5E			0643	0.834	0.6F			1038	1.510	1.0F				1502	1.0F	
		0652	2.2F							0541	0.828	1.4F			1058	1.513	0.6E									1641	1.0F	
		1029	3.1E							1245	1.619	1.3E			1743	2.054	1.2F									2041	1.7F	
		2120								1912	2.058	0.5F																
13	Tu	0044	1.8F	28	W	1049	1.537	1.7E	13	F	0158	0.449	1.0E	28	Sa	0102	0.426	1.3E	13	M	0024	0.530	2.2E	28	Tu	0024	0.503	2.4E
		0407	1.1F			1939				0705	0.916	0.9F			0739	0.911	0.4F			1303	2.126	2.0F			1228	1.554	1.3F	
		0739	2.2F							1419	1.645	0.6E														1720	1.3F	
		1117	2.9E							1839	2.112	1.0F														2101	1.7F	
		2153																										
14	W	0120	1.5F	29	Th	1106	1.550	1.4E	14	Sa	0102	0.523	1.4E	29	Su	0106	0.453	1.5E	14	Tu	0120	0.609	2.1E	29	W	0113	0.547	2.4E
		0445	0.6F			1923	2.227	0.9F		0840	1.013	0.3F														1325	1.656	1.5F
		0824	1.9F								1229	*															1804	1.5F
		1202	2.4E								1440	0.3F															2100	1.6F
		2149									1700†	*																
15	Th	0152	1.1F	30	F	1116	1.612	1.1E	15	Su	0119	0.600	1.7E	30	M	0128	0.526	1.7E</										

St. Andrew Bay Entrance, Florida, 2010

F—Flood, Dir. 046° True E—Ebb, Dir. 225° True

October				November				December																	
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum											
	h	m	knots		h	m	knots		h	m	knots		h	m	knots										
1 F	0323	0813	2.2E	16 Sa	0331	1016	1.3E	1 M	0508	1003	1.2E	16 Tu	0249	03E	1 W	0514	0755	0.5F	16 Th	0700	1457	1.8F			
	1501	1842	1.8F		1434	1833	1.2F		1400	1845	1.0F		1038	1535		1.3F	1911	2342		2.1E	1909	2339	1.8E		
2 Sa	0433	0105	1.3F	17 Su	0412	1042	1.0E	2 Tu	0140	0331	0.5F	17 W	0353	0.4E	2 Th	0552	0918	1.0F	17 F	0649	1523	1.9F			
	1546	0952	2.1E		0420	1042	1.0E		0802	1055	0.6E		0523	0.5E		1038	1.0F	1931		1510	1.8F	1931	1510	1.8F	
3 Su	0550	0227	1.2F	18 M	0118	0304	0.4F	3 W	0323	0807	0.6F	18 Th	0018	1.6E	3 F	0026	2.5E	18 Sa	0002	2.2E					
	1625	1943	1.4F		0445	1005	0.7E		1144	*	0739		1608	1.7F		0637	1544		2.1F	0701	1554	2.0F			
4 M	0730	0331	1.1F	19 Tu	0201	06F	4 Th	2029	0043	2.0E	19 F	0036	1.9E	4 Sa	0113	2.9E	19 Su	0039	2.5E						
	1644	1143	1.6E		0401	04E		0516	0932	0.9F		0729	1637		1.7F	0724		1158	1.8F	0724	1640	2.0F			
5 Tu	0909	1644	0.7F	20 W	0420	11F	5 F	2021	0124	2.5E	20 Sa	0100	2.3E	5 Su	0203	3.0E	20 M	0123	2.8E						
	2318	2318	0.7F		0445	1005		0.7E	0638	1106		1.3F	0738		1720	1.8F		0813	1234	1.9F	0756	1150	1.8F		
6 W	0909	0222	0.6F	21 Th	0518	*	6 Sa	2046	1323	1.2F	21 Su	0134	2.6E	6 M	1402	1.9F	21 Tu	1415	1.7F						
	1603	0105	1.0E		0700	*		0744	1222	1.6F		0802	1810		1.9F	1732		2.4F	0902	1308	2.0F	1415	1.7F		
7 Th	1603	0336	0.8F	22 F	0818	*	7 Su	2125	1708	1.8F	22 M	0134	2.6E	7 Tu	1611	1.7F	22 W	1615	1.5F						
	2222	1102	1.314		1025†	*		0853	1534	1.7F		2136	0841		0219	2.9E		1921	2.4F	0916	1259	2.1F	1615	1.5F	
8 F	1519	0145	1.6E	23 Sa	1048	*	8 M	2210	1848	2.3F	23 Tu	0310	3.1E	8 W	2248	0426	2.9E	23 Th	1652	1.3F					
	2152	0507	0.8F		1751	1.4F		1000	1411	1.9F		2215	0841		0219	2.9E	2003		2.2F	0958	1337	2.0F	1652	1.3F	
9 Sa	0623	0228	2.1E	24 Su	0200	2.1E	9 Tu	2256	1931	2.4F	24 W	0310	3.1E	9 Th	1025	1404	1.7F	24 F	2007	2.1F					
	2145	1133	1.1F		0724	1851		1.7F	1059	1447		1.8F	0931		1335	2.0F	2327		0449	2.6E	1034	1413	1.7F		
10 Su	0736	1258	1.3F	25 M	0236	2.4E	10 W	2342	2010	2.3F	25 Th	0400	3.2E	10 F	2041	1.7F	25 Sa	2050	1.8F						
	1545	1545	1.1F		1315	1.2F		1147	1518	1.7F		1023	1415		2.1F	2358		0459	2.2E	1052	1446	1.4F	2050	1.8F	
11 M	1917	0358	2.7E	26 Tu	1511	1.2F	11 Th	2342	2048	2.0F	26 F	1711	1.6F	11 Sa	2041	1.7F	26 Su	2118	1.2F	26 M	2141	1.3F			
	2224	1415	1.5F		1920	1.8F		0025	0526	2.4E		2008	2.1F		0031	0524		2.9E	0020		0507	1.8E	2141	1.3F	0104	0540	1.9E
12 Tu	2309	1513	1.6F	27 W	1625	1.3F	12 F	2342	2048	2.0F	27 Sa	1529	1.9F	12 Su	2118	1.2F	27 M	2118	1.2F	27 Th	2118	1.2F			
	2358	1652	1.5F		1948	1.9F		1223	1546	1.6F		2344	0444		3.2E	2118		1.2F	0028		0518	1.5E	2118	1.2F	0104	0540	1.9E
13 W	0438	0513	2.6E	28 Th	1708	1.5F	13 Sa	2342	2048	2.0F	28 Su	1840	1.3F	13 M	2302	1.0F	13 Th	2302	1.0F	28 Tu	2302	1.0F			
	1117	1652	1.5F		2016	2.0F		0104	0543	2.0E		2132	1.5F		0211	0645		1.8E	0924		1436	1.2F	2302	1.0F	0136	0607	1.1E
14 Th	2025	1513	1.6F	29 F	1708	1.5F	14 Su	2342	2048	2.0F	29 M	1840	1.3F	14 Tu	2302	1.0F	14 W	2302	1.0F	29 Th	2302	1.0F			
	2025	1652	1.5F		2016	2.0F		1241	1612	1.4F		2132	1.5F		1229	1604		1.6F	1908		2239	0.6E	2302	1.0F	0136	0607	1.1E
15 F	2253	1707	1.6F	30 Sa	1750	1.6F	15 M	2342	2048	2.0F	30 Tu	2248	1.0F	15 W	2302	1.0F	15 Th	2302	1.0F	30 F	2302	1.0F			
	2253	2100	2.1F		2044	1.9F		0159	0617	1.2E		2248	1.0F		0303	0738		1.0E	0839		1420	1.4F	2302	1.0F	0510	1356	1.8F
16 Sa	2253	0546	2.3E	31 Su	2044	1.9F	16 Tu	2342	2048	2.0F	31 W	0033	0.5F	16 Th	2302	1.0F	31 F	2302	1.0F						
	2253	2141	1.8F		2111	1.7F		1215	1646	1.2F		2248	1.0F		1153	1655		0.9F	1853	2304	1.0E	2302	1.0F	0510	1356	1.8F
17 Su	0050	0621	1.9E	1 M	2111	1.7F	17 F	2342	2048	2.0F	1 Tu	1952	0.7E	17 W	1853	2304	1.0E	1 Th	1857	2322	1.4E	1 F	1842	1438	2.2F
	1321	0621	1.9E		2111	1.7F		2122	2301	0.3E		1952	0.7E		0759	1435	1.6F		1857	2322	1.4E		1842	1438	2.2F
18 M	1402	1847	1.5F	2 Tu	2150	1.3F	2 W	2342	2048	2.0F	2 Th	2218	1.4E	2 F	1857	2322	1.4E	2 Sa	1842	1438	2.2F				
	2253	2142	1.3F		2240	1.3F		0135	*	2342		2048	2.0F		2218	1.4E	0759		1435	1.6F	1842	1438	2.2F		
19 Th	2253	1847	1.5F	3 Su	2240	1.3F	3 M	2342	2048	2.0F	3 Tu	2218	1.4E	3 W	1857	2322	1.4E	3 Th	1842	1438	2.2F				
	2253	2253	0.7F		2240	1.3F		0135	*	2342		2048	2.0F		2218	1.4E	0759		1435	1.6F	1842	1438	2.2F		
20 F	2253	0918	1.0F	4 M	2240	1.3F	4 Tu	2342	2048	2.0F	4 W	2218	1.4E	4 Th	1857	2322	1.4E	4 F	1842	1438	2.2F				
	2253	2318	0.7F		2240	1.3F		0135	*	2342		2048	2.0F		2218	1.4E	0759		1435	1.6F	1842	1438	2.2F		
21 Sa	2253	0918	1.0F	5 Su	2240	1.3F	5 M	2342	2048	2.0F	5 Tu	2218	1.4E	5 W	1857	2322	1.4E	5 Th	1842	1438	2.2F				
	2253	2318	0.7F		2240	1.3F		0135	*	2342		2048	2.0F		2218	1.4E	0759		1435	1.6F	1842	1438	2.2F		
22 Su	2253	0918	1.0F	6 M	2240	1.3F	6 Tu	2342	2048	2.0F	6 W	2218	1.4E	6 Th	1857	2322	1.4E	6 F	1842	1438	2.2F				
	2253	2318	0.7F		2240	1.3F		0135	*	2342		2048	2.0F		2218	1.4E	0759		1435	1.6F	1842	1438	2.2F		
23 M	2253	0918	1.0F	7 Tu	2240	1.3F	7 W	2342	2048	2.0F	7 Th	2218	1.4E	7 F	1857	2322	1.4E	7 Sa	1842	1438	2.2F				
	2253	2318	0.7F		2240	1.3F		0135	*	2342		2048	2.0F		2218	1.4E	0759		1435	1.6F	1842	1438	2.2F		
24 Tu	2253	0918	1.0F	8 Su	2240	1.3F	8 M	2342	2048	2.0F	8 Tu	2218	1.4E	8 W	1857	2322	1.4E	8 Th	1842	1438	2.2F				
	2253	2318	0.7F		2240	1.3F		0135	*	2342		2048	2.0F		2218	1.4E	0759		1435	1.6F	1842	1438	2.2F		
25 W	2253	0918	1.0F	9 Tu	2240	1.3F	9 W	2342	2048	2.0F	9 Th	2218	1.4E	9 F	1857	2322	1.4E	9 Sa	1842	1438	2.2F				
	2253	2318	0.7F		2240	1.3F		0135	*	2342		2048	2.0F		2218	1.4E	0759		1435	1.6F	1842	1438	2.2F		
26 Th	2253	0918	1.0F	10 Su	2240	1.3F	10 M	2342	2048	2.0F															

Mobile Bay Entrance, Alabama, 2010

F—Flood, Dir. 025° True E—Ebb, Dir. 190° True

January				February				March															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	1118	1745	2.9F	16 Sa	1200	1845	1.8F	1 M	1326	1955	1.0F	16 Tu	1434	2135	0.5F	1 M	1510	2056	0.6F	16 Tu	1919	1432	0.4E
2 Sa	1212	0543 1837	2.8E 2.6F	17 Su	0036 1236	0609 1916	1.8E 1.5F	2 Tu	0142	0611 2119	0.6E *	17 W	0728 1229 1554	* * *	2 Tu	0525 0735 1540	* * 0.5E	17 W	0946 2155	0050 1614	0.5F 0.8E		
3 Su	0041 1302	0626 1922	2.4E 2.0F	18 M	0112 1308	0642 1941	1.5E 1.2F	3 W	0410 1050 1441	* 0.3F 0.5E	18 Th	1240	0641 1923	0.3F 0.5E	3 W	1212	0722 1758	0.7F 1.0E	18 Th	1119 2337	0507 1731	0.8F 1.1E	
4 M	0126 1341	0658 1956	1.8E 1.3F	19 Tu	0146 1333	0710 1949	1.1E 0.7F	4 Th	0337 1550	1034 2159	0.9F 1.1E	19 F	0119 1413	0814 2049	0.7F 1.0E	4 Th	0038 1335	0807 1929	1.2F 1.4E	19 F	1226	0624 1842	1.2F 1.4E
5 Tu	0157 1340	0704 1933	1.0E 0.6F	20 W	0213 1333	0725 1821	0.6E 0.3F	5 F	0426 1650	1105 2257	1.4F 1.6E	20 Sa	0245 1521	0909 2156	1.2F 1.4E	5 F	0207 1444	0857 2046	1.6F 1.7E	20 Sa	0055 1331	0724 1953	1.5F 1.7E
6 W	0130 1031 1920	0554 1440	0.4E 0.3F	21 Th	0552 1407 2325	* * 0.4E	6 Sa	0517 1749	1152 2352	1.7F 1.9E	21 Su	0351 1628	1007 2259	1.6F 1.8E	6 Sa	0316 1552	0951 2156	1.8F 1.9E	21 Su	0205 1438	0824 2105	1.8F 2.0E	
7 Th	0653 1814	0141 1305	0.4E 0.8F	22 F	0428 1701	1118 2322	0.5F 0.9E	7 Su	0610 1849	1246	1.9F	22 M	0454 1736	1110 2359	1.9F 2.2E	7 Su	0420 1700	1050 2303	1.8F 1.9E	22 M	0313 1549	0926 2214	2.0F 2.1E
8 F	0628 1841	0020 1305	1.1E 1.4F	23 Sa	0453 1731	1119 2354	1.1F 1.4E	8 M	0704 1948	0046 1345	2.1E 2.0F	23 Tu	0558 1844	1218	2.2F	8 M	0522 1810	1155	1.8F	23 Tu	0420 1701	1032 2320	2.1F 2.2E
9 Sa	0655 1923	0041 1334	1.6E 1.8F	24 Su	0537 1817	1159	1.6F	9 Tu	0759 2045	0138 1447	2.1E 2.0F	24 W	0703 1952	0058 1329	2.4E 2.3F	9 Tu	0624 1918	0006 1306	1.9E 1.7F	24 W	0527 1814	1141	2.1F
10 Su	0735 2009	0118 1416	2.0E 2.1F	25 M	0628 1911	0036 1251	1.9E 2.0F	10 W	0853 2139	0228 1547	2.1E 1.9F	25 Th	0808 2057	0155 1441	2.5E 2.3F	10 W	0725 2023	0105 1421	1.8E 1.6F	25 Th	0633 1926	0022 1255	2.1E 1.9F
11 M	0819 2057	0200 1502	2.3E 2.2F	26 Tu	0723 2008	0124 1350	2.4E 2.4F	11 Th	0944 2229	0315 1644	2.1E 1.8F	26 F	0915 2203	0250 1555	2.4E 2.1F	11 Th	0824 2123	0158 1536	1.7E 1.4F	26 F	0742 2043	0120 1420	1.9E 1.5F
12 Tu	0906 2145	0243 1551	2.4E 2.3F	27 W	0822 2106	0215 1453	2.7E 2.6F	12 F	1033 2315	0359 1735	1.9E 1.7F	27 Sa	1027 2311	0343 1713	2.0E 1.7F	12 F	0924 2222	0248 1649	1.5E 1.3F	27 Sa	0902 2214	0215 1616	1.4E 1.0F
13 W	0952 2232	0328 1640	2.4E 2.2F	28 Th	0922 2204	0307 1555	2.8E 2.7F	13 Sa	1120	0440 1823	1.7E 1.5F	28 Su	1156	0433 1844	1.5E 1.1F	13 Sa	1030 2325	0334 1804	1.3E 1.0F	28 Su	1239	0306 1920	0.8E 0.5F
14 Th	1037 2316	0411 1726	2.4E 2.1F	29 F	1023 2301	0359 1657	2.8E 2.6F	14 Su	0000 1207	0518 1911	1.4E 1.2F	14 Su	1208	0420 1930	0.9E 0.8F	29 M	1902	0354 0601 1357	* * 0.6E	29 M	0449 1537	0.6F 1.2E	
15 F	1120 2358	0453 1808	2.2E 2.0F	30 Sa	1123 2357	0448 1756	2.5E 2.2F	15 M	0046 1301	0556 2006	1.1E 0.8F	15 M	0044 1540	0515 2126	0.6E 0.5F	30 Tu	0951 2144	0449 1537	0.6F 1.2E	30 Tu	0951 2144	0449 1537	0.6F 1.2E
				31 Su	1223	0533 1855	2.0E 1.7F												31 W	1104 2314	0536 1649	1.2F 1.6E	

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (F) or (E) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

Mobile Bay Entrance, Alabama, 2010

F—Flood, Dir. 025° True E—Ebb, Dir. 190° True

April				May				June															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 Th	1205	1753	1.9E	16 F	1124 2343	1731	1.9E	1 Sa	1246	1836	2.4E	16 Su	1218	1823	2.7E	1 Tu	1406	1952	1.9E	16 W	1352	1937	1.9E
2 F	0024 1304	0714 1857	1.9F 2.1E	17 Sa	1218	0612 1829	2.0F 2.2E	2 Su	0102 1338	0734 1931	2.2F 2.2E	17 M	0041 1311	0701 1917	2.6F 2.6E	2 W	0209 1447	0827 2033	1.6F 1.6E	17 Th	0206 1424	0811 1953	1.6F 1.3E
3 Sa	0127 1404	0805 2001	2.0F 2.1E	18 Su	0045 1316	0707 1930	2.2F 2.3E	3 M	0155 1433	0821 2027	2.0F 2.0E	18 Tu	0136 1404	0751 2008	2.5F 2.4E	3 Th	0241 1522	0844 2106	1.2F 1.1E	18 F	0217 1412	0756 1908	0.8F 0.6E
4 Su	0229 1507	0858 2107	2.0F 2.0E	19 M	0147 1418	0803 2034	2.3F 2.3E	4 Tu	0246 1527	0907 2121	1.8F 1.8E	19 W	0228 1455	0836 2053	2.2F 2.0E	4 F	0300 1541	0825 2124	0.8F 0.7E	19 Sa	0027 0947 2020	0448 1522	0.4F 0.4E
5 M	0329 1613	0955 2212	1.8F 1.9E	20 Tu	0249 1521	0859 2135	2.3F 2.2E	5 W	0334 1622	0949 2212	1.5F 1.5E	20 Th	0313 1539	0912 2125	1.6F 1.4E	5 Sa	0245 2012	0659 2012	0.4F *	20 Su	0720 1915	0223 1315	0.8F 1.0E
6 Tu	0429 1721	1056 2315	1.6F 1.7E	21 W	0349 1625	0956 2233	2.1F 2.0E	6 Th	0416 1717	1022 2258	1.1F 1.1E	21 F	0340 1600	0916 2121	1.0F 0.7E	6 Su	0854 1906	0502 1340	0.3F 0.5E	21 M	0727 1934	0158 1324	1.4F 1.7E
7 W	0527 1830	1202	1.4F	22 Th	0446 1729	1050 2324	1.7F 1.5E	7 F	0450 1819	1022 2338	0.7F 0.6E	22 Sa	0258 1759	0708 1759	0.4F *	7 M	0756 1909	0302 1335	0.6F 1.0E	22 Tu	0802 2011	0217 1356	1.9F 2.2E
8 Th	0624 1940	0012 1321	1.5E 1.1F	23 F	0539 1837	1142	1.1F	8 Sa	0500	0837 1435 1627	0.3F * *	23 Su	0831 2001	0411 1401	0.5F 0.8E	8 Tu	0802 1942	0211 1357	1.1F 1.5E	23 W	0844 2054	0253 1435	2.3F 2.5E
9 F	0721 2055	0105 1511	1.2E 0.8F	24 Sa	0620	0004 1157	0.9E 0.4F	9 Su	0003 0625 1340 1811	* * 0.4E	24 M	0823 2018	0311 1409	1.1F 1.5E	9 W	0829 2024	0224 1430	1.5F 2.0E	24 Th	0929 2140	0336 1517	2.5F 2.6E	
10 Sa	0833 2236	0155 1739	0.9E 0.5F	25 Su	0628 1341 1843	* 1341 0.4E	10 M	0825 1925	0356 1403	0.4F 0.9E	25 Tu	0853 2056	0318 1441	1.7F 2.1E	10 Th	0907 2111	0259 1509	2.0F 2.4E	25 F	1016 2226	0422 1601	2.5F 2.7E	
11 Su	0931 1216 2027	0248 * 1216 2027	0.5E * 0.4F	26 M	0846 2026	0412 1426	0.6F 1.1E	11 Tu	0842 2017	0245 1435	0.9F 1.3E	26 W	0933 2140	0348 1520	2.1F 2.4E	11 F	0951 2202	0343 1554	2.4F 2.7E	26 Sa	1102 2311	0508 1645	2.5F 2.6E
12 M	0938 1838	0434 * 0538 1357	* * 0.5E	27 Tu	0929 2127	0406 1514	1.3F 1.7E	12 W	0914 2107	0308 1512	1.3F 1.8E	27 Th	1016 2226	0426 1603	2.4F 2.6E	12 Sa	1039 2255	0432 1641	2.6F 2.8E	27 Su	1147 2354	0553 1727	2.4F 2.4E
13 Tu	0849 2024	0014 1456	0.5F 0.9E	28 W	1016 2223	0437 1602	1.8F 2.1E	13 Th	0953 2157	0346 1554	1.8F 2.1E	28 F	1102 2313	0508 1648	2.5F 2.7E	13 Su	1129 2349	0522 1730	2.8F 2.9E	28 M	1229	0634 1808	2.2F 2.2E
14 W	0945 2138	0323 1547	0.9F 1.3E	29 Th	1105 2316	0518 1651	2.1F 2.4E	14 F	1037 2250	0431 1640	2.1F 2.4E	29 Sa	1149	0552 1735	2.5F 2.6E	14 M	1220	0612 1817	2.8F 2.8E	29 Tu	0034 1309	0711 1846	1.9F 1.9E
15 Th	1034 2242	0427 1637	1.3F 1.7E	30 F	1154	0602 1743	2.3F 2.4E	15 Sa	1126 2345	0519 1730	2.4F 2.6E	30 Su	0000 1235	0636 1822	2.4F 2.4E	15 Tu	0041 1308	0700 1902	2.6F 2.4E	30 W	0110 1345	0741 1921	1.6F 1.6E
												31 M	0046 1321	0718 1908	2.2F 2.2E								

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (F) or (E) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

Mobile Bay Entrance, Alabama, 2010

F—Flood, Dir. 025° True E—Ebb, Dir. 190° True

July				August				September																
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum										
	h	m	knots		h	m	knots		h	m	knots		h	m	knots									
1 Th	0139	0759	1.2F	16 F	0143	0744	0.5F	1 Su	1533	2231	0.4E	16 M	0402	1013	1.7E	1 W	0356	1028	1.7E	16 Th	0535	1134	2.0E	
	1416	1948	1.1E		1332	1731	0.3E						1636	2307	1.9F		1624	2235	1.8F		1754			
2 F	0156	0746	0.8F	17 Sa	0140	*		2 M	0423	1047	0.9E	17 Tu	0508	1116	2.0E	2 Th	0506	1132	2.0E	17 F	0645	1234	1.8E	
	1431	1958	0.7E		1746	1233	0.4E		1622	2248	1.0F		1735				1728	2343	2.0F		1855			
3 Sa	0137	0608	0.4F	18 Su	0521	1136	1.1E	3 Tu	0505	1129	1.3E	18 W	0614	1216	2.2E	3 F	0615	1232	2.2E	18 Sa	0752	1328	1.6E	
		1821	*		1742	0008	0.8F		1712	2332	1.4F		1835	0006	2.0F		1833				1955	0145	1.6F	
4 Su	0747	0343	0.3F	19 M	0600	1208	1.7E	4 W	0556	1216	1.8E	19 Th	0718	1312	2.2E	4 Sa	0723	1330	2.3E	19 Su	0857	1418	1.4E	
	1814	1251	0.4E		1820	0018	1.4F		1806				1933	0110	2.1F		1938	0054	2.1F		2056	0306	1.3F	
5 M	0645	0131	0.6F	20 Tu	0649	1251	2.1E	5 Th	0651	1306	2.2E	20 F	0819	1405	2.1E	5 Su	0831	1425	2.2E	20 M	1001	1504	1.1E	
	1810	1237	1.0E		1906	0055	1.9F		1902	0027	1.8F		2031	0217	2.0F		2046	0208	2.1F		2212	0431	1.1F	
6 Tu	0655	0053	1.1F	21 W	0741	1337	2.2F	6 F	0749	1357	2.2F	21 Sa	0917	1453	2.0E	6 M	0939	1519	1.8E	21 Tu	1113	1551	0.7E	
	1843	1259	1.5E		1956	0142	2.2F		2000	0127	2.2F		2125	0323	1.9F		2201	0326	1.9F			0604	0.8F	
7 W	0727	0115	1.5F	22 Th	0834	1424	2.3F	7 Sa	0847	1449	2.4F	22 Su	1011	1538	1.8E	7 Tu	1053	1614	1.3E	22 W	1258	1651	0.3E	
	1926	1334	1.9E		2046	0235	2.3F		2100	0230	2.4F		2218	0425	1.8F		2348	0453	1.5F		2119	0751	0.6F	
8 Th	0810	0155	2.0F	23 F	0926	1510	2.3F	8 Su	0945	1540	2.5F	23 M	1101	1619	1.6E	8 W	1233	1717	1.0F	23 Th	0518	1012	0.5F	
	2015	1416	2.3E		2136	0329	2.3F		2201	0334	2.5F		2309	0524	1.6F			0.6E			1942	0114	0.3E	
9 F	0858	0245	2.3F	24 Sa	1015	1555	2.3F	9 M	1043	1629	2.3E	24 Tu	1150	1659	1.3E	9 Th	0415	0938	0.5F	24 F	0803	1415	0.6F	
	2108	1502	2.7E		2224	0423	2.3F		2303	0436	2.4F			0620	1.3F		2101				2207	0303	0.6E	
10 Sa	0949	0339	2.6F	25 Su	1102	1637	2.2E	10 Tu	1140	1716	1.9E	25 W	0006	0720	1.0F	10 F	0925	1820	0.9F	25 Sa	0956	1657	0.9F	
	2203	1550	2.8E		2309	0514	2.2F			0539	2.1F		1244	1739	0.9E		2335	0333	0.7E		2311	0414	0.9E	
11 Su	1041	0434	2.7F	26 M	1146	1716	2.0F	11 W	0009	0644	1.6F	26 Th	0126	0835	0.7F	11 Sa	1159	1920	1.3E	26 Su	1119	1801	1.3F	
	2258	1638	2.9E		2350	0559	2.0F		1240	0644	1.2E		1355	1826	0.5E			1.4F				1801	0517	1.2E
12 M	1133	0527	2.7F	27 Tu	1226	1752	1.7E	12 Th	0132	0800	0.9F	27 F	0449	1039	0.4F	12 Su	0056	0652	1.7E	27 M	0008	0619	1.5E	
	2352	1725	2.7E			1752	1.7E		1351	1809	0.5E		1704				1328	2016	1.8F		1229	1857	1.6F	
13 Tu	1223	0618	2.4F	28 W	0028	0719	1.4F	13 F		1041	*	28 Sa	0950	0438	0.3E	13 M	0206	0807	2.0E	28 Tu	0106	0725	1.7E	
		1808	2.3E		1306	1826	1.4E			1512	*			1747	0.4F		1439	2113	2.0F		1336	1953	1.8F	
14 W	0044	0706	2.0F	29 Th	0104	0753	1.0F	14 Sa	0118	0717	0.7E	29 Su	0016	0642	0.7E	14 Tu	0315	0919	2.1E	29 W	0208	0833	1.9E	
	1309	1841	1.7E		1344	1856	0.9E		1414	2130	1.0F		1241	1934	0.8F		1546	2213	2.0F		1441	2052	2.0F	
15 Th	0128	0745	1.3F	30 F	0134	0822	0.6F	15 Su	0252	0902	1.3E	30 M	0139	0809	1.0E	15 W	0424	1028	2.1E	30 Th	0315	0941	2.0E	
	1346	1850	1.0E		1425	1914	0.5E		1533	2214	1.5F		1409	2033	1.2F		1651	2318	1.9F		1546	2154	2.0F	
				31 Sa		0603	*	31 Tu			*	31 Tu	0248	0921	1.4E									
						1730	*						1518	2132	1.5F									

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (F) or (E) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

Mobile Bay Entrance, Alabama, 2010

F—Flood, Dir. 025° True E—Ebb, Dir. 190° True

October				November				December																
Slack	Maximum			Slack	Maximum			Slack	Maximum			Slack	Maximum											
	h	m	knots		h	m	knots		h	m	knots		h	m	knots									
1 F	0425	1047	2.1E	16 Sa	0552	1135	1.4E	1 M	0544	1120	0.9E	16 Tu	0306 0455 1024 1734	*		1 W	0739 1957	0149 1438	0.8E 1.2F	16 Th	0707 1957	0125 1410	1.1E 1.1F	
	1650	2259	2.0F		1747				1723	2201	0.4F		2102				0755 2027	0150 1447	1.6E 1.8F		0737 2025	0149 1421	1.5E 1.5F	
2 Sa	0535 1754	1148	2.0E	17 Su	0700 1834	0031 1225	1.1F 1.1E	2 Tu	1057 1751	*		17 W	0659 2031	0144 1550	0.5E 0.6F	2 Th						0737 2025	0149 1421	1.5E 1.5F
3 Su	0648 1901	0008 1246	1.8F 1.7E	18 M	0818 1919	0220 1310	0.7F 0.7E	3 W	0711 2028	0152 1536	0.4E 0.7F	18 Th	0737 2045	0202 1501	1.0E 1.0F	3 F	0834 2109	0222 1520	2.2E 2.3F	18 Sa	0817 2102	0223 1453	1.9E 1.9F	
4 M	0806 2019	0128 1341	1.4F 1.3E	19 Tu	1018	0545 1353 1935	0.4F 0.3E *	4 Th	0814 2107	0215 1535	1.2E 1.4F	19 F	0819 2113	0232 1511	1.4E 1.4F	4 Sa	0920 2156	0302 1602	2.6E 2.6F	19 Su	0902 2144	0302 1535	2.3E 2.2F	
5 Tu	0949	0337 1435	0.8F 0.6E	20 W	0458	0117 0920 1444 1659	0.3E 0.3F * *	5 F	0909 2154	0258 1610	1.9E 2.0F	20 Sa	0902 2149	0307 1542	1.8E 1.8F	5 Su	1009 2244	0346 1649	2.8E 2.7F	20 M	0951 2230	0344 1621	2.5E 2.5F	
6 W	0139 1926	0752	0.4F	21 Th	0717 2109	0213 1446	0.7E 0.6F	6 Sa	1004 2244	0345 1653	2.4E 2.4F	21 Su	0949 2229	0347 1622	2.1E 2.1F	6 M	1058 2333	0433 1736	2.9E 2.7F	21 Tu	1041 2317	0429 1709	2.7E 2.6F	
7 Th	0727 2131	0202 1608	0.7E 0.8F	22 F	0835 2148	0259 1538	1.1E 1.0F	7 Su	1058 2335	0434 1740	2.6E 2.6F	22 M	1038 2314	0430 1707	2.3E 2.3F	7 Tu	1147	0520 1823	2.8E 2.6F	22 W	1131	0515 1756	2.7E 2.6F	
8 F	0931 2239	0323 1702	1.4E 1.5F	23 Sa	0935 2229	0343 1622	1.4E 1.4F	8 M	1152	0525 1829	2.7E 2.6F	23 Tu	1129	0517 1753	2.5E 2.5F	8 W	0021 1234	0606 1907	2.6E 2.3F	23 Th	0004 1221	0600 1841	2.6E 2.5F	
9 Sa	1051 2339	0429 1753	1.9E 2.0F	24 Su	1030 2313	0428 1706	1.7E 1.7F	9 Tu	0027 1246	0618 1918	2.6E 2.5F	24 W	0002 1221	0606 1841	2.6E 2.5F	9 Th	0107 1316	0650 1946	2.3E 2.0F	24 F	0049 1307	0642 1922	2.4E 2.1F	
10 Su	1159	0531 1845	2.2E 2.2F	25 M	1126	0517 1754	2.0E 2.0F	10 W	0120 1338	0711 2005	2.4E 2.2F	25 Th	0051 1312	0655 1927	2.5E 2.4F	10 F	0150 1353	0731 2016	2.0E 1.6F	25 Sa	0131 1346	0716 1952	1.9E 1.5F	
11 M	0038 1303	0632 1938	2.4E 2.3F	26 Tu	0002 1223	0610 1844	2.1E 2.2F	11 Th	0213 1427	0804 2049	2.2E 1.9F	26 F	0140 1401	0742 2009	2.3E 2.1F	11 Sa	0228 1421	0807 2031	1.6E 1.2F	26 Su	0204 1401	0732 1944	1.2E 0.8F	
12 Tu	0138 1404	0735 2033	2.3E 2.2F	27 W	0055 1321	0706 1936	2.2E 2.3F	12 F	0304 1510	0853 2127	1.9E 1.5F	27 Sa	0226 1443	0824 2041	1.9E 1.6F	12 Su	0259 1432	0835 1959	1.1E 0.7F	27 M	0157 1216 2130	0648 1633	0.6E 0.3F	
13 W	0240 1504	0838 2128	2.2E 2.0F	28 Th	0151 1418	0805 2028	2.3E 2.2F	13 Sa	0353 1546	0938 2151	1.5E 1.1F	28 Su	0305 1509	0853 2045	1.4E 1.0F	13 M	0307 1358	0841 1812	0.6E 0.4F	28 Tu	0740 1842	0257 1342	0.4E 0.7F	
14 Th	0343 1602	0941 2225	2.0E 1.8F	29 F	0248 1515	0903 2119	2.2E 2.0F	14 Su	0439 1607	1017 2124	1.1E 0.6F	29 M	0320 1428	0844 1850	0.7E 0.4F	14 Tu		0619 1620	* 0.4F	29 W	0639 1853	0047 1317	1.0E 1.4F	
15 F	0447 1656	1041 2324	1.7E 1.4F	30 Sa	0347 1608	0957 2207	1.9E 1.7F	15 M	0521 1549	1043 1927	0.6E 0.3F	30 Tu	0021 1003 2010	0520 1543	0.3E 0.5F	15 W	0708 1947	0126 1447	0.6E 0.7F	30 Th	0703 1931	0057 1341	1.7E 1.9F	
				31 Su	0445 1656	1045 2243	1.5E 1.1F														31 F	0744 2017	0131 1422	2.2E 2.3F

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (F) or (E) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

Galveston Bay Entrance (between jetties), Texas, 2010

F—Flood, Dir. 277° True E—Ebb, Dir. 088° True

January				February				March				
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots	
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	
1 F	0103 1343	0830 1718	2.4E 2.6F	16 Sa	0208 0326 1012 1431	* * 1.6E 1.8F		1 M	0232 0720 1536 2219	0054 1153 1816	0.3E 1.3E 0.7F	
2 Sa	0149 1440	0931 1808	2.3E 2.3F	17 Su	0146 0425 1058 1504 2340	* * 1.4E 1.6F		2 Tu	0321 0918 1636 2141	0609 1324 1849	1.1F 0.9E 0.7F	
3 Su		0224 0439 1036 1538	* 1.9E 1.9F	18 M	0136 0525 1205 1534 2320	0.3E * 1.0E 1.3F		3 W	0418 1156	0721 1448 1917	1.3F 0.4E *	
4 M		0231 0557 1216 1639	* 0.3F 1.4E 1.4F	19 Tu	0156 0452 0842 1557 2305	0.6E 0.3F 0.6E 0.9F		4 Th	0522	0842 1820 1933	1.1E 1.5F *	
5 Tu	0054 0501 0949 1750	0252 0721 1414 2032	0.4E 0.6F 0.9E 0.9F	20 W	0221 0539 1415 1932 2229	0.8E 0.5F * 0.5F		5 F	0630 1810	0213 1017	1.3E 1.6F	
6 W	0012 0606 1247 1916 2339	0319 0851 1613 2112	0.7E 0.9F 0.4E 0.4F	21 Th	0242 0620 1545 1930	1.0E 0.7F * *		6 Sa	0737 1924	0239 1130	1.4E 1.7F	
7 Th	0707 1629	1029 1858 2145	1.0E 1.3F 0.3E *	22 F	0247 0658 2034	1.1E 1.1F		7 Su	0842 2032	0327 1227	1.5E 1.7F	
8 F	0804 1849	0424 1139 2042 2208	1.3E 1.7F 0.3E *	23 Sa	0245 0734 2022	1.3E 1.4F		8 M	0942 2137	0512 1322	1.5E 1.7F	
9 Sa	0900 2023	0500 1235	1.5E 1.8F	24 Su	0304 0813 2050	1.6E 1.7F		9 Tu	1036 2242	0617 1418	1.6E 1.7F	
10 Su	0956 2144	0534 1332	1.6E 1.9F	25 M	0339 0858 2129	1.8E 1.9F		10 W	1124 2340	0711 1506	1.6E 1.7F	
11 M	1049 2303	0609 1432	1.7E 1.8F	26 Tu	0430 0949 2212	2.0E 2.2F		11 Th	1208	0806 1544	1.6E 1.8F	
12 Tu	1141	0652 1525	1.7E 1.8F	27 W	0529 1046 2257	2.1E 2.3F		12 F	0002 1249	0855 1616	1.6E 1.8F	
13 W	0012 1230	0748 1607	1.7E 1.9F	28 Th	0630 1145 2338	2.2E 2.5F		13 Sa	0021 0250 0940 1327 2149 0200 0536 1402 2122	* * 1.5E 1.7F 0.3E 0.3F 1.3E 1.5F 0.5E		
14 Th	0108 1315	0846 1645	1.8E 1.9F	29 F	0738 1245	2.2E 2.4F		14 Su	0233 0707 1433 2107	0439 1115 1723	0.6F 0.9E 1.2F	
15 F	0211 1355	0931 1720	1.7E 1.9F	30 Sa	0049 0252 0852 1344	* * 2.1E 2.2F		15 M				
				31 Su	0043 0400 0534 1440 2307	* 0.5F 1.8E 1.8F						
16 Tu	0306 0846 1455 2043	0529 1218 1740	0.8F 0.6E 0.8F	17 W	0339	0040 0623 1321 1750	0.9E 0.9F * 0.5F		16 Sa	0539 1852	0050 0931	1.4E 1.4F
17 Th	0415	0046 0720 1426 1644	1.1E 1.1F * 0.3F	18 F	0213 0630 1310 1810	1.3E 1.6F		17 Su	0630 1921	0118 1045	1.6E 1.6F	
19 M	0454 1844	0036 0821	1.2E 1.2F	19 Tu	0213 0630 1310 1810	1.3E 1.6F		18 W	0728 1958	0159 1140	1.8E 1.9F	
20 Tu		0046 0720 1426 1644	1.1E 1.1F * 0.3F	20 W	0247 0658 2034	1.1E 1.1F		19 Th	0830 2038	0254 1232	1.9E 2.1F	
21 Tu	0054 0501 0949 1750	0252 0721 1414 2032	0.4E 0.6F 0.9E 0.9F	21 Th	0245 0734 2022	1.3E 1.4F		20 F	0934 2115	0407 1329	2.0E 2.2F	
22 W	0012 0606 1247 1916 2339	0319 0851 1613 2112	0.7E 0.9F 0.4E 0.4F	22 M	0304 0813 2050	1.6E 1.7F		21 Sa	1038	0527 1427 2305	2.0E 2.3F *	
23 Th	0707 1629	1029 1858 2145	1.0E 1.3F 0.3E *	23 Tu	0339 0858 2129	1.8E 1.9F		22 W	1140	0031 0646 1515 2253	* 1.9E 2.2F *	
24 F	0804 1849	0424 1139 2042 2208	1.3E 1.7F 0.3E *	24 W	0430 0949 2212	2.0E 2.2F		23 Th	1052	0703 1428 2235	1.4E 1.7F *	
25 Sa	0900 2023	0500 1235	1.5E 1.8F	25 Th	0529 1046 2257	2.1E 2.3F		24 F	1133 2007	0043 0754 1504 2216	* 1.4E 1.6F 0.3E	
26 Su	0956 2144	0534 1332	1.6E 1.9F	26 F	0630 1145 2338	2.2E 2.5F		25 Sa	1214 1936	0201 0847 1532 2205	* 1.3E 1.5F 0.5E	
27 M	1049 2303	0609 1432	1.7E 1.8F	27 Su	0738 1245	2.2E 2.4F		26 Su	0049 0534 1254 1921	0306 0938 1552 2221	0.5F 1.1E 1.3F 0.8E	
28 Tu	1141	0652 1525	1.7E 1.8F	28 M	0806 1544	1.6E 1.8F		27 M	0119 0702 1332 1909	0354 1029 1608 2239	0.9F 0.8E 1.0F 1.0E	
29 W	0012 1230	0748 1607	1.7E 1.9F	29 Tu	0846 1544	1.8E 1.9F		28 Tu				
30 Th	0108 1315	0846 1645	1.8E 1.9F	30 W	0931 1720	1.7E 1.9F		29 W				
31 F	0211 1355	0931 1720	1.7E 1.9F	31 Th	0015 0649 1348 1759	0.318 1.0E 0.7F 1.1E		30 Th				
				31 F	0100 0842	2.0F 0.7E *		31 F				
					0147 1109	0504 1346 1623 2202	2.2F 0.4E * 1.6E					

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (E) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

Galveston Bay Entrance (between jetties), Texas, 2010

F—Flood, Dir. 277° True E—Ebb, Dir. 088° True

April				May				June																							
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum																	
	h	m	knots		h	m	knots		h	m	knots		h	m	knots																
1 Th	0236	0557	2.1F	16 F	0203	0535	2.0F	1 Sa	0316	0645	1.8F	16 Su	0218	0606	2.3F	1 Tu	0434	0833	1.5F	16 W	0401	0742	2.0F								
	1400	2224	1.7E		1540	2131	2.0E		1622	2227	1.7E		1531	2140	2.3E		1649					1608	*								
2 F	0328	0656	1.9F	17 Sa	0238	0622	2.0F	2 Su	0411	0757	1.6F	17 M	0308	0704	2.2F	2 W	0519	0927	1.5F	17 Th	0506	0837	1.6F								
	1620	2257	1.7E		1616	2155	2.1E		1709	2317	1.5E		1610	2232	2.2E		1548					1406	1607	0.3E							
3 Sa	0427	0808	1.6F	18 Su	0321	0718	2.0F	3 M	0509	0924	1.5F	18 Tu	0407	0810	2.1F	3 Th	0605	1012	1.4F	18 F	0622	0931	1.2F								
	1722	2348	1.5E		1649	2233	2.1E		1738				1631	2353	1.9E		1438	1808	0.4E	☉	1913	2142	0.8F								
4 Su	0536	0953	1.5F	19 M	0417	0827	2.0F	4 Tu	0609	1029	1.5F	19 W	0515	0922	2.0F	4 F	0651	1043	1.2F	19 Sa	0054	0440	0.6E								
	1808				1718	2341	2.0E		1751				1622			☉	1416	1729	0.7E		0747	1016	0.7F								
5 M	0649	0102	1.3E	20 Tu	0527	0953	2.0F	5 W	0703	1111	1.5F	20 Th	0631	0130	1.5E	5 Sa	0157	0503	0.4E	20 Su	0359	0657	0.4E								
	1845	1106	1.5F		1740			☉	1729			☉	1558	1818	0.4E		0736	1103	0.9F		0922	1051	0.3F								
6 Tu	0751	0218	1.2E	21 W	0644	0118	1.8E	6 Th	0752	0354	1.0E	21 F	0748	0313	1.1E	6 Su	0024	0823	0.8F	21 M	0630	0853	0.3E								
☉	1911	1151	1.5F	☉	1747	1103	2.1F		1630	1143	1.5F		1526	1813	0.6E		1118	0.6F			1118	*									
7 W	0843	0442	1.2E	22 Th	0800	0244	1.6E	7 F	0837	0522	0.8E	22 Sa	0144	0556	0.8E	7 M	0105	0821	1.2F	22 Tu	0828	1021	0.3E								
	1914	1228	1.6F		1738	1149	2.0F		1601	1209	1.4F		0905	1146	1.0F		1132	*			1136	0.3E									
8 Th	0928	0549	1.2E	23 F	0912	0503	1.3E	8 Sa	0251	0032	0.4F	23 Su	0414	0011	1.3F	8 Tu	0148	0820	1.6F	23 W	1001	1847	2.2F								
	1828	1302	1.6F		1719	1943	0.5E		0922	0626	0.6E		1024	0738	0.6E		1155	1820	1.6E		2333										
9 F		0006	*	24 Sa	0224	0004	0.6F	9 Su	0453	0121	0.8F	24 M	0639	0114	1.8F	9 W	0230	0827	1.8F	24 Th	1126	0317	2.2F								
	1011	0643	1.1E		1021	0656	1.1E		1008	0732	0.4E		1243	0929	0.5E		1827	1.8E				1929	1.9E								
10 Sa	0332	0739	0.9E	25 Su	0437	0830	0.9E	10 M	0211	1.2F	25 Tu	0847	0218	2.2F	10 Th	0308	0849	2.0F	25 F	0029	0408	2.1F									
	1052	1403	1.3F		1132	1345	0.8F		1305	0.4F		1308	1103	0.4E		2354					1242	2019	1.9E								
11 Su	0514	0217	0.7F	26 M	0639	0219	1.8F	11 Tu	0254	1.6F	26 W	1039	0316	2.3F	11 F	0345	0922	2.2E	26 Sa	0122	0453	2.0F									
	1136	0840	0.7E		1252	1000	0.7E		1022	*			1946	1.9E		1922					1355	2105	1.8E								
12 M	0007	0307	1.1F	27 Tu	0849	0318	2.2F	12 W	0329	1.8F	27 Th	0033	0408	2.3F	12 Sa	0036	0423	2.4F	27 Su	0208	0535	1.9F									
	0651	0940	0.5E		1447	1141	0.5E		1944	1.6E	☉		1216	2020	2.0E	☉	1310	2004	2.3E		1521	2144	1.7E								
13 Tu	0036	0346	1.5F	28 W	0042	0410	2.4F	13 Th	0024	0402	2.1F	28 F	0127	0455	2.2F	13 Su	0122	0506	2.4F	28 M	0247	0614	1.8F								
	0839	1043	0.3E		1057	1318	0.4E	☉	1245	2003	2.0E		1343	2058	1.9E		1359	2053	2.4E		1625	2226	1.6E								
14 W	0104	0421	1.7F	29 Th	0133	0458	2.3F	14 F	0058	0437	2.2F	29 Sa	0219	0544	1.9F	14 M	0212	0554	2.4F	29 Tu	0322	0653	1.7F								
☉	1210	*			1304	2118	1.9E		1342	2028	2.2E		1512	2137	1.8E		1449	2146	2.3E		1705	2321	1.3E								
15 Th	0133	0456	1.9F	30 F	0224	0548	2.1F	15 Sa	0135	0517	2.3F	30 Su	0306	0638	1.8F	15 Tu	0304	0647	2.3F	30 W	0355	0729	1.5F								
	1518	2115	1.8E		1500	2150	1.9E		1440	2100	2.3E		1614	2218	1.7E		1516	2249	2.0E		1445	*									
												31 M	0351	0735	1.6F							1800	*								
													1646	2312	1.5E																

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (E) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

Galveston Bay Entrance (between jetties), Texas, 2010

F—Flood, Dir. 277° True E—Ebb, Dir. 088° True

July				August				September							
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum	
	h	m	knots		h	m	knots		h	m	knots		h	m	knots
1	0428	0803	1.0E	16	0501	0744	1.0E	1	0531	1405	1.5E	1	0653	1331	1.6E
Th	1243	1459	0.4E	F	1118	1435	0.7E	Su	1902	2302	1.9F	W	1910	2344	1.8F
		1937	*		1718	2009	1.1F								
					2359										
2		0155	0.6E	17	0627	0824	0.4F	2	0646	1454	1.5E	2	0730	1421	1.7E
F	0502	0835	1.0F	Sa	1042	1501	1.0E	M	2015			Th	2009		
	1230	1529	0.7E		1822	2138	1.4F								
	1913	2159	0.4F												
3	0050	0311	0.3E	18	0335	0624	0.3E	3	0743	1448	1.5E	3		0024	1.9F
Sa	0531	0904	0.6F	Su	0900	*		W	2000			F	0807	1527	1.7E
	1221	1602	1.0E		1530	1.3E									
	1946	2319	0.8F		1925	2303	1.8F								
4		0507	*	19	0610	0820	0.3E	4	0819	0010	1.7F	4		0108	2.0F
Su		0928	0.3F	M	0929	0.3E		W	2046			Sa	0839	1649	1.8E
	1146	1631	1.2E		1612	1.6E									
	2019				2028										
5		0001	1.2F	20	0744	1709	1.7E	5	0900	0050	1.8F	5		0156	2.1F
M	1039	1647	1.4E	Tu	2130			Th	2134			Su	1045	*	
	2053												1206	*	
6	0911	0038	1.5F	21	0904	0110	2.0F	6	0943	0138	2.0F	6		1807	1.7E
Tu	2128	1647	1.6E	W	2231	1805	1.8E	F	2225	1701	1.9E	M	2304	0241	2.0F
														1021	*
7	0944	0117	1.7F	22	1021	0217	2.0F	7	1025	0229	2.1F	7		1332	*
W	2206	1704	1.7E	Th	2329	1904	1.8E	Sa	2319	1801	2.0E	Tu	1656	2115	1.4E
														1931	1.6E
8	1027	0203	1.9F	23	1138	0315	1.9F	8	1058	0314	2.3F	8		0105	0.354
Th	2248	1734	1.9E	F	2006	2006	1.8E	Su	1905	1905	2.0E	W	1843	0742	1.034
														1256	1.547
9	1111	0250	2.1F	24	0021	0400	1.9F	9	0014	0353	2.3F	9		1843	2.238
F	2333	1815	2.1E	Sa	1248	2056	1.7E	M	2016	1222	*	Th	2027	0207	0425
										1427	*			0716	1047
10		0332	2.3F	25	0107	0436	1.8F	10	0109	0429	2.1F	10		1338	1642
Sa	1154	1904	2.2E	Su	1435	2133	1.7E	Tu	1711	1204	*	F	2241	0207	0425
										1538	0.5F			0716	1047
11	0023	0412	2.4F	26	0145	0506	1.8F	11	0205	0504	1.8F	11		1338	1642
Su	1234	2001	2.3E	M	1343	*		W	1003	1215	0.4E	Sa	1516	0716	1047
					1519	*			1406	1638	0.9F			1338	1642
12	0115	0453	2.4F	27	0219	0533	1.7F	12	0300	0539	1.3F	12		2027	0425
M	1420	*		Tu	1317	*		Th	0922	1234	0.6E	Su	1615	0716	1047
	1500	*			1616	*			1450	1740	1.3F			1338	1642
	2101	2.2E			2245	1.3E			2050					2027	0425
13	0208	0535	2.3F	28	0249	0558	1.5F	13	0358	0612	0.7F	13		2027	0425
Tu	1350	*		W	1054	1302	0.3E	F	0852	1253	0.9E	M	0438	0310	0.8E
	1619	*			1517	1713	0.4F		1540	1848	1.5F		1727	1212	1.6E
	2203	1.9E			1906	2344	1.0E		2309				2126	2126	1.8F
14	0301	0619	2.0F	29	0318	0623	1.2F	14	0212	0.5E		14		0546	1312
W	1353	*		Th	1031	1322	0.6E	Sa	0642	*		Tu	1848	2303	1.7F
	1730	0.4F			1604	1816	0.5F		1310	1.2E					
	1904	2317	1.5E		2100				1639	2001	1.7F				
15	0356	0702	1.5F	30	0054	0.6E		15	0544	*		15		0643	1417
Th	1155	1412	0.4E	F	0343	0648	0.9F	Su	0659	*		W	2004	0643	1417
	1616	1847	0.7F		1021	1347	0.8E		1331	1.4E				0643	1417
	2113				1653	1927	0.7F		1748	2129	1.8F			2004	1417
					2337										
				31	0354	0709	0.5F	31	0621	1255	1.5E	31			
				Sa	0950	1411	1.0E	Tu	1813	2255	1.6F				
					1742	2048	0.9F								

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (E) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

Galveston Bay Entrance (between jetties), Texas, 2010

F—Flood, Dir. 277° True E—Ebb, Dir. 088° True

October				November				December			
Slack	Maximum		knots	Slack	Maximum		knots	Slack	Maximum		knots
h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m	h m
1 F	0633 1938	1358 2354	1.7E 2.0F	16 Sa	0656 0900 1032 1737	0013 0.3E 0.3E 1.1E		1 M	0434 0946 1344 2134	0708 1136 1804	0.6E 0.5F 1.0E
2 Sa	0649 2043	1520	1.6E	17 Su	0608 1158 1826	0848 * 1.0E		2 Tu	0403 1004 1607 2248	0718 1242 1945	0.9E 1.2F 0.8E
3 Su	0648 2147	0032 0908 1121 1701	2.0F 0.3E * 1.4E	18 M	0516 1056 1525 2231	0810 1257 1918 0.8E		3 W	0343 1040 1812	0735 1347 2125	1.2E 1.8F 0.6E
4 M	0633 1056 1416 2252	0844 1234 1852	1.8F 0.4E 1.3E	19 Tu	0457 1115 1705 2313	0804 1357 2019 0.7E		4 Th	0012 0313 1124 2024	0139 0750 1450 2310	0.3F 1.5E 2.3F 0.5E
5 Tu	0602 1112 1635 2359	0850 1345	1.5F 0.6E 1.0F 1.1E	20 W	0453 1142 1840	0824 1450 2122	0.9F 1.1E 1.2F 0.5E	5 F	1213 2225	0805 1546	1.8E 2.5F
6 W	0539 1147 1824	0905 1450 2202	1.1F 0.9E 1.6F 0.9E	21 Th	0002 0444 1213 2027	0223 0844 1533 2227	0.6F 1.3E 1.6F 0.3E	6 Sa	0055 0241 0829 1308	04E 0.3E 2.0E 2.6F	
7 Th	0112 0518 1230 2018	0309 0918 1547 2332	0.6F 1.3E 2.1F 0.6E	22 F	0100 0414 1246	0245 0855 1611	0.3F 1.5E 1.8F	7 Su	0023 1404	0901 1731	2.1E 2.4F
8 F	0338 0923 1318 2234	* 1.6E 1640	* 2.4F	23 Sa	0013 0300 0859 1320	* * 1.7E 2.0F		8 M	0208 1501	0935 1832	2.0E 2.0F
9 Sa	0121 0401 0937 1409	0.4E * 1.8E 2.4F		24 Su	0109 1354	0907 1726	1.8E 2.0F	9 Tu	0344 1558	1013 1945	1.8E 1.7F
10 Su	0311 0401 1003 1504	* * 1.9E 2.2F		25 M	0249 1429	0920 1810	1.9E 2.0F	10 W	0444 1657	1059 2107	1.6E 1.6F
11 M	0327 1605	1036 1946	1.8E 1.9F	26 Tu	0344 1509	0935 1903	2.0E 1.9F	11 Th	0520 1755	1214 2212	1.3E 1.5F
12 Tu	0448 1715	1121 2128	1.6E 1.6F	27 W	0424 1555	1003 2005	2.1E 1.9F	12 F	0537 1847	1345 2253	1.1E 1.5F
13 W	0540 1830	1234 2253	1.4E 1.6F	28 Th	0454 1653	1049 2120	1.9E 1.9F	13 Sa	0523 1932	1512 2323	0.9E 1.4F
14 Th	0621 1936	1358 2339	1.2E 1.6F	29 F	0514 1801	1226 2229	1.7E 1.9F	14 Su	0409 1128 1655 2014	0723 * 0.7E 2.345	0.4E * 1.2F
15 F	0649 2029	1632	1.1E	30 Sa	0515 1912	1359 2314	1.5E 1.9F	15 M	0324 0955 1436 2056	0633 1213 1802 0.5E	0.7E 0.4F 0.5E
				31 Su	0500 1017 1532 2022	0731 * 1.2E 2.351	0.4E * 1.2E 1.6F				
16 Tu	0313 1009 1639 2142	0639 1258 1907	1.0E 0.9F 0.4E	17 W	0308 1034	0658 1348 2029	1.3E 1.3F *	18 Th	0244 1104	0719 1438 2216	1.5E 1.6F *
19 F	1138 2257	1520	1.9F	20 Sa	1213	1557	1.8E 2.1F	21 Su	0012 1250	0755 1632	1.9E 2.2F
22 M	0110 1328	0816 1710	2.1E 2.2F	23 Tu	0206 1407	0843 1753	2.2E 2.2F	24 W	0259 1450	0917 1843	2.2E 2.1F
25 Th	0341 1537	1001 1938	2.1E 2.0F	26 F	0402 1633	1104 2036	1.8E 1.9F	27 Sa	0346 1738	1242 2134	1.5E 1.7F
28 Su	0317 1852	0544 2224	0.4E 1.4F	29 M	0238 0821 1302 2012	0537 1028 1655 2304	0.6E 0.6F 0.7E 1.0F	30 Tu	0211 1536 2139	0552 1140 2338	1.0E 1.3F 0.5F
1 W	0147 0930 1810	0611 1241 2057	1.4E 1.9F 0.4E	2 Th	1017 2019	1345 2236	2.3F 0.4E	3 F	1111 2206	1449	1.9E 2.5F
4 Sa	1208 2340	1548	2.5F	5 Su	1308	1642	2.1E 2.4F	6 M	0104 1405	0849 1735	2.0E 2.1F
7 Tu	0230 1457	0930 1830	1.9E 1.9F	8 W	0352 1543	1010 1924	1.7E 1.7F	9 Th	0436 1624	1056 2013	1.5E 1.5F
10 F	0446 1703	1209 2057	1.2E 1.4F	11 Sa	0351 1741	1332 2137	0.9E 1.2F	12 Su	0207 1821	0534 2209	0.3E * 0.6E 1.1F
13 M	0139 0831 1334 1903	0450 1115 1625 2234	0.7E 0.4F 0.3E 0.8F	14 Tu	0133 0851	0512 1200 1757 2255	1.0E 0.9F * 0.5F	15 W	0123 0920	0538 1242 2005 2314	1.3E 1.3F * *
16 Th	0953 2224	1330 2319	1.6F *	17 F	1029 2224	1421	1.8F	18 Sa	1107 2312	1508	2.0F
19 Su	1147 2359	1546	2.1F	20 M	1228	1620	2.2F	21 Tu	0044 1310	0746 1655	2.1E 2.3F
22 W	0127 1353	0831 1734	2.2E 2.3F	23 Th	0206 1437	0920 1818	2.1E 2.2F	24 F	0218 1524	1016 1904	1.9E 2.0F
25 Sa	0308 0550 1130 1618	* * 1.5E 1.6F		26 Su	0118 0856 1723	0319 1309 2038	0.3E 0.3F 1.0E 1.2F	27 M	0041 0631 1209 1848	0342 0858 1513 2124	0.7E 0.8F 0.5E 0.7F
28 Tu	0017 0720 1509	0409 1026 1803	1.0E 1.4F 0.3E *	29 W	0812 1800	0438 2026 2243	1.4E 1.9F 0.3E *	30 Th	0908 1956	0510 2158 2309	1.7E 0.3E 0.3E
31 F	1007 2126	1346	1.9E 2.3F								

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three consecutive entries are marked (E) the middle one is not a true maximum but an intermediate value to show the current pattern.
 * Current weak and variable.

Bolivar Roads, Galveston Bay, Texas, 2010

F—Flood, Dir. 306° True E—Ebb, Dir. 116° True

January				February				March															
Slack	Maximum			Slack	Maximum			Slack	Maximum			Slack	Maximum										
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0108 1410	0925 1737	2.9E 2.6F	16 Sa	1427 2355	1809 1007	1.9E 2.0F	1 M	0340 0659 1548 2230	0521 1208 1833	0.4E 1.7E 1.4F	16 Tu	0441 0831 1504 2053	0620 1217 1752	1.1E 0.3F 0.6E 0.8F	1 M	0202 0657 1451 2005	0428 1122 1711 2348	0.9F 1.6E 1.1F 1.0E	16 Tu	0245 0900 1437 1835	0520 1200 1635 2320	0.9F 0.5E 0.5F 1.4E
2 Sa	0155 1507	1032 1832	2.8E 2.4F	17 Su	0255 0449 1048 1458 2348	0.7E 0.7E 1.6E 1.8F	2 Tu	0426 0922 1641 2145	0642 1329 1901	0.7F 1.1E 0.9F	17 W	0439 1040 1542 2009	0659 1322 1805	0.7F 0.3E 0.5F	2 Tu	0242 0856 1548 1930	0532 1238 1734 2350	1.3F 1.1E 0.5F 1.5E	17 W	0251 1017	0545 1257 1650 2311	1.3F 0.4E * 1.5E	
3 Su	0156 1602	1144 1921	2.4E 2.1F	18 M	0303 0611 1135 1525 2330	0.9E 0.6E 1.1E 1.5F	3 W	0512 1209 1743 2106	0804 1502 1924	1.1F 0.5E 0.3F	18 Th	0447 0735 1432 1814	0107 0735 * *	1.4E 1.1F *	3 W	0324 1104	0632 1401 1755	1.7F 0.6E *	18 Th	0304 1117	0612 1356 1704 2311	1.6F 0.4E * 1.7E	
4 M	0130 0618 1305 1655 2003	0337 * 1.8E 2003	0.4E * 1.6F	19 Tu	0303 0740 1239 1548 2302	1.0E 0.3E 0.6E 1.1F	4 Th	0559 0923 1710 1941	0208 0923 1.5F *	1.6E 1.5F	19 F	0504 0814 1607 1722	0102 0814 * *	1.5E 1.4F	4 Th	0408 1318	0005 0730 1545 1809	1.8E 1.9F 0.3E *	19 F	0325 1216	0647 1511 1659 2330	1.9F 0.3E 0.3E 1.8E	
5 Tu	0048 0809 1435 1750 2038	0347 * 1.1E 2038	0.8E * 1.1F	20 W	0300 0900 1403 1925 2216	1.2E * * 0.6F	5 F	0649 1725	0232 1033	1.9E 1.7F	20 Sa	0534 1618	0113 0901	1.6E 1.6F	5 F	0457 1535	0034 0830	2.0E 1.9F	20 Sa	0359 1340	0730	1.9F	
6 W	0002 0721 1329 1855 2323	0357 1003 1621 2108	1.2E 0.7F 0.5E	21 Th	0656 0945 1540 1924	1.3E 0.6F * *	6 Sa	0742 1843	0307 1139	2.0E 1.8F	21 Su	0621 1818	0146 0958	1.8E 1.7F	6 Sa	0552 1720	0115 0937	2.0E 1.8F	21 Su	0450 1616	0009 0825	1.9E 1.9F	
7 Th	0757 1841 2132	0409 1122 * 2132	1.6E 1.3F *	22 F	0702 1908	0259 1019	1.5E 1.1F	7 Su	0842 1941	0354 1241	2.0E 1.8F	22 M	0727 1940	0240 1110	1.9E 1.8F	7 Su	0659 1829	0210 1058	1.9E 1.6F	22 M	0559 1811	0108 0937	1.9E 1.8F
8 F	0837 1838	0425 1221 2059 2142	1.9E 1.8F 0.3E 0.3E	23 Sa	0723 1853	0303 1057	1.6E 1.5F	8 M	0945 2033	0452 1343	1.9E 1.8F	23 Tu	0845 2049	0350 1232	2.1E 1.9F	8 M	0814 1920	0320 1223	1.8E 1.5F	23 Tu	0721 1919	0225 1108	2.0E 1.8F
9 Sa	0919 1944	0449 1310	2.1E 2.0F	24 Su	0801 1939	0326 1145	1.8E 1.8F	9 Tu	1046 2116	0600 1440	1.9E 1.8F	24 W	1003 2147	0507 1349	2.3E 2.1F	9 Tu	0928 1957	0439 1335	1.7E 1.6F	24 W	0843 2006	0351 1238	2.1E 1.9F
10 Su	1004 2039	0522 1355	2.1E 2.1F	25 M	0855 2043	0411 1242	2.1E 2.0F	10 W	1139 2148	0707 1529	1.9E 1.9F	25 Th	1112 2232	0626 1450	2.5E 2.2F	10 W	1031 2020	0600 1428 2259	1.7E 1.7F 0.7E	25 Th	0957 2033	0519 1341 2244 2341	2.2E 2.0F 0.4E 0.4E
11 M	1052 2131	0605 1440	2.2E 2.1F	26 Tu	1001 2154	0509 1344	2.3E 2.2F	11 Th	1224 2208	0022 0125 0806 1609	0.6E 0.6E 1.9E 2.0F	26 F	1212	0743 1537 2359	2.6E 2.2F *	11 Th	1120 2030	0123 0712 1506 2309	0.6E 1.6E 1.8F 0.8E	26 F	1102 2030	0645 1425 2227	2.1E 1.9F 0.4E
12 Tu	1142 2220	0655 1525	2.2E 2.0F	27 W	1110 2304	0616 1447	2.6E 2.3F	12 F	1301 2215	0035 0237 0857 1641	0.6E 0.5E 1.9E 2.0F	27 Sa	1306 2218	0200 0857 1614 2357	* 2.4E 2.0F 0.3E	12 F	1201 2027	0233 0815 1536 2322	0.4E 1.5E 1.7F 0.9E	27 Sa	1201 1945	0129 0809 1459 2222	* 1.9E 1.6F 0.5E
13 W	1229 2304	0748 1611	2.2E 2.0F	28 Th	1214	0726 1546	2.8E 2.5F	13 Sa	1334 2209	0053 0340 0943 1706	0.7E 0.5E 1.6E 1.8F	28 Su	0129 0457 1358 2108	0319 1009 1644 2352	0.4F 2.1E 1.6F 0.6E	13 Sa	1238 2012	0329 0912 1558 2331	* 1.3E 1.5F 1.0E	28 Su	0028 1300 1834	0241 0930 1527 2211	0.7F 1.6E 1.1F 0.9E
14 Th	1313 2335	0839 1655	2.2E 2.1F	29 F	0007 1313	0835 1639	2.9E 2.5F	14 Su	1404 2152	0106 0439 1029 1725	0.9E 0.3E 1.3E 1.6F	14 Su	1313 1945	0415 1007 1613 2331	* 1.0E 1.2F 1.2E	14 Su	0244 1351 1914	0452 1103 1623 2326	0.5F 0.7E 0.8F 1.3E	29 M	0050 1401 1752	0340 1550 2159	1.3F 0.6F 1.3E
15 F	1352 2352	0925 1735	2.1E 2.1F	30 Sa	0044 1407	0943 1724	2.7E 2.3F	15 M	1433 2126	0111 0533 1119	1.0E * 0.9E	15 M	0276 1351	0726 1623	0.5F 0.8F	15 M	0244 1351	0452 1103 1623	0.5F 0.7E 0.8F	30 Tu	0121 0839	0432 1202 1612 2159	1.8F 0.9E * 1.8E
				31 Su	1458 2334	0136 0359 1053	* * 2.3E 1.9F													31 W	0157 1022	0519 1319 1632 2217	2.2F 0.7E * 2.1E

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 * Current weak and variable.

Bolivar Roads, Galveston Bay, Texas, 2010

F—Flood, Dir. 306° True E—Ebb, Dir. 116° True

April				May				June															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h m	h m	knots		h m	h m	knots		h m	h m	knots		h m	h m	knots								
1 Th	0236 1202	0605 1446	2.3F 0.4E 0.3E 2.2E	16 F	0205 1124	0535 2206	2.2F 2.0E	1 Sa	0252 1420	0625 2257	2.2F 2.2E	16 Su	0235 1403	0607 2241	2.4F 2.4E	1 Tu	0423 1453	0820 1820	1.8F	16 W	0439 1430	0811 1704	2.2F 0.5E 1.8E 2.3E
2 F	0320 1350	0652 2332	2.2F 2.2E	17 Sa	0243 1241	0617 2248	2.3F 2.1E	2 Su	0348 1535	0722 2355	1.9F 2.0E	17 M	0339 1516	0710 2350	2.3F 2.3E	2 W	0510 1448	0919 1850	1.6E 1.7F 0.9E 0.9E	17 Th	0538 1409	0903 1705	1.8F 0.8E 1.8E *
3 Sa	0412 1543	0746 2249	2.0F	18 Su	0336 1445	0710 2346	2.2F 2.1E	3 M	0449 1618	0838 2249	1.7F	18 Tu	0446 1556	0823 2249	2.2F	3 Th	0553 1436	1005 1831	1.1E 1.5F 1.1E 0.4E	18 F	0639 2036	0947 2258	1.3F 1.1E 0.5F
4 Su	0514 1703	0026 0856	2.0E 1.7F	19 M	0443 1633	0817 2249	2.0F	4 Tu	0553 1637	0104 1009	1.8E 1.6F	19 W	0553 1611	0113 0939	2.1E 2.1F	4 F	0635 1419	1039 1826	1.1F 1.3E	19 Sa	0752 2056	1024 1721	0.7F 1.5E
5 M	0626 1753	0133 1034	1.8E 1.5F	20 Tu	0558 1734	0942 2349	2.1E 1.9F	5 W	0654 1641	0223 1117	1.5E 1.6F 0.9E 0.8E	20 Th	0659 1605	0249 1041	1.8E 1.8F 0.7E 0.4E	5 Sa	0051 0517 1100 1352	0.3F * 0.6F 1.4E	20 Su	0433 1056 1731	0008 0707 1056 1731	1.3F 0.4E * 1.8E	
6 Tu	0743 1823	0254 1203	1.7E 1.5F	21 W	0716 1808	0230 1111	2.0E 1.9F	6 Th	0752 1633	0348 2016	1.1E 1.5F 1.1E	21 F	0807 1538 2221	0427 1128 1905	1.4E 1.5F 0.9E	6 Su	0807 1110 1816	0.9F * 1.6E	21 M	0638 2205	0901 1124 1745	0.5E 0.3E 2.1E	
7 W	0852 1837	0419 1302	1.5E 1.6F 0.8E	22 Th	0830 1818	0405 1216 2056 2316	1.9E 1.9F 0.6E 0.4E	7 F	0848 1618	0107 0522 1238 2018	0.3E 0.7E 1.2F 1.2E	22 Sa	0207 0922 1459 2221	0013 0613 1205 1905	0.3F 0.9E 0.9F 1.2E	7 M	0154 1019 1104 1814	1.4F * * 1.8E	22 Tu	0802 2245	1035 1147 1807	0.5E 0.5E 2.3E	
8 Th	0950 1837	0049 0543 1344 2145	0.6E 1.3E 1.6F 0.9E	23 F	0939 1759	0540 1302 2050	1.7E 1.6F 0.7E	8 Sa	0019 0359 0950 1553 2352	0159 0711 1304 2014	0.3F 0.4E 0.8F 1.4E	23 Su	0455 1051 1419 2242	0115 0807 1236 1902	1.1F 0.7E 0.4F 1.6E	8 Tu	0835 2247	0212 1817	1.8F 2.0E	23 W	0910 2329	0229 1840	2.3F 2.3E
9 F	1041 1826	0158 0706 1415 2154	0.3E 1.1E 1.4F 1.1E	24 Sa	1047 1709 2329	0059 0716 1337 2046	* 1.4E 1.2F 0.9E	9 Su	0633 1110 1515 2348	0237 0902 1319 2005	0.8F 0.3E 0.4F 1.5E	24 M	0659 2311	0204 0945 1302 1903	1.8F 0.6E * 2.0E	9 W	0912 2315	0229 1835	2.1F 2.1E	24 Th	1015 2354	0311 1922	2.3F 2.4E
10 Sa	1128 1803	0251 0826 1439 2157	* 0.9E 1.1F 1.2E	25 Su	1158 1622 2347	0203 0852 1405 2034	0.9F 1.1E 0.7F 1.3E	10 M	0805 2353	0304 1028 1327 1958	1.3F 0.4E * 1.7E	25 Tu	0829 2345	0245 1106 1325 1915	2.3F 0.6E 0.4E 2.3E	10 Th	0959 2354	0255 1909	2.3F 2.3E	25 F	1119 2008	0353 2008	2.2F 2.4E
11 Su	0115 0616 1219 1732	0333 0940 1454 2151	0.6F 0.7E 0.7F 1.4E	26 M	0655	0254 1018 1429 2024	1.6F 0.9E * 1.7E	11 Tu	0859	0322 1139 1337 1951	1.8F 0.5E 0.3E 1.9E	26 W	0942	0323 1221 1344 1941	2.5F 0.6E 0.6E 2.4E	11 F	1102	0331 1954	2.4F 2.5E	26 Sa	1217 2056	0438 2056	2.1F 2.3E
12 M	0111 0757 1318 1651	0403 1047 1503 2143	1.1F 0.5E 0.3F 1.5E	27 Tu	0014 0836	0338 1136 1450 2029	2.2F 0.8E * 2.1E	12 W	0938	0005 0337 1245 1349 1957	2.1F 0.5E 0.5E 0.5E 2.0E	27 Th	0022 1051	0400 2017	2.5F 2.5E	12 Sa	0044 1219	0417 2047	2.5F 2.6E	27 Su	0149 1257	0526 2144	2.1F 2.2E
13 Tu	0115 0909	0422 1149 1514 2133	1.5F 0.5E * 1.7E	28 W	0046 1000	0418 1249 1510 2051	2.5F 0.6E 0.4E 2.4E	13 Th	0026 1016	0359 2020	2.3F 2.2E	28 F	0104 1205	0440 2100	2.4F 2.5E	13 Su	0141 1331	0511 2146	2.5F 2.7E	28 M	0232 1314	0613 2232	2.0F 2.0E
14 W	0124 0959	0440 1247 1529 2126	1.8F 0.5E * 1.8E	29 Th	0122 1120	0457 1408 1522 2125	2.6F 0.5E 0.5E 2.4E	14 F	0057 1108	0432 2057	2.4F 2.3E	29 Sa	0151 1318	0524 2148	2.2F 2.4E	14 M	0241 1419	0610 2252	2.4F 2.6E	29 Tu	0312 1313	0658 2323	2.0F 1.7E
15 Th	0139 1038	0503 1346 1545 2138	2.1F 0.5E 0.4E 1.9E	30 F	0204 1247	0538 2207	2.4F 2.4E	15 Sa	0140 1227	0514 2144	2.5F 2.4E	30 Su	0242 1415	0616 2240	2.1F 2.2E	15 Tu	0341 1436	0712	2.3F	30 W	0349 1302	0738 1630 1859	1.8F 0.9E 0.7E
												31 M	0333 1445	0716 2334	1.9F 2.0E								

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
* Current weak and variable.

Bolivar Roads, Galveston Bay, Texas, 2010

F—Flood, Dir. 306° True E—Ebb, Dir. 116° True

July				August				September											
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum					
	h	m	knots		h	m	knots		h	m	knots		h	m	knots				
1 Th	0423	0810	1.5F	16 F	0525	0808	1.1F	1 Su		0354	*	16 M	0419	1441	2.0E				
	1248	1627	1.1E		1129	1517	1.2E		1839	1441	1.5E	17 M	1910	2303	1.9F				
		2200	0.3E		1831	2111	0.8F			1831	2111	0.8F	18 W	0600	1406	1.8E			
2 F	0453	0834	1.1F	17 Sa	0038	0346	0.7E	2 M	0540	1446	1.6E	19 Th	0720	1633	1.9E	1 W	1900	2242	1.6F
	1227	1624	1.2E		0635	0840	0.5F	3 Tu	0631	1506	1.7E	20 F	0821	1742	1.9E	2 Th	0722	1516	1.9E
		2312	*		1054	1533	1.6E	4 W	0732	1546	1.9E	21 Sa	0937	1200	0.5E	3 F	0827	1632	2.1E
3 Sa	0330	0849	0.6F	18 Su	0330	0552	0.4E	5 Th	0839	1642	2.1E	22 Su	0950	1209	0.6E	4 Sa	0921	1750	2.3E
	1154	1625	1.4E		0909	*	0.9E	6 F	0946	1747	2.4E	23 M	1223	1306	0.5E	5 Su	1001	1908	2.4E
	2036	2354	0.8F	19 M	0544	0809	0.4E	7 Sa	1050	1855	2.6E	24 Tu	1426	1426	0.4E	6 M	1001	1908	2.4E
4 Su	0605	0846	1.6E	20 Tu	0713	1657	2.2E	8 Su	1146	2003	2.7E	25 W	1724	1724	0.3E	7 Tu	1257	1457	0.5F
	2039	1629	1.6E	21 W	0823	1743	2.2E	9 M	0046	0412	2.3F	26 Th	2104	1559	1.810	8 W	1643	2143	2.0E
5 M	0726	1633	1.7E	22 Th	0925	2328	2.2E	10 Tu	0140	0454	2.2F	27 F	0226	0521	1.1F	9 Th	2038	1405	1.705
	2054			23 F	1020	0312	1.9F	11 W	0232	0531	1.9F	28 Sa	0404	0549	0.3F	10 F	1447	1803	2.0F
6 Tu	0750	1645	1.6F	24 Sa	0018	0359	1.9F	12 Th	0326	0605	1.4F	29 Su	0725	1242	1.4E	11 Sa	1447	1803	2.0F
	2121			25 Su	1104	2021	2.2E	13 F	0949	1306	0.8E	30 M	1622	1923	1.3F	12 Su	1447	1803	2.0F
7 W	0833	1714	1.8F	26 M	0139	0518	2.0F	14 Sa	1459	1657	0.5F	31 Tu	2104	1559	1.810	13 M	1625	1959	2.1F
	2200			27 Tu	1129	1419	0.7E	15 Su	1850	2346	1.8E	1 W	0307	0536	0.7F	14 Tu	1625	1959	2.1F
8 Th	0930	1758	2.0F	28 W	0245	0617	1.8F	16 M	0232	0531	1.9F	2 Th	0815	1240	1.3E	15 W	0606	1459	1.8E
	2251			29 Th	0317	0639	1.4F	17 Tu	0232	0531	1.9F	3 F	1608	1848	1.0F	16 Th	1954		
9 F	1038	1852	2.2F	30 F	0348	0658	1.0F	18 W	0232	0531	1.9F	4 Sa	2259			17 M			
	2348			31 Sa	1028	1429	1.2E	19 Tu	0232	0531	1.9F	5 Su	0404	0549	0.3F	18 Tu			
10 Sa	1149	0322	2.3F		1820	2039	0.4F	20 W	0232	0531	1.9F	6 M	0725	1242	1.4E	19 W			
		1952	2.7E		2355			21 Th	0232	0531	1.9F	7 Tu	1622	1923	1.3F	20 Th			
11 Su	0048	0417	2.4F					22 F	0232	0531	1.9F	8 W	1622	1923	1.3F	21 F			
	1252	2055	2.8E					23 Sa	0232	0531	1.9F	9 Th	1622	1923	1.3F	22 Sa			
								24 M	0232	0531	1.9F	10 F	1622	1923	1.3F	23 Su			
12 M	0145	0512	2.5F					25 Tu	0232	0531	1.9F	11 Sa	1622	1923	1.3F	24 M			
	1329	2201	2.7E					26 W	0232	0531	1.9F	12 Su	1622	1923	1.3F	25 Tu			
								27 Th	0232	0531	1.9F	13 M	1622	1923	1.3F	26 W			
13 Tu	0240	0603	2.4F					28 F	0232	0531	1.9F	14 Tu	1622	1923	1.3F	27 Th			
	1459	1613	*					29 Sa	0232	0531	1.9F	15 W	1622	1923	1.3F	28 F			
		2315	2.4E					30 Su	0232	0531	1.9F	16 Th	1622	1923	1.3F	29 Sa			
14 W	0333	0650	2.1F					31 M	0232	0531	1.9F	17 Tu	1622	1923	1.3F	30 M			
	1252	1458	1.4E									18 W	1622	1923	1.3F	31 Tu			
		1753	*									19 Th	1622	1923	1.3F				
15 Th	0427	0731	1.7F									20 F	1622	1923	1.3F				
	1211	1505	0.8E									21 Sa	1622	1923	1.3F				
	1756	1931	0.3F									22 Su	1622	1923	1.3F				
	2122											23 M	1622	1923	1.3F				
												24 Tu	1622	1923	1.3F				
												25 W	1622	1923	1.3F				
												26 Th	1622	1923	1.3F				
												27 F	1622	1923	1.3F				
												28 Sa	1622	1923	1.3F				
												29 Su	1622	1923	1.3F				
												30 M	1622	1923	1.3F				
												31 Tu	1622	1923	1.3F				

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 * Current weak and variable.

Bolivar Roads, Galveston Bay, Texas, 2010

F—Flood, Dir. 306° True E—Ebb, Dir. 116° True

Table with columns for months (October, November, December) and days of the week. Each day entry includes slack and maximum times in h:m and knots. Includes symbols like 'Flood' (F) and 'Ebb' (E) directions.

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. * Current weak and variable.

Aransas Pass (between jetties), Texas, 2010

F—Flood, Dir. 300° True E—Ebb, Dir. 120° True

January				February				March																
Slack	Maximum			Slack	Maximum			Slack	Maximum			Slack	Maximum											
	h m	h m	knots		h m	h m	knots		h m	h m	knots		h m	h m	knots									
1 F	0108	0751	2.6E	16 Sa	0220	0821	1.7E	1 M	0115	*		16 Tu	0014	*		1 M	0531	0953	0.8E	16 Tu	0709	1121	0.3E	
	1313	1751	2.3F		1341	1802	1.5F		0232	*			0332	0.3F			1338	1600	0.5F		1532	*		
									1421	1742	0.9F		0557	1012	0.6E		1914	2233	0.3E		2019	0.4E		
2 Sa	0209	0840	2.3E	17 Su	0255	0853	1.4E	2 Tu	0033	*		17 W	0520	0.4F		2 Tu	0049	0416	0.8F	17 W	0028	0423	0.8F	
	1358	1823	2.0F		1409	1812	1.3F		0516	0.3F			1115	*			0835	1139	0.3E		1230	*		
									0719	1119	0.5E		1115	*				1610	*			1509	*	
3 Su	0256	0936	1.9E	18 M	0318	0930	1.1E	3 W	0022	0.5E		18 Th	0234	0642	0.6F	3 W	0202	0547	1.0F	18 Th	0116	0535	1.0F	
	1439	1847	1.7F		1433	1829	1.0F		0703	0.5F			1200	*			1702	2257	1.1E		1353	2119	1.1E	
									1215	*			1358	*										
4 M	0312	1037	1.3E	19 Tu	0323	1016	0.8E	4 Th	2008			19 F	0401	0809	0.8F	4 Th	0314	0717	1.2F	19 F	0206	0642	1.2F	
	1513	1908	1.2F		1445	1849	0.8F		0526	0.9E			1715	2344	1.1E		1642	2327	1.4E		1507	2211	1.3E	
									1954	0.8F		20 Sa	0511	0927	1.1F	5 F	0426	0910	1.4F	20 Sa	0308	0756	1.4F	
5 Tu		0422	*	20 W	0428	*		5 F	0627	1.3E			1754				1722				1559	2301	1.6E	
		0628	*		0633	*			2004	1.2F														
		1121	0.6E		1056	0.4E			○															
		1518	0.9F		1410	0.5F																		
		2325			2220																			
6 W		0347	0.5E	21 Th	0042	0.3E		6 Sa	0725	1.5E		21 Su	0614	0018	1.4E	6 Sa	0533	0000	1.6E	21 Su	0420	0909	1.6F	
		0846	*		0821	*			2037	1.5F			1846	1037	1.4F		1814	1024	1.5F		1654	2346	1.8E	
		1137	*		1125	*							○											
		1935	0.6F		1456	0.3F																		
7 Th		0342	0.9E	22 F	0044	0.6E		7 Su	0820	1.6E		22 M	0717	0108	1.6E	7 Su	0638	0038	1.6E	22 M	0530	1009	1.7F	
		0726	0.8F		0944	0.6F			2124	1.7F			1945	1324	1.7F		1912	1239	1.5F		1754			
		2155			1142	0.5F																		
					1412	0.6F																		
8 F		0355	1.3E	23 Sa	0113	1.0E		8 M	0913	1.7E		23 Tu	0818	0246	1.8E	8 M	0740	0146	1.5E	23 Tu	0639	0034	1.8E	
		1403	1.3F		1353	1.1F			2214	1.8F			2053	1356	1.9F		2020	1336	1.6F		1856	1120	1.8F	
9 Sa		0419	1.6E	24 Su	0224	1.4E		9 Tu	1005	1.8E		24 W	0917	0406	2.0E	9 Tu	0838	0356	1.4E	24 W	0745	0146	1.7E	
		1425	1.7F		1358	1.5F			2305	1.8F			2204	1423	2.0F		2139	1411	1.6F		2004	1309	1.7F	
10 Su		0449	1.9E	25 M	0335	1.7E		10 W	1055	1.8E		25 Th	1016	0505	2.1E	10 W	0932	0453	1.4E	25 Th	0846	0347	1.6E	
		1454	1.9F		1417	1.9F				1.7F			2322	1448	1.9F		2253	1437	1.4F		2136	1337	1.6F	
11 M		0524	2.0E	26 Tu	0425	2.1E		11 Th	0002	0642	1.7E	26 F	1114	0608	2.0E	11 Th	1024	0545	1.4E	26 F	0947	0500	1.4E	
		1528	2.0F		1444	2.2F			1140	1.6E				1508	1.7F			1456	1.3F			1351	1.3F	
12 Tu		0603	2.0E	27 W	0514	2.3E		12 F	0115	0720	1.6E	27 Sa	0135	0713	1.7E	12 F	0024	0638	1.2E	27 Sa	0101	0621	1.1E	
		1609	2.0F		1517	2.3F			1220	1.6E			1208	1526	1.3F		1114	1458	1.1F		1050	1403	0.9F	
										1.4F			2348	0.3F									*	
13 W		0643	2.0E	28 Th	0609	2.4E		13 Sa	0226	0753	1.4E	28 Su	0333	0141	0.4F	13 Sa	0214	0726	1.0E	28 Su	0346	0125	0.5F	
		1655	1.9F		1555	2.3F			1255	1.6E			1256	0817	1.3E		1159	1456	0.8F		1154	1415	0.7E	
										1.2F				0.9F				*			1716	2007	0.6F	
														*							2258		0.3E	
14 Th		0719	2.0E	29 F	0021	0704	2.4E	14 Su	0325	0825	1.2E	14 Su	0337	0139	0.4F	14 Su	0337	0812	0.8E	29 M	0642	0229	0.9F	
		1733	1.8F		1634	2.1F			1325	1.6E			1240	1505	0.6F		1240	1505	0.6F			1426	*	
										0.9F				*								2002	0.8E	
																					○			
15 F		0751	1.8E	30 Sa	0150	0757	2.1E	15 M	0045	*		15 M	0506	0228	0.5F	15 M	0506	0926	0.5E	30 Tu	0001	0331	1.2F	
		1756	1.6F		1704	1.7F			0223	0.3F			1320	0926	0.5E		1320	1520	0.4F			1203	*	
									0430	0.9E				0.4F				*				1427	*	
									1353	0.7F												2020	1.2E	
				31 Su	0319	0852	1.7E														31 W	0054	0446	1.5F
					1347	1725	1.3F															1247	2052	1.5E

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

If three or more consecutive entries are marked (F) or (E) the middle ones are not true maximums but intermediate values to show the current pattern.

* Current weak and variable.

† See page 148 for the remaining currents on this day.

Aransas Pass (between jetties), Texas, 2010

F—Flood, Dir. 300° True E—Ebb, Dir. 120° True

April				May				June																
Slack	Maximum		Slack	Maximum		Slack	Maximum		Slack	Maximum		Slack	Maximum											
	h	m	knots	h	m	knots	h	m	knots	h	m	knots	h	m	knots									
1 Th	0145	0602	1.6F	16 F	0108	0541	1.7F	1 Sa	0216	0710	2.0F	16 Su	0149	0640	2.2F	1 Tu	0325	0811	1.6F	16 W	0315	0740	1.8F	
	1430	2137	1.7E		1335	2037	1.7E		1450	2142	1.9E		1425	2112	2.2E		1535	2247	1.4E		1520	2258	1.4E	
2 F	0240	0717	1.7F	17 Sa	0154	0641	1.8F	2 Su	0307	0813	1.8F	17 M	0240	0735	2.2F	2 W	0406	0834	1.4F	17 Th	0353	0805	1.4F	
	1523	2231	1.7E		1436	2129	1.9E		1533	2237	1.7E		1513	2213	2.1E		1551	2319	1.1E		1451	1733	0.4E	
3 Sa	0341	0842	1.7F	18 Su	0249	0747	1.9F	3 M	0402	0901	1.7F	18 Tu	0334	0823	2.1F	3 Th	0442	0854	1.2F	18 F	0410	0825	1.0F	
	1611	2316	1.7E		1529	2230	2.0E		1611	2320	1.5E		1552	2306	1.8E		1549	1846	0.4E		1258	1650	0.5E	
4 Su	0445	0941	1.6F	19 M	0353	0850	2.0F	4 Tu	0457	0932	1.5F	19 W	0428	0900	1.8F	4 F	0507	0914	0.9F	19 Sa	0838	0.7F		
	1700	2355	1.6E		1619	2323	1.9E		1645	2354	1.3E		1617	2348	1.4E		1512	1808	0.4E		1124	1634	0.9E	
5 M	0548	1031	1.5F	20 Tu	0458	0939	1.9F	5 W	0548	0955	1.3F	20 Th	0516	0927	1.5F	5 Sa	0426	0931	0.6F	20 Su	1050	0215	0.7F	
	1752				1709				1709				1610	1905	0.4E		1315	1741	0.5E		2051	1635	1.4E	
6 Tu	0649	0035	1.4E	21 W	0601	0009	1.7E	6 Th	0637	0024	0.9E	21 F	0554	0021	0.8E	6 Su	0005	*		21 M	1036	0219	1.3F	
	1844	1229	1.4F		1752	1019	1.7F		1017	1017	1.0F		1511	0948	1.1F		0243	0.3F			2131	1651	1.8E	
7 W	0747	0145	1.1E	22 Th	0701	0100	1.4E	7 F	0723	0055	0.6E	22 Sa	0042	*			0634	0.3F			1152	1710†	0.8E	
	1935	1324	1.2F		1816	1057	1.4F		1643	1040	0.8F		0401	*			0939	0.3F			1105	1656	1.1E	
8 Th	0841	0420	1.0E	23 F	0758	0327	0.9E	8 Sa	0507	*			1324	1747†	0.7F	7 M	1105	1656	1.1E	22 Tu	1040	0243	1.8F	
		1345	1.0F			1133	1.0F		1104	0.5F			0200	0.6F			2133	0.8E			2216	1718	2.0E	
9 F	0932	0523	0.8E	24 Sa	0852	0514	0.5E	9 Su	1519	1849	0.4E	23 Su	1215	1738	1.2E	8 Tu	1016	1706	1.5E	23 W	1102	0316	2.1F	
		1341	0.8F			1204	0.6F		2138	0.4E			1215	1738	1.2E		2206	1.5E			2302	1752	2.2E	
10 Sa	1027	0641	0.6E	25 Su	1425	0104	0.5F	10 M	0038	0.4F		24 M	1132	1748	1.6E	9 W	1028	1731	1.8E	24 Th	1135	0357	2.2F	
		1334	0.6F		2231	0737	*		0730	*			2228	1.6E		2246	1.8E			2348	1831	2.2E		
11 Su	0405	0112	0.4F	26 M	2316	1102	1.1F	11 Tu	1125	0.6E		25 Tu	1112	1811	1.9E	10 Th	1101	1806	2.1E	25 F	1217	0447	2.2F	
	1133	1343	0.3F			1239	*		1812	0.6E			2311	1.9E		2330	2.1E			2348	1909	2.2E		
12 M	0204	0759	0.4E	27 Tu	1107	1227	0.3F	12 W	1015	1.3E		26 W	1134	1843	2.1E	11 F	1145	1848	2.3E	26 Sa	0030	0534	2.1F	
	1356	1927	0.3E			1850	1.3E		2301	1.3E			2355	2.1E			2.3E				1304	1945	2.1E	
13 Tu	0249	0759	0.4E	28 W	1107	1239	0.3E	13 Th	1053	1.6E		27 Th	1213	1917	2.2E	12 Sa	0015	0455	2.3F	27 Su	0109	0611	2.0F	
	1154	1404	0.9E			1850	1.3E		2339	1.6E			2.2E				2.5E				1351	2019	2.0E	
14 W	0338	0759	0.4E	29 Th	1107	1239	0.3E	14 F	0302	1.5F		28 F	0037	0531	2.2F	13 Su	0100	0547	2.4F	28 M	0146	0638	1.8F	
	1103	1927	1.2E			1850	1.3E		2339	1.6E			1300	1952	2.2E		1334	2017	2.4E		1429	2055	1.7E	
15 Th	0027	0438	1.5F	30 F	0045	0511	2.0F	15 Sa	0020	2.0F		29 Sa	0119	0617	2.1F	14 M	0145	0631	2.3F	29 Tu	0220	0655	1.6F	
	1218	1958	1.5E		1303	2011	2.0E		1231	2.1E			1349	2029	2.1E		1425	2107	2.2E		1456	2135	1.5E	
						2051	2.0E		1503	2.2E		30 Su	0200	0700	2.0F	15 Tu	0231	0708	2.1F	30 W	0252	0710	1.4F	
						2051	2.0E		1503	2.2E			1433	2112	1.9E		2206	1.9E			1511	2219	1.1E	
						2051	2.0E		1503	2.2E		31 M	0242	0740	1.8F									
						2051	2.0E		1503	2.2E			1508	2202	1.7E									

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three or more consecutive entries are marked (F) or (E) the middle ones are not true maximums but intermediate values to show the current pattern.
 * Current weak and variable.
 † See page 148 for the remaining currents on this day.

Aransas Pass (between jetties), Texas, 2010

F—Flood, Dir. 300° True E—Ebb, Dir. 120° True

July				August				September																			
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum													
1	h m	h m	knots	16	h m	h m	knots	1	h m	h m	knots	16	h m	h m	knots												
1 Th	0319	0730	1.1F	16 F	0302	0657	0.8F	1 Su	0234	0308	0.3F	16 M	0704	1305	1.6E	16 Th	0731	1523	1.5E								
	1506	2254	0.8E		1800	2006	0.3F		0508	*	*	1 W	1848				2009										
									0642	0.6E		2 Th		0054	1.5F	17 F		0144	1.6F								
2 F	0332	0752	0.9F	17 Sa	0939	1428	0.9E	2 M	0757	1246	1.0E	17 Tu	0748	1436	1.7E		0710	1351	1.6E	17 F	0851	1633	1.4E				
	1414	1707	0.3E		1843	2214	0.7F	3 Tu	1849	2235	0.9F	3 W	1948				1950				2104						
		2002	*			2334	0.7F	3 Tu		0142	1.0F	18 W		0140	1.8F	3 F		0136	1.8F	18 Sa		0213	1.4F				
3 Sa	0228	0811	0.6F	18 Su	0916	1503	1.3E		0737	1335	1.3E		0846	1558	1.8E		0817	1538	1.8E		1027	1728	1.3E				
	1130	1639	0.4E	19 M	0917	1543	1.7E	4 W	1937			4 Sa		0203	1.9F	4 Sa		0203	1.9F	18 Sa		0213	1.4F				
		2135	*					4 W	0812	1509	1.6E		0933	1641	1.9E		2147				2156						
4 Su		0305	0.3F	19 M	0917	1543	1.7E	5 Th	0903	1606	1.9E	19 Th	0948	1650	1.8E	5 Su	1057	1742	1.8E	5 Su	1057	1742	1.8E	19 Su	1210	1825	1.1E
		0521	0.3F	20 Tu	0939	1622	1.9E	5 Th	2026			20 F	1046	1740	1.8E		2246				2247						
5 M	1035	1608	0.7E					6 F	0959	1655	2.0F	20 F	1046	1740	1.8E	6 Su	1057	1742	1.8E	20 M		0231	1.0F				
	1959			20 Tu	0939	1622	1.9E	6 F	2212			21 Sa	1147	1828	1.7E		2246					1018	*				
6 Tu	0932	0217	1.1F	21 W	1014	1701	2.0F	7 Sa	1057	1747	2.2E	21 Sa	1147	1828	1.7E	7 Tu		0223	1.8F			1227	*				
	2101	1605	1.4E		2201			7 Sa		0259	2.1F	22 Su	1307	1911	1.5E		1527	1958	1.1E			1920	0.9E				
				22 Th	1054	1744	2.1E	8 Su	1202	1843	2.2E	22 Su	1307	1911	1.5E	8 W		0257	1.2F	22 W		0023	0.5F				
7 W	0942	0224	1.5F	23 F	1139	1828	2.1E	8 Su	2358			23 M	0003	0356	1.3F		1527	1958	1.1E			0841	*				
	2143	1633	1.8E		2338			9 M	1338	1937	2.0E	23 M	0003	0356	1.3F			1117	0.3F			1425	0.6F				
8 Th	1016	0243	1.9F	24 Sa	1230	1909	2.0E	9 M		0402	1.9F	24 Tu	0040	0357	1.0F		1527	1958	1.1E			1425	0.6F				
	2230	1710	2.1E					9 M		1937	2.0E	24 Tu	0040	0357	1.0F			0257	1.2F			1736	2.201				
				25 Su	0020	0516	1.8F	10 Tu	0046	0431	1.6F	25 W	0114	0410	0.8F		1735	2140	0.7E			0841	*				
9 F	1100	0314	2.1F		1328	1943	1.8E	10 Tu	1518	2032	1.6E	25 W	0114	0410	0.8F			1117	0.3F	23 Th	0110	0252	0.3F				
	2320	1754	2.3E	26 M	0057	0542	1.6F	11 W	0129	0454	1.2F	26 Th	0145	0430	0.6F			1331	0.4F			0753	0.3E				
10 Sa	1150	0356	2.3F		1421	2015	1.6E	11 W		1231	*	26 Th	0145	0430	0.6F			1331	0.4F			1513	0.8F				
		1843	2.5E	27 Tu	0130	0547	1.4F	11 W		1447	0.3F	27 F	0213	0451	0.3F			1331	0.4F			2011	2338				
11 Su	0009	0446	2.3F		1504	2047	1.3E	12 Th	0207	0512	0.8F	27 F	0213	0451	0.3F		0127	0327	0.4F	24 F		0301	*				
	1249	1932	2.4E	28 W	0159	0552	1.2F	12 Th		1156	*	28 Sa		0505	*		0552	0903	0.4E			0753	0.6E				
12 M	0055	0529	2.2F		1541	2126	1.0E	13 F	0227	0527	0.4F	28 Sa		1032	0.5E		1220	1555	1.0F			1611	0.9F				
	1353	2019	2.2E	29 Th	0225	0608	0.9F	13 F		1651	0.4F	29 Su	0358	1052	0.8E		2100	2345	0.3E			1611	0.9F				
13 Tu	0138	0559	1.9F		1618	2219	0.7E	14 Sa		2321	0.4E	29 Su	0358	1052	0.8E			0330	*			1611	0.9F				
	1448	2112	1.8E	30 F	0239	0627	0.7F	14 Sa		0039	*	30 M	0427	1122	1.1E			0330	*	25 Sa		0057	*				
14 W	0219	0622	1.6F		1618	2219	0.7E	15 Su	0648	1224	1.4E	30 M	0427	1122	1.1E			0924	0.9E			0229	*				
	1523	2218	1.3E	31 Sa	0203	0644	0.4F	15 Su		2032	1.6E	31 Tu	0514	1156	1.3E		1330	1725	1.2F			0813	0.9E				
15 Th	0253	0641	1.2F		1724	1957	0.3F	16 M		0039	*	31 Tu	0514	1156	1.3E			0924	0.9E			1303	1718				
		1555	*					16 M		0525	*	31 Tu	0514	1156	1.3E			1725	1.2F			1718	1.1F				
		1758	*	31 Sa	0203	0644	0.4F	16 M		1158	1.0E	31 Tu	0514	1156	1.3E			1725	1.2F			1718	1.1F				
		2314	0.6E		1724	1957	0.3F	16 M		2036	1.0F	31 Tu	0514	1156	1.3E			1725	1.2F			1718	1.1F				
								16 M		2036	1.0F	31 Tu	0514	1156	1.3E			1725	1.2F			1718	1.1F				
								16 M		2036	1.0F	31 Tu	0514	1156	1.3E			1725	1.2F			1718	1.1F				
								16 M		2036	1.0F	31 Tu	0514	1156	1.3E			1725	1.2F			1718	1.1F				

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three or more consecutive entries are marked (F) or (E) the middle ones are not true maximums but intermediate values to show the current pattern.
 * Current weak and variable.
 † See page 148 for the remaining currents on this day.

Aransas Pass (between jetties), Texas, 2010

F—Flood, Dir. 300° True E—Ebb, Dir. 120° True

October				November				December															
Slack		Maximum		Slack		Maximum		Slack		Maximum		Slack		Maximum									
	h	m	knots		h	m	knots		h	m	knots		h	m	knots								
1 F	0614	1301	1.6E	16 Sa	0631	1600	0.9E	1 M	0454	0719	0.3E	16 Tu	0936	1354	0.4F	1 W	0923	1415	1.3F	16 Th	0926	1431	1.2F
	1909	2342	1.6F		2010				2006	1039	*		2305	1932	*		2305				2220		
2 Sa	0714	1458	1.5E	17 Su	0103	0805	1.0F	2 Tu	0314	0637	0.5E	17 W	0954	1401	0.8F	2 Th	1002	1443	1.8F	17 F	0959	1444	1.6F
	2011				1003	*			0937	1245	0.5F		2340	2245	*		2253				2227		
3 Su	0824	0053	1.5F	18 M	0049	0755	0.7F	3 W	0141	0613	0.9E	18 Th	1021	1425	1.2F	3 F	1046	1522	2.1F	18 Sa	1038	1509	1.8F
	2110	1629	1.3E		1135	*			1007	1358	1.1F		2232	1425	1.2F		2318				2257		
4 M	0909	0116	1.2F	19 Tu	0055	0738	0.3E	4 Th	1050	0619	1.4E	19 F	1054	1457	1.5F	4 Sa	1133	1612	2.3F	19 Su	1120	1547	2.0F
	1057	*			1312	0.5F			2303	1448	1.6F		2256	1457	1.5F		2357				2337		
5 Tu	1309	0132	0.8F	20 W	0111	0707	0.5E	5 F	1137	0643	1.8E	20 Sa	1131	1539	1.8F	5 Su	1219	1711	2.3F	20 M	1203	1637	2.2F
	1543	0802	0.5F		1031	1402	0.8F		2349	1543	2.0F		2334	1539	1.8F								
6 W	1900	0146	0.5F	21 Th	0127	0646	0.7E	6 Sa	1224	0715	2.1E	21 Su	1209	1632	1.9F	6 M	0046	0739	2.4E	21 Tu	0026	0718	2.3E
	2208	0726	0.4E		1443	1.1F			1651	1651	2.2F			1632	1.9F		1303	1801	2.3F		1245	1728	2.2F
7 Th	1135	0156	*	22 F	0005	0134	*	7 Su	0044	0751	2.3E	22 M	0021	0723	2.1E	7 Tu	0138	0818	2.2E	22 W	0120	0800	2.3E
		1514	1.4F		0651	1.0E			1310	1756	2.2F		1250	1729	2.1F		1345	1844	2.1F		1327	1808	2.2F
8 F	1228	0016	*	23 Sa	0711	1623	1.5F	8 M	0143	0831	2.2E	23 Tu	0115	0802	2.2E	8 W	0223	0859	2.0E	23 Th	0210	0844	2.2E
	1625	0152	1.4E		1217	1.5F			1358	1854	2.2F		1332	1820	2.1F		1427	1922	1.9F		1408	1842	2.0F
9 Sa	1320	0024	1.7E	24 Su	0013	0739	1.6E	9 Tu	0234	0919	2.1E	24 W	0208	0846	2.2E	9 Th	0258	0945	1.8E	24 F	0250	0936	1.9E
	1743	0818	1.9F		1255	1.7F			1448	1955	2.0F		1417	1909	2.1F		1508	1952	1.7F		1448	1911	1.7F
10 Su	1414	0156	1.9E	25 M	0117	0814	1.7E	10 W	0317	1016	1.9E	25 Th	0253	0940	2.1E	10 F	0322	1031	1.4E	25 Sa	0311	1032	1.4E
	1856	0901	1.9F		1336	1.8F			1541	2046	1.8F		1505	1955	2.0F		1546	2013	1.4F		1524	1936	1.4F
11 M	1513	0255	1.9E	26 Tu	0215	0859	1.9E	11 Th	0352	1104	1.6E	26 F	0330	1037	1.8E	11 Sa	0333	1105	1.1E	26 Su	0246	1115	0.8E
	2019	0957	1.9F		1425	1.9F			1634	2117	1.6F		1554	2033	1.8F		1619	2033	1.1F		1538	1957	1.0F
12 Tu	1617	0345	1.9E	27 W	0305	0957	1.9E	12 F	0420	1139	1.3E	27 Sa	0354	1122	1.4E	12 Su	0323	0613	0.4E	27 M	0027	0431	0.5E
	2122	1053	1.8F		1522	2.04	1.9F		1723	2137	1.4F		1640	2101	1.5F		1127	0.4E			0855	*	
13 W	1720	0432	1.7E	28 Th	0352	1054	1.9E	13 Sa	0435	1205	0.9E	28 Su	0350	1122	1.4E	13 M	0238	0543	0.4E	28 Tu	0748	1413	0.7F
	2207	1138	1.7F		1623	2.113	1.9F		1807	2155	1.1F		1713	2123	1.1F		0924	*			2253	2009	0.6F
14 Th	1820	0517	1.5E	29 F	0435	1142	1.7E	14 Su	0431	0702	0.3E	29 M	0248	0555	0.5E	14 Tu	0030	0524	0.6E	29 W	0821	1406	1.3F
	2251	1218	1.5F		1723	2.151	1.7F		0913	1227	0.5E		0955	1220	*		0849	1049	0.3F		2203		
15 F	1917	0559	1.2E	30 Sa	0513	1226	1.4E	15 M	0354	0646	0.4E	30 Tu	0046	0522	0.8E	15 W	0900	1428	0.8F	30 Th	0903	1427	1.8E
		1303	1.2E		1821	2.223	1.4F		1031	1242	*		0859	1406	0.6F		2254				2211		
				31 Su	0531	1325	0.9E		1416	1707†	*		2344	2133	0.4F							0453	2.1E
					1916	2.252	1.1F														2239	1458	2.1F

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 If three or more consecutive entries are marked (F) or (E) the middle ones are not true maximums but intermediate values to show the current pattern.
 * Current weak and variable.
 † See page 148 for the remaining currents on this day.

EXTRA CURRENTS, 2010

Bucksport, Maine

January			
Slack	Maximum		
h m	h m	knots	
21	2131	1906	1.6E
22	2218	1959	1.5E
23	2309	2053	1.5E
24	1722	1843	1.0E
		1942	0.9E
		2146	1.5E
25	1819	2237	1.7E
February			
Slack	Maximum		
h m	h m	knots	
19	2055	1835	1.6E
20	1508	1639	1.3E
		1740	1.2E
		1925	1.5E
21	1600	1727	1.2E
		1833	1.1E
		2022	1.5E
22	1654	1817	1.1E
		1918	1.0E
		2118	1.5E
23	2332	2211	1.7E
March			
Slack	Maximum		
h m	h m	knots	
21	2117	1858	1.6E
22	2212	1954	1.6E
23	2312	2052	1.6E
July			
Slack	Maximum		
h m	h m	knots	
4	2315	1617	1.7E
5	1706	2133	1.7E
6	1758	2222	1.8E

August

Slack	Maximum		
h m	h m	knots	
2	1542	1711	1.2E
		1803	1.1E
		2006	1.6E
3	1632	1758	1.1E
		1855	1.1E
		2100	1.7E
4	1724	1849	1.1E
		1939	1.0E
		2152	1.8E
5	1819	2243	1.9E
30	2109	1840	1.7E
31	1509	1642	1.3E
		1740	1.2E
		1932	1.6E
	2201		
September			
Slack	Maximum		
h m	h m	knot	
1	1601	2029	1.6E
		2257	
2	1654	1822	1.2E
		1916	1.1E
		2124	1.8E
3	1751	2216	1.9E
28	2041	1618	1.4E
29	1442	1710	1.3E
		1902	1.7E
30	2133	1708	1.3E
		1801	1.3E
		1959	1.7E
	2230		
October			
Slack	Maximum		
h m	h m	knots	
1	2329	2056	1.8E
December			
Slack	Maximum		
h m	h m	knots	
14		2121	1.7E

Quonset Point, Rhode Island

January			
Slack	Maximum		
h m	h m	knots	
6	2251		0.3F
21	2207		*
22	2258		*
February			
Slack	Maximum		
h m	h m	knots	
4	1824		*
	1932		*
	2229		0.3F
5	1908		*
	2021		*
	2326		0.3F
6	2005		*
	2105		*
	2041		*
18	2135		*
19	2231		*
20			*
March			
Slack	Maximum		
h m	h m	knots	
5	1759		*
	1918		*
	2208		0.3F
6	1840		*
	2008		*
	2304		*
7	1931		*
	2052		*
	2359		*
19	2010		*
20	2111		*
21	2209		*
22	2308		*
April			
Slack	Maximum		
h m	h m	knots	
2	2248	2048	0.3F
3	2144		*
4	1817		*
	1950		*
	2238		*
5	1904		*
	2033		*
	2331		*
6	2005		*
	2110		*
18	2051		*
19	2150		*

May

Slack	Maximum		
h m	h m	knots	
2	2115		*
3	1800		*
	1927		*
	2206		*
4	1844		*
	2009		*
	2255		*
5	1939		*
	2044		*
	2342		*
18	2132		0.3F
	2331		
June			
Slack	Maximum		
h m	h m	knots	
1	2127		*
2	1830		*
	1942		*
	2213		*
3	1920		*
	2015		*
	2258		*
July			
Slack	Maximum		
h m	h m	knots	
2	2215		*
18	2058	2346	0.3F
31	2137		*
August			
Slack	Maximum		
h m	h m	knots	
1	2227		*
2	2317		*
15	1749	2230	0.3F
16	1911		*
	2013		*
	2327		*
17	2009		*
	2055		*
29	2104		*
30	2155		*
31	2248		*
September			
Slack	Maximum		
h m	h m	knots	
1	2342		*
13	1802		*
	1910		*
	2210		*
14	1840		*
	2000		*
	2306		*
15	1931		*
	2043		*
16	1704		0.3E
28	2129		*
29	1905		*
	1943		*
	2223		*

October

Slack	Maximum		
h m	h m	knots	
12	1741		*
	1849		*
	2148		*
13	1818		*
	1940		*
	2242		*
14	1906		*
	2023		*
	2335		*
15	2014		*
	2056		*
27	2105		*
28	2200		*
29	1826	2255	0.3F

November

Slack	Maximum		
h m	h m	knot	
10	2121		*
11	1804		*
	1916		*
	2213		*
12	1850		*
	2000		*
	2303		*
13	2350		*
26	1704	2138	0.3F
	2332		

December

Slack	Maximum		
h m	h m	knots	
10	2137		*
11	1836		*
	1937		*
	2222		*
12	2306		*

EXTRA CURRENTS, 2010

Philadelphia, Pennsylvania	Portsmouth Harbor Entrance	Aransas Pass, Texas	St. Andrew Bay, Florida
March	January	January	February
Slack Maximum h m h m knots	Slack Maximum h m h m knots	Slack Maximum h m h m knots	Slack Maximum h m h m knots
30 2153	10 2114 2333 1.3E	21 1902 0.3F	2 1919 2131 0.8F
31 1516 1834 2.3E 2236	March	May	March
April	Slack Maximum h m h m knots	Slack Maximum h m h m knots	Slack Maximum h m h m knots
Slack Maximum	9 2021 2237 1.1E	22 2120	1 1736 2002 1.2F 18 2305 *
h m h m knots		June	May
25 1904 2139 1.7F		Slack Maximum h m h m knots	Slack Maximum h m h m knots
May		6 2109	22 2140 *
Slack Maximum		July	June
h m h m knots		Slack Maximum h m h m knots	Slack Maximum h m h m knots
23 1742 2016 1.6F 2249		30 2303 0.3E	19 1817 *
June		August	July
Slack Maximum h m h m knots		Slack Maximum h m h m knots	Slack Maximum h m h m knots
14 1528 1816 1.9E 2244		1 2347 0.5F	17 2316 1.1F
October		November	August
Slack Maximum h m h m knots		Slack Maximum h m h m knots	Slack Maximum h m h m knots
6 2021 2241 1.8F 7 2111 2329 2.0F 8 2159		15 2233 0.5F	14 2137 1.4F 28 2109 1.4F 29 2128 1.4F
November		December	September
Slack Maximum h m h m knots		Slack Maximum h m h m knots	Slack Maximum h m h m knots
2 1814 2023 1.2F 2250		14 2117 0.4F 2328	8 2218 0.3F 10 2356 1.3F 11 2257 1.7F 25 2336 1.6F 2319
			October
			Slack Maximum h m h m knots
			20 1725 1.2F 2133
			November
			Slack Maximum h m h m knots
			2 2052
			December
			Slack Maximum h m h m knots
			28 1731 2140 1.3E

TABLE 2. — CURRENT DIFFERENCES AND OTHER CONSTANTS AND ROTARY TIDAL CURRENTS

EXPLANATION OF TABLE

In this publication, reference stations are those for which daily predictions are listed in Table 1. Those stations appearing in Table 2 are called subordinate stations. The principal purpose of Table 2 is to present data that will enable one to determine the approximate times of minimum currents (slack waters) and the times and speeds of maximum currents at numerous subordinate stations on the Atlantic Coast of North America. By applying specific corrections given in Table 2 to the predicted times and speeds of the current at the appropriate reference station, reasonable approximations of the current at the subordinate station may be compiled.

Locations and Depths

Because the latitude and longitude are listed according to the exactness recorded in the original survey records, the locations of the subordinate stations are presented in varying degrees of accuracy. Since a minute of latitude is nearly equivalent to a mile, a location given to the nearest minute may not indicate the exact position of the station. This should be noted, especially in the case of a narrow stream, where the nearest minute of latitude or longitude may locate a station inland. In such cases, unless the description locates the station elsewhere, reference is made to the current in the center of the channel. In some instances, the charts may not present a convenient name for locating a station. In those cases, the position may be described by a bearing from some prominent place on the chart.

Although current measurements may have been recorded at various depths in the past, the data listed here for most of the subordinate stations are mean values determined to have been representative of the current at each location. For that reason, no specific current meter depths for those stations are given in Table 2. Beginning with the Boston Harbor tidal current survey in 1971, data for individual meter depths were published and subsequent new data may be presented in a similar manner.

Since most of the current data in Table 2 came from meters suspended from survey vessels or anchored buoys, the listed depths are those measured downward from the surface. Some later data have come from meters anchored at fixed depths from the bottom. Those meter positions were defined as depths below chart datum. Such defined depths in this and subsequent editions will be accompanied by the small letter “d.”

Minimum Currents

The reader may note that at many locations the current may not diminish to a true slack water or zero speed stage. For that reason, the phrases, “minimum before flood” and “minimum before ebb” are used in Table 2 rather than “slack water” although either or both minimums may actually reach a zero speed value at some locations. Table 2 lists the average speeds and directions of the minimums.

Maximum Currents

Near the coast and in inland tidal waters, the current increases from minimum current (slack water) for a period of about 3 hours until the maximum speed or the strength of the current is reached. The speed then decreases for another period of about 3 hours when minimum current is again reached and the current begins a similar cycle in the opposite direction. The current that flows toward the coast or up a stream is known as the flood current; the opposite flow is known as the ebb current. Table 2 lists the average speeds and directions of the maximum floods and maximum ebbs. The directions are given in degrees, true, reading clockwise from 000° at north to 359° and are the directions toward which the current flows.

TABLE 2. — CURRENT DIFFERENCES AND OTHER CONSTANTS AND ROTARY TIDAL CURRENTS

Differences and Speed Ratios

Table 2 contains mean time differences by which the reader can compile approximate times for the minimum and maximum current phases at the subordinate stations. Time differences for those phases should be applied to the corresponding phases at the reference station. It will be seen upon inspection that some subordinate stations exhibit either a double flood or a double ebb stage, or both. Explanations of these stages can be found in the glossary located elsewhere in this publication. In those cases, a separate time difference is listed for each of the three flood (or ebb) phases and these should be applied only to the daily maximum flood (or ebb) phase at the reference station. The results obtained by the application of the time differences will be based upon the time meridian shown above the name of the subordinate station. Differences of time meridians between a subordinate station and its reference station have been accounted for and no further adjustment by the reader is needed. Summer or daylight-saving time is not used in this publication.

The speed ratios are used to compile approximations of the daily current speeds at the subordinate stations and refer only to the maximum floods and ebbs. No attempt is made to predict the speeds of the minimum currents. Normally, the ratios should be applied to the corresponding maximum current phases at the reference station. As mentioned above, however, some subordinate stations may exhibit either a double flood or a double ebb or both. As with the time differences, separate ratios are listed for each of the three flood (or ebb) phases and should be applied only to the daily maximum flood (or ebb) speed at the reference station. It should be noted that although the speed of a given current phase at a subordinate station is obtained by reference to the corresponding phase at the reference station, the directions of the current at the two places may differ considerably. Table 2 lists the average directions of the various current phases at the subordinate stations.

Rotary Tidal Currents

Table 5 contains listings of data for those stations which exhibit rotary current patterns. Briefly, a rotary current can be described as one which flows continually with the direction of flow changing through all points of the compass during the tidal period. A more complete description can be found in the glossary located elsewhere in this publication. The average speeds and directions are listed in hourly increments as referred to the predicted times of a particular current phase at a reference station in Table 1. The Moon, at times of new, full, or perigee may increase speeds 15 to 20 percent above average; or 30 to 40 percent if perigee occurs at or near the time of new or full Moon. Conversely, the Moon at times of quadrature or apogee may decrease the speeds 15 to 20 percent or 30 to 40 percent if they occur together. Near average speeds may be expected when apogee occurs near or at new or full Moon, or when perigee occurs at or near quadrature. The directions of the currents are given in degrees true, reading clockwise from 000° at north to 359° and are the directions toward which the current flows.

TABLE 2. — CURRENT DIFFERENCES AND OTHER CONSTANTS AND ROTARY TIDAL CURRENTS

EXAMPLE OF THE USE OF TABLE 2

Suppose we wish to calculate the times of the minimum currents and the times and speeds of the maximum currents on a particular morning at the location listed in Table 2 as Winthrop Head, 1.1 n. mi. east of. From Table 2 we learn that the reference station is Boston Harbor whose morning currents are listed below. Currents for Winthrop Head can be approximated by using the Table 2 corrections as indicated.

	<i>Minimum before flood h.m.</i>	<i>Maximum flood h.m.</i>		<i>Minimum before ebb h.m.</i>	<i>Maximum ebb h.m.</i>	<i>kn.</i>
Boston Harbor	0052	0419	1.2	0645	1109	1.4
Table 2 corrections.....	-0112	+0019	x0.4 ratio	+0031	-0146	x0.3 ratio
Winthrop Point.....	2340*	0438	0.5	0716	0923	0.4

* this minimum current phase is seen to occur just before midnight of the previous day.

Table 2 states that the average speeds and directions of the minimums before flood and ebb are 0.3 knots at 103° and 0.2 knots at 297°, respectively. The average directions of the maximum flood and maximum ebb are 205° and 019°; respectively.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	BAY OF FUNDY Time meridian, 60° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
1	Brazil Rock, 6 miles east of		43° 22'	65° 18'	-2 00	-2 00	-1 56	-2 00	0.4	0.4	1.0	275°	1.0	050°
6	Cape Sable, 3 miles south of		43° 20'	65° 38'	-3 02	-2 10	-1 21	-2 10	1.0	0.8	2.2	275°	2.0	095°
11	Cape Sable, 12 miles south of		43° 11'	65° 37'	-1 12	-1 00	-0 46	-1 00	0.7	0.7	1.7	285°	1.6	090°
16	Blonde Rock, 5 miles south of		43° 15'	65° 59'	-1 02	-0 50	-0 36	-0 50	0.9	0.8	2.0	310°	2.0	125°
21	Seal Island, 13 miles southwest of		43° 16'	66° 15'	-0 17	+0 10	+0 39	+0 10	1.1	0.7	2.6	325°	1.6	140°
26	Cape Fourchu, 17 miles southwest of		43° 34'	66° 24'	+0 38	+0 45	+0 44	+0 45	0.5	0.5	1.2	355°	1.2	145°
31	Cape Fourchu, 4 miles west of		43° 47'	66° 15'	-0 12	0 00	+0 09	0 00	0.9	0.7	2.0	000°	1.7	175°
36	Lurcher Shoal, 6 miles east of		43° 52'	66° 21'	+0 08	+0 30	+0 34	+0 30	0.9	0.8	2.0	355°	1.8	175°
41	Lurcher Shoal, 10 miles west of		43° 46'	66° 42'	+0 23	+0 30	+0 34	+0 30	0.6	0.7	1.4	000°	1.6	160°
46	Lurcher Shoal, 10 miles northwest of		43° 59'	66° 37'	-0 02	+0 30	+0 49	+0 30	0.8	0.5	1.8	005°	1.2	175°
51	Brier Island, 5 miles west of		44° 13'	66° 30'	+0 43	+0 50	+0 54	+0 50	1.2	1.0	2.7	005°	2.5	185°
56	Brier Island, 15 miles west of		44° 17'	66° 44'	-0 42	-0 15	+0 14	-0 15	0.6	0.5	1.4	060°	1.2	250°
61	Gannet Rock, 5 miles southeast of		44° 29'	66° 41'	+0 38	+0 30	+0 09	+0 30	1.1	1.6	2.6	040°	3.9	230°
66	Boats Head, 10 miles northwest of		44° 31'	66° 23'	+0 48	+0 55	+0 59	+0 55	0.8	0.8	1.9	020°	2.0	205°
71	Prim Point, 20 miles west of		44° 44'	66° 15'	+0 38	+0 45	+0 54	+0 45	0.7	0.6	1.6	040°	1.4	235°
76	Cape Spencer, 14 miles south of		44° 58'	65° 57'	+0 51	+0 55	+0 57	+0 55	0.7	0.7	1.7	050°	1.6	245°
81	BAY OF FUNDY ENTRANCE		44° 45.2'	66° 55.9'	+0 51	+0 55	+0 57	+0 55	0.7	0.7	2.3	032°	2.4	212°
	MAINE COAST Time meridian, 75° W													
86	ESTES HEAD, EASTPORT	32d	44° 53.28'	66° 59.74'	+0 00	+0 00	+0 00	-0 04	1.0	1.1	2.2	263°	2.4	088°
	do	13d	44° 53.28'	66° 59.74'	-0 03	-0 02	+0 01	+0 01	0.9	0.9	2.3	260°	2.6	090°
	do	52d	44° 53.28'	66° 59.74'	-0 06	-0 01	+0 01	+0 00	0.9	0.8	2.1	268°	2.3	085°
91	Eastport, Friar Roads	78d	44° 53.28'	66° 59.74'	0 00	0 00	0 00	0 00	1.2	1.2	2.0	271°	2.0	079°
96	Robbinson, St. Croix River	12d	45° 04.58'	67° 06.06'	-0 27	-0 10	-0 17	-0 13	0.5	0.4	1.1	349°	0.9	165°
	do	32d	45° 04.58'	67° 06.06'	-0 19	-0 07	-0 07	+0 00	0.5	0.5	1.1	344°	1.1	166°
	do	58d	45° 04.58'	67° 06.06'	-0 54	+0 24	-0 21	-1 06	0.4	0.3	3.2	310°	0.6	171°
101	Western Passage, off Kendall Head		44° 55.9'	67° 01.9'	+0 27	+0 11	+0 13	+0 40	1.4	1.3	3.2	349°	3.1	142°
106	Western Passage, off Frost Ledge		44° 57.9'	67° 01.9'	+0 33	+0 04	-0 16	+0 15	0.9	0.7	2.1	330°	1.7	150°
	on Bay of Fundy Entrance, p. 4													
111	Pond Point, 7.6 miles SSE of		44° 20.1'	67° 30.2'	+0 13	-0 20	-1 33	-0 05	0.2	0.5	0.5	015°	1.2	215°
116	Moosabec Reach, east end		44° 31.71'	67° 34.36'	-2 45	-3 08	-3 13	-3 39	0.4	0.4	1.0	110°	1.0	258°
121	Moosabec Reach, west end		44° 31.25'	67° 39.00'	-1 43	-1 43	-2 00	-1 44	0.4	0.5	1.0	092°	1.2	253°
126	Bar Harbor, 1.2 miles east of <1>		44° 23.0'	68° 10.0'	-	+0 30	-	+0 48	0.1	0.3	0.2	328°	0.7	148°
131	Casco Passage, east end		44° 11.7'	68° 27.9'	-1 49	-1 44	-1 02	-1 58	0.3	0.3	0.7	088°	0.7	284°
136	Hat Island, SE of Jericho Bay		44° 08.0'	68° 29.7'	-1 02	-0 35	-0 50	-1 20	0.4	0.5	0.9	318°	1.3	124°
141	Clam I., NW of Deer I., Thorofare	14	44° 09.87'	68° 36.23'	-2 14	-0 15	-0 57	-2 46	0.1	0.1	0.2	004°	0.2	199°
146	Grog Island, E of Deer Island Thorofare	14	44° 09.72'	68° 37.23'	-2 16	-0 22	-2 27	-3 31	0.1	0.1	0.2	020°	0.3	235°
151	Russ Island, N of Deer Island Thorofare	14	44° 09.18'	68° 38.78'	-2 12	-2 10	-2 29	-3 16	0.2	0.2	0.4	074°	0.6	265°
156	Crotch Island-Moose Island, between <49>	14	44° 08.85'	68° 40.58'	-0 53	-1 07	-1 07	-1 19	0.6	0.6	1.4	336°	1.5	139°
161	Isle au Haut, 0.8 mile E of Rich's Pt. East Penobscot Bay	11	44° 05'	68° 35'	-0 18	-1 01	-2 27	-0 22	0.1	0.2	0.3	013°	0.4	164°
166	Mark Island, north of	14	44° 08.20'	68° 42.17'	-0 43	-0 49	+0 04	-1 08	0.3	0.2	0.6	302°	0.5	118°
171	Widow Island-Stimpson Island, between	14	44° 07.95'	68° 49.50'	-0 18	-0 55	-2 20	-1 46	0.4	0.4	0.9	336°	1.0	147°
176	Eagle Island, 0.4 nautical mile S of	14	44° 11.63'	68° 46.93'	-0 18	-1 19	-2 22	-0 57	0.3	0.5	0.7	290°	1.3	098°
181	Burnt Island-Oak Island, between	14	44° 11.47'	68° 49.13'	-2 43	-2 14	-0 25	-1 36	0.1	0.3	0.2	032°	0.6	194°
186	Butter I., 0.3 nautical mile SE of	14	44° 13.33'	68° 46.67'	-0 23	-0 23	-0 23	-0 23	0.2	0.2	0.4	077°	0.7	225°
191	Bradbury Island, ESE of	14	44° 14.03'	68° 44.07'	+0 11	-0 17	-0 53	-0 56	0.2	0.3	0.5	025°	0.7	225°
196	Compass Island, 0.4 nmi. ENE of	14	44° 13.00'	68° 51.33'	-1 44	-1 22	-1 25	-1 01	0.1	0.1	0.3	015°	0.3	175°
201	Scrag Island, 0.3 nautical mile SW of	14	44° 13.33'	68° 50.62'	-0 45	-0 27	-0 55	-0 55	0.2	0.1	0.4	010°	0.3	197°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS						
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb			
	MAINE COAST—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.			
	<i>East Penobscot Bay—cont.</i>				on Bay of Fundy Entrance, p.4												
206	Great Spruce Head Island, west of	14	44° 14.30'	68° 50.18'	-1 14	-0 54	-0 26	-1 19	0.2	0.1	0.3	003°	--	--	0.3	174°	
211	Horse Head Island, 0.2 nmi. ENE of	14	44° 15.07'	68° 50.67'	See Table 5.												
216	Pickering Island, south of	14	44° 15.63'	68° 45.38'	-2 45	-1 37	-1 56	-2 37	0.2	0.2	0.6	300°	0.2	203°	0.6	150°	
221	Little Eaton Island, NNE of	14	44° 16.45'	68° 43.87'	-0 43	+0 12	+0 02	-0 19	0.2	0.1	0.4	300°	--	--	0.3	201°	
226	Pickering Island, north of	14	44° 16.48'	68° 45.28'	See Table 5.												
231	Hog Island, ESE of	14	44° 16.52'	68° 46.87'	-0 13	-0 02	-0 33	-0 51	0.1	0.2	0.3	024°	0.2	105°	0.5	180°	
236	Little Deer I.—Sheep I., between	14	44° 16.78'	68° 43.43'	-0 13	-0 37	+0 33	-0 52	0.2	0.2	0.6	310°	--	--	0.6	124°	
241	Swains Ledge, WSW of	14	44° 16.97'	68° 45.28'	See Table 5.												
246	Swains Ledge, 0.3 nautical mile SW of	14	44° 17.13'	68° 43.87'	-0 46	-0 22	-0 55	-1 07	0.2	0.2	0.5	358°	--	--	0.4	170°	
251	Pond Island—Western Island, between	14	44° 17.58'	68° 49.00'	-1 44	-1 13	-1 56	-1 34	0.2	0.2	0.4	366°	--	--	0.6	172°	
256	Birch Island, northwest of	14	44° 18.17'	68° 45.35'	-1 44	-1 31	-0 56	-1 30	0.1	0.1	0.3	022°	--	--	0.2	200°	
261	Pond Island, north of	14	44° 18.17'	68° 48.60'	Current weak and variable												
266	Howard Ledges, ENE of, Eggemoggin Reach	14	44° 18.28'	68° 42.63'	Current weak and variable												
271	Howard Ledges, NE of, Eggemoggin Reach	14	44° 18.30'	68° 42.08'	Current weak and variable												
276	Spectacle Island, 0.2 nmi. NW of	14	44° 18.47'	68° 47.33'	Current weak and variable												
281	Pumpkin Island, north of	14	44° 18.80'	68° 44.42'	-3 14	-2 10	-1 54	-2 43	0.1	0.1	0.3	290°	--	--	0.3	090°	
286	Islesboro Harbor, Penobscot Bay	14	44° 18.86'	68° 53.35'	See Table 5.												
291	Islesboro Harbor, NE of, Penobscot Bay	75	44° 18.97'	68° 52.78'	-1 04	-1 00	-1 36	-1 25	0.1	0.1	0.3	004°	--	--	0.3	166°	
296	Islesboro Harbor, NE of, Penobscot Bay	15	44° 19.03'	68° 52.67'	+0 26	-0 54	-1 22	-1 23	0.1	0.1	0.1	334°	--	--	0.1	248°	
301	Islesboro Ledge		44° 21.00'	68° 50.57'	See Table 5.												
306	Thrum Cap I., E of, East Penobscot Bay	14	44° 19.40'	68° 44.80'	Current weak and variable												
					on Bucksport, p.12												
311	Turtle Head Pt., ESE of, Penobscot Bay	15	44° 22.57'	68° 51.28'	-0 36	-1 10	+0 24	-1 02	0.3	0.4	0.7	338°	--	--	0.8	171°	
	do.	40	44° 22.57'	68° 51.28'	-0 55	-1 18	+0 31	-0 32	0.2	0.4	0.4	319°	--	--	0.8	155°	
316	Hosmer Ledge, Castine Harbor	13d	44° 23.01'	68° 47.40'	+0 15	-0 10	+0 37	-0 08	0.5	0.6	1.2	061°	--	--	1.2	240°	
	do.	33d	44° 23.01'	68° 47.40'	+0 02	-0 17	+0 41	-0 03	0.5	0.5	1.3	060°	0.1	330°	1.2	241°	
	do.	52d	44° 23.01'	68° 47.40'	-0 12	-0 31	+0 38	-0 14	0.5	0.6	1.2	052°	0.1	332°	1.1	245°	
321	Dice Head, west of, Penobscot Bay	15	44° 22.77'	68° 50.72'	-1 52	-1 23	-0 27	-0 48	0.2	0.3	0.5	028°	--	--	0.5	198°	
	do.	58	44° 22.77'	68° 50.72'	-0 09	-0 39	+0 25	+0 34	0.2	0.3	0.5	334°	--	--	0.5	178°	
	do.	96	44° 22.77'	68° 50.72'	+0 37	-0 32	+0 34	+0 24	0.3	0.3	0.6	312°	--	--	0.6	135°	
326	Sears Island, S of, Penobscot Bay <53>	15	44° 25.12'	68° 53.25'	--	+0 04	--	+0 27	0.2	0.2	0.4	012°	--	--	0.4	237°	
	do.	40	44° 25.12'	68° 53.25'	--	-1 50	--	-0 15	0.2	0.2	0.4	080°	--	--	0.4	270°	
331	Jones Point, Bagaduce River <51>	15	44° 25.55'	68° 45.50'	-0 13	-0 03	+0 21	+0 21	1.8	2.1	4.2	053°	--	--	4.2	237°	
336	Fort Point Ledge, Penobscot Bay	25d	44° 27.85'	68° 48.69'	-0 44	-0 35	+0 28	-0 15	0.5	0.4	1.2	053°	0.1	323°	0.9	248°	
	do.	45d	44° 27.85'	68° 48.69'	-1 26	-0 46	+0 25	-0 06	0.5	0.4	1.2	052°	0.1	346°	0.8	258°	
	do.	71d	44° 27.85'	68° 48.69'	-1 46	-0 55	+0 46	+0 01	0.5	0.4	1.3	062°	0.1	349°	0.7	273°	
341	Odom Ledge, Penobscot River	16d	44° 31.00'	68° 48.19'	-0 21	-0 10	-0 12	-0 41	0.4	0.4	1.1	358°	--	--	0.8	177°	
	do.	29d	44° 31.00'	68° 48.19'	-1 22	-0 44	+0 33	-0 05	0.5	0.2	1.3	007°	0.2	282°	0.4	193°	
346	Verona I., N of, Easter Ch., Penobscot R <52>	10	44° 34.07'	68° 46.87'	+2 18	+0 07	-0 54	+0 18	0.3	0.9	2.7	273°	--	--	1.8	116°	
351	Penobscot Narrows Bridge	13d	44° 33.74'	68° 48.03'	-0 17	-0 20	+0 10	+0 22	1.2	1.2	2.8	034°	--	--	2.4	210°	
	do.	26d	44° 33.74'	68° 48.03'	-0 27	-0 20	+0 13	+0 03	1.1	1.0	2.7	033°	0.1	106°	2.1	201°	
	do.	36d	44° 33.74'	68° 48.03'	-0 44	-0 37	+0 17	+0 04	1.0	0.9	2.5	029°	0.1	113°	1.9	201°	
356	BUCKSPORT, Penobscot River	12d	44° 34.28'	68° 48.46'	Daily Predictions												
	do.	32d	44° 34.28'	68° 48.46'	-0 23	-0 04	-0 05	-0 21	1.1	0.9	2.5	290°	--	--	2.0	113°	
	do.	45d	44° 34.28'	68° 48.46'	-0 34	-0 01	-0 03	-0 23	1.0	0.9	2.4	300°	--	--	1.8	118°	
361	Frankfort Flats at Marsh River, Penobscot River	11d	44° 36.29'	68° 50.80'	-0 25	+0 04	-0 06	+0 42	0.3	0.5	2.4	300°	0.1	015°	1.8	123°	
366	Winterport, Penobscot River <51>	7d	44° 37.88'	68° 50.54'	+0 15	+0 10	+0 43	-0 06	0.7	0.8	2.7	273°	--	--	1.0	109°	
	do.	14d	44° 37.88'	68° 50.54'	-0 27	+0 10	+0 43	+0 04	0.7	0.5	1.6	033°	--	--	1.6	212°	
	do.	15	44° 40.10'	68° 48.78'	+0 05	+0 16	+0 21	+1 09	0.6	0.9	1.6	036°	--	--	1.0	210°	
371	Oak Point, Penobscot River <51>	35	44° 40.10'	68° 48.78'	-0 53	+0 10	+0 01	-0 50	0.7	0.9	1.5	026°	--	--	1.7	258°	
	do.	35	44° 40.10'	68° 48.78'	+0 31	+0 22	-0 06	-0 26	0.5	0.7	1.6	337°	--	--	1.8	219°	
376	Snub Point, Penobscot River <51>	7d	44° 42.57'	68° 50.46'	+0 18	+0 17	-0 05	-0 47	0.5	0.5	1.3	003°	--	--	1.3	182°	
	do.	17d	44° 42.57'	68° 50.46'	+0 04	+0 22	+0 53	-0 08	0.3	0.4	0.8	003°	--	--	1.0	179°	
	do.	26d	44° 42.57'	68° 50.46'	+0 04	+0 22	+0 53	-0 08	0.3	0.4	0.9	003°	--	--	0.9	176°	

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS											
			Latitude	Longitude	Min. before Flood	h m	Flood	h m	Min. before Ebb	h m	Flood	Ebb	Minimum before Flood	knots	Dir.	Maximum Flood	knots	Dir.	Minimum before Ebb	knots	Dir.	Maximum Ebb
MAINE COAST—cont. Time meridian, 75° W																						
<i>West Penobscot Bay</i>																						
381	Andrews Island, ESE of	15	43° 59.65'	69° 00.78'	-0.20	-0.44	-0.55	-1.14	0.2	0.3	--	--	0.4	011°	0.7	155°	--	--	0.6	188°		
386	Little Hurricane Island, southwest of	75	43° 59.65'	69° 00.78'	-1.15	-0.56	-0.20	-1.07	0.3	0.2	--	--	0.8	342°	0.6	188°	--	--	0.8	157°		
391	Heron Neck, Green Island	40	44° 01.38'	68° 55.07'	-0.05	-0.50	-0.18	-0.35	0.2	0.3	--	--	0.6	300°	0.7	125°	--	--	0.6	165°		
396	The Reach, Norton Point	14	44° 01.78'	68° 52.38'	-1.47	-0.59	-0.58	-1.43	0.4	0.3	Current weak and variable				1.0	344°	0.6	165°	--	--		
<i>Isle au Haut Bay</i>																						
401	Triangle Ledge, SSE of	15	44° 02.47'	68° 45.48'	+0.14	-0.17	-0.26	-0.17	0.3	0.4	--	--	0.7	354°	1.0	197°	--	--	0.6	180°		
406	Moore Harbor, W of	15	44° 02.47'	68° 45.48'	-1.20	-0.39	-0.32	-1.15	0.3	0.3	--	--	0.6	317°	0.1	135°	--	--	0.5	165°		
<i>West Penobscot Bay</i>																						
411	The Reach, NNE of, Green Island	14	44° 02.57'	68° 51.58'	-3.23	-1.10	-1.55	-2.55	0.2	0.2	--	--	0.4	284°	0.4	111°	--	--	0.6	165°		
416	White Islands, northeast of	14	44° 03.00'	68° 54.40'	-1.48	-2.18	-1.55	-2.08	0.2	0.2	0.2	262°	0.3	322°	0.3	258°	0.2	240°	0.7	240°		
421	Fisherman Island Passage	14	44° 03.12'	69° 02.70'	-2.44	-2.37	-2.26	-2.28	0.2	0.3	0.1	136°	0.6	053°	0.2	312°	2.0	163°	--	--		
426	Crotch Island, east of	14	44° 03.62'	68° 54.43'	-0.49	-0.55	-1.21	-1.09	0.8	0.8	--	--	1.9	343°	--	--	--	--	0.9	155°		
431	Lairays Island, south of	14	44° 03.62'	68° 53.78'	-0.48	-0.18	-0.51	-2.16	0.2	0.4	0.1	073°	0.5	023°	--	--	--	--	0.8	220°		
436	Sheep Island	14	44° 03.88'	69° 03.47'	-2.44	-1.19	-1.57	-2.16	0.2	0.3	--	--	1.4	320°	--	--	--	--	1.3	126°		
441	Leadbetter I., SSW of southern tip	14	44° 04.07'	68° 53.90'	-0.43	-0.39	-0.28	-1.32	0.6	0.5	0.1	214°	0.1	360°	0.1	105°	0.6	175°	0.5	205°		
446	Leadbetter Island, E of southern tip	14	44° 04.15'	68° 53.62'	-0.18	-0.43	+0.37	-0.13	0.2	0.2	0.1	214°	0.8	016°	0.1	135°	1.0	214°	0.2	278°		
451	Leadbetter Island, northwest tip of	14	44° 05.03'	68° 54.67'	-0.48	-0.41	-0.53	-1.12	0.3	0.4	0.2	267°	0.2	015°	0.1	092°	0.5	205°	0.4	147°		
456	Dodge Point—Monroe Island, between	14	44° 05.12'	69° 02.62'	-3.43	-1.43	-2.55	-3.07	0.2	0.2	0.2	244°	0.5	325°	0.0	045°	0.4	147°	0.0	220°		
461	Dogfish Island, NNE of	14	44° 05.52'	68° 54.80'	-2.14	-2.27	-2.55	-2.06	0.2	0.2	0.1	215°	0.3	315°	0.2	100°	0.2	221°	0.2	228°		
466	Rockland Harbor Breakwater	14	44° 06.13'	69° 04.67'	-1.18	-0.30	-1.04	-0.39	0.1	0.2	0.1	325°	0.1	016°	0.2	150°	0.2	228°	0.1	150°		
471	Browshead, Vinalhaven Island, NNW of	14	44° 06.78'	68° 54.73'	-1.48	-1.22	-0.55	-0.56	0.1	0.1	0.2	287°	0.3	003°	0.2	070°	0.2	278°	0.4	246°		
476	Crabtree Pt., North Haven I., NNE of	14	44° 06.90'	68° 55.42'	-0.43	-1.18	-0.55	-1.01	0.1	0.1	0.2	287°	0.3	003°	0.1	163°	0.5	246°	0.1	101°		
481	Fox Island Thorofare	14	44° 07.62'	68° 53.58'	-3.13	-2.41	-3.25	-3.25	0.2	0.2	0.2	331°	0.2	070°	0.1	163°	0.5	246°	0.1	101°		
486	Mark Island, 0.3 nmi. SSE of	14	44° 10.00'	68° 58.83'	-1.41	-1.31	-1.59	-1.26	0.2	0.2	0.2	331°	0.2	070°	0.1	163°	0.5	246°	0.1	101°		
491	Saddle Island, northwest of	14	44° 10.85'	68° 57.30'	-3.43	-2.31	-3.56	-2.13	0.1	0.2	0.2	272°	0.3	010°	0.1	101°	0.4	225°	0.4	217°		
496	Mark Island, 0.3 nautical mile, N of	14	44° 10.87'	68° 58.92'	-1.47	-1.31	-2.54	-1.46	0.2	0.2	--	--	0.4	022°	--	--	--	--	0.4	210°		
501	Laseil Island, SSW of	14	44° 11.20'	68° 56.82'	-3.45	-2.43	-3.57	-3.13	0.2	0.2	--	--	0.4	000°	0.2	112°	0.3	325°	0.3	190°		
506	East Goose Rock, NNE of	14	44° 11.37'	68° 58.08'	-2.44	-4.06	-2.26	-1.56	0.1	0.1	0.2	003°	0.3	009°	--	--	--	--	0.3	220°		
511	Camden Harbor Entrance	14	44° 12.17'	69° 02.80'	-3.10	-1.19	+0.32	-1.25	0.2	0.1	--	--	0.5	036°	0.3	248°	--	--	0.4	185°		
516	Ensign Island, SSE of	14	44° 13.40'	68° 57.52'	-1.30	-1.00	+0.32	-1.25	0.2	0.1	--	--	0.5	036°	0.3	248°	--	--	0.4	185°		
521	Warren Island, northwest of	14	44° 16.55'	68° 57.22'	-2.17	-0.52	-1.23	-0.41	0.2	0.2	--	--	0.4	014°	0.3	203°	--	--	0.3	203°		
526	Ducktrap Harbor, northeast of	15	44° 18.00'	68° 56.38'	-1.07	-0.58	-1.23	-0.41	0.2	0.2	--	--	0.4	014°	0.3	203°	--	--	0.3	203°		
531	Ducktrap Harbor, NNE of	40	44° 18.00'	68° 56.38'	-2.29	-1.20	-1.47	-1.49	0.2	0.1	--	--	0.4	014°	0.3	203°	--	--	0.3	203°		
536	Ducktrap Harbor, NNE of	160	44° 18.27'	68° 57.35'	-0.59	-0.28	-0.19	-0.33	0.2	0.1	--	--	0.5	038°	0.5	202°	--	--	0.5	202°		
541	Flat Island, SSW of	15	44° 18.30'	68° 57.55'	+0.33	-0.13	-0.56	-0.35	0.2	0.2	0.2	013°	0.6	013°	0.5	193°	--	--	0.5	193°		
546	Head of the Cape, 0.8 nmi. W. of Penobscot Bay	14	44° 18.83'	68° 55.45'	-1.13	-0.52	-0.48	-1.11	0.3	0.2	--	--	0.4	045°	0.1	135°	--	--	0.4	230°		
551	Head of the Cape, NNW of, Penobscot Bay	15	44° 19.25'	68° 50.80'	-0.24	-0.14	-0.24	-0.28	0.2	0.2	--	--	0.4	325°	0.4	125°	--	--	0.3	166°		
556	Ram Island, west of, West Penobscot Bay	14	44° 19.07'	68° 50.17'	-0.46	-0.39	-0.41	-0.51	0.2	0.1	--	--	0.6	332°	0.6	163°	--	--	0.4	172°		
		130	44° 19.07'	68° 50.17'	-0.59	-1.22	-0.47	-0.59	0.2	0.2	--	--	0.3	353°	0.3	353°	--	--	0.4	172°		
		14	44° 21.28'	68° 54.95'	-3.43	-1.55	-2.53	-2.16	0.2	0.1	--	--	0.4	004°	0.4	189°	--	--	0.3	189°		

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS							
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb				
															North	West	h m	h m
MAINE COAST—cont. Time meridian, 75° W																		
561	Temple Heights, NE of, W Penobscot Bay	15	44° 21.38'	68° 55.33'	-1.06	-1 23	-2.03	-1 18	0.2	0.2	--	--	0.4	000°	--	--	0.4	189°
	do.	65	44° 21.38'	68° 55.33'	-1.42	-1 12	-1.36	-1 33	0.2	0.1	--	--	0.4	354°	--	--	0.3	175°
566	Temple Heights, NNE of, W Penobscot Bay	15	44° 21.45'	68° 56.62'	-0.34	-0 21	-0.35	-1 05	0.3	0.3	--	--	0.6	005°	--	--	0.7	175°
	do.	30	44° 21.45'	68° 56.62'	-0.51	-0 26	-0.15	-0 43	0.2	0.2	--	--	0.6	344°	--	--	0.4	188°
	do.	50	44° 21.45'	68° 56.62'	-0.28	-0 30	-0.47	-0 39	0.2	0.2	--	--	0.5	333°	--	--	0.5	164°
on Portsmouth Harbor Entrance, p.16																		
571	Muscongus Sound		43° 56.5'	69° 26.9'	Current weak and variable								0.6	350°			1.0	215°
576	Damariscotta River, off Cavis Point		43° 52.5'	69° 35.0'	-0.34	-0 35	-1.32	-1 20	0.5	0.7	--	--	0.8	005°	--	--	1.1	200°
581	Sheepscoot River, off Barter Island		43° 54.0'	69° 41.5'	-0.38	-0 53	-1.23	-0 35	0.7	0.7	--	--	1.7	327°	--	--	1.8	152°
586	Lowe Point, NE of, Sasanoa River		43° 51.1'	69° 43.3'	-0.38	+0 18	-0.54	-0 29	1.5	1.2	--	--	3.0	290°	--	--	3.5	155°
591	Lower Hell Gate, Knubble Bay <2>		43° 52.6'	69° 43.8'	-0.13	+0 46	-0.54	+0 04	2.6	2.3	--	--	1.0	307°	--	--	0.8	142°
596	Upper Hell Gate, Sasanoa River		43° 53.7'	69° 46.3'	+3.41	+2 57	+1.12	+2 01	0.9	0.5	--	--			--	--		
KENNEBEC RIVER																		
601	Hunniwell Point, northeast of		43° 45.4'	69° 46.9'	+0.15	+0 21	-0.03	+0 22	2.1	1.9	--	--	2.4	332°	--	--	2.9	151°
606	Bald Head, 0.3 mile southwest of		43° 48.1'	69° 47.6'	+0.33	+0 37	-0.12	+0 21	1.4	1.5	--	--	1.6	321°	--	--	2.3	153°
611	Bluff Head, west of		43° 51.3'	69° 47.8'	+0.43	+0 18	+0.18	+0 22	2.0	2.3	--	--	2.3	014°	--	--	3.4	184°
616	Fiddler Ledge, north of		43° 52.8'	69° 47.8'	+0.57	+1 21	+0.14	+0 46	1.6	1.7	--	--	1.9	267°	--	--	2.6	113°
621	Doubling Point, south of		43° 52.8'	69° 48.4'	+0.38	+0 58	+0.15	+0 51	2.2	2.0	--	--	2.6	300°	--	--	3.0	127°
626	Lincoln Ledge, east of		43° 53.8'	69° 48.6'	+0.42	+0 54	+0.15	+0 32	1.6	1.9	--	--	1.9	359°	--	--	2.8	174°
631	Bath, 0.2 mile south of bridge <3>		43° 54.5'	69° 48.5'	+0.39	+1 37	+0.35	+0 21	0.9	1.0	--	--	1.0	003°	--	--	1.5	177°
CASCO BAY																		
636	Broad Sound, west of Eagle Island	15	43° 42.7'	70° 03.8'	-1.06	-0 56	-1.35	-1 01	0.8	0.9	--	--	0.9	010°	--	--	1.3	168°
641	Hussey Sound, SW of Overset Island	25	43° 40.27'	70° 10.52'	-1.18	-1 09	-1.06	-1 32	0.9	0.8	--	--	1.1	316°	--	--	1.2	153°
	do.	40	43° 40.27'	70° 10.52'	-1.29	-1 10	-1.14	-1 34	0.9	0.7	--	--	1.1	318°	--	--	1.1	155°
	do.	40	43° 40.45'	70° 10.78'	-1.48	-1 07	-1.13	-1 34	0.9	0.6	0.1	228°	1.1	314°	0.3	200°	1.0	154°
646	Hussey Sound, SE of Pumpkin Nob	40	43° 40.45'	70° 10.78'	-2.11	-1 20	-1.40	-1 16	1.0	0.6	0.1	068°	1.2	346°	0.1	066°	0.9	168°
651	Hussey Sound, east of Crow Island	40	43° 41.33'	70° 10.79'	-2.08	-0 33	-1.03	-1 26	0.8	0.5	0.1	114°	0.9	016°	--	--	0.8	197°
656	Chebeag Bar Channel		43° 45'	70° 08'	Current weak and variable													
661	Portland Hbr. ent., SW of Cushing Island	19	43° 37.9'	70° 12.7'	-1.33	-1 02	-1.28	-1 00	0.9	0.7	--	--	1.0	322°	--	--	1.1	154°
666	Portland Bridge, center of draw		43° 36.7'	70° 15.5'	-0.56	-0 08	-0.46	-0 17	0.8	0.7	--	--	0.9	225°	--	--	1.0	050°
671	Portland Breakwater Light, 0.3 mi. NW of <1><4>		43° 39.5'	70° 14.5'	--	-0 38	--	-1 09	0.3	0.3	--	--	0.4	250°	--	--	0.5	048°
676	Grand Trunk Wharves, off ends <1>		43° 39.5'	70° 14.7'	--	-1 36	--	-1 52	0.5	0.3	--	--	0.6	250°	--	--	0.4	040°
681	Diamond Island Ledge, midchannel SW of		43° 39.6'	70° 13.5'	-1.10	-1 03	-1.19	-1 08	0.8	0.6	--	--	0.9	300°	--	--	0.9	150°
PORTSMOUTH HARBOR																		
686	Odiornes Point, NNE of	15	43° 02.60'	70° 42.30'	+1.23	+1 54	+0.41	+2 13	0.4	0.6	--	--	0.5	339°	--	--	0.8	183°
691	Odiornes Point, northeast of	15	43° 03.00'	70° 42.10'	+0.09	+0 14	+0.29	+1 03	0.5	0.7	0.1	238°	0.6	320°	0.1	058°	1.0	156°
696	Kitts Rocks, WSW of <55>	15	43° 03.10'	70° 41.80'	--	-0 04	+0.00	-0 04	0.6	0.5	0.2	191°	0.7	314°	0.1	058°	0.8	133°
701	Little Harbor entrance	3d	43° 03.32'	70° 42.94'	-1.05	-0 30	-1.04	-1 19	0.7	0.8	--	--	0.8	321°	--	--	1.2	107°
	do.	12d	43° 03.32'	70° 42.94'	-1.58	-0 36	-1.09	-1 23	0.6	0.7	--	--	0.7	316°	--	--	1.0	122°
706	Whaleback Reef, west of	15	43° 03.50'	70° 42.32'	+0.09	+0 27	+0.03	+0 10	0.6	1.0	--	--	0.7	340°	--	--	1.5	144°
711	PORTSMOUTH HARBOR ENTRANCE	8d	43° 03.74'	70° 42.32'	-0.34	-0 30	+0.03	+0 07	1.0	0.9	0.1	282°	1.2	342°	--	--	1.5	194°
	do.	25d	43° 03.74'	70° 42.32'	-1.03	-0 49	-0.03	+0 04	0.9	0.6	0.1	082°	1.0	346°	0.1	092°	1.3	196°
	do.	44d	43° 03.74'	70° 42.32'	+0.12	+0 09	+0.23	+0 40	1.0	0.8	0.2	291°	1.2	358°	0.1	278°	0.9	178°
716	Wood Island, northwest of	15	43° 03.95'	70° 42.30'	+0.24	+0 43	+0.01	+0 20	1.3	1.3	0.1	213°	1.6	328°	0.2	043°	1.3	199°
721	Fort Point	6d	43° 04.47'	70° 42.40'	-0.14	+0 19	+0.00	+0 15	1.4	1.1	0.2	221°	1.7	328°	0.2	052°	2.0	098°
	do.	19d	43° 04.47'	70° 42.40'	-0.44	+0 29	+0.09	+0 07	1.4	1.1	0.2	221°	1.6	323°	0.2	047°	1.6	104°
	do.	39d	43° 04.47'	70° 42.40'	-0.24	+0 44	+0.26	+0 45	1.2	0.6	0.1	255°	1.4	257°	0.1	067°	0.7	138°
726	Salamander Point, north of	15	43° 04.58'	70° 43.02'	+0.24	+0 44	+0.26	+0 45	1.2	0.6	--	--	1.4	323°	--	--	0.8	091°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS					
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb		
	MASSACHUSETTS COAST—cont. Time meridian, 75° W	ft	North	West	h	m	h	m			knots	Dir.	knots	Dir.		
886	Nahant, 1.8 n.mi. NE of East Point	10	42° 26.00'	70° 52.02'	+0.32	+0.49	+1.04	+1.15	+1.00	0.6	0.6	252°	0.1	291°	0.7	144°
	do.	45	42° 26.00'	70° 52.02'	-0.21	+0.49	+1.15	+1.15	-0.31	0.3	0.2	250°	—	—	0.2	070°
891	do.	80	42° 26.00'	70° 52.02'	-0.25	+1.04	+1.15	+1.15	-0.31	0.2	0.1	329°	—	—	0.2	077°
	Nahant, 0.4 n.mi. east of East Point	15	42° 25.23'	70° 53.63'	+0.04	-0.41	+0.08	+0.22	+0.22	0.4	0.5	205°	—	—	0.6	045°
896	do.	25	42° 25.23'	70° 53.63'	+0.03	-0.41	+0.08	+0.22	+0.22	0.4	0.4	198°	—	—	0.5	027°
	Nahant, 1 n.mi. SE of East Point	45	42° 23.83'	70° 51.17'	+0.04	+1.04	+1.13	+1.13	+0.14	0.3	0.2	261°	—	—	0.3	074°
901	do.	70	42° 23.83'	70° 51.17'	-0.22	-0.04	+0.19	+0.19	-0.01	0.2	0.2	261°	—	—	0.2	090°
	Pea Island, 0.4 n.mi. southeast of	15	42° 24.63'	70° 54.13'	+0.34	+0.55	+0.42	+0.42	-0.01	0.5	0.4	239°	—	—	0.5	063°
	do.	25	42° 24.63'	70° 54.13'	+0.34	+0.34	+0.57	+0.57	-0.29	0.4	0.3	224°	—	—	0.4	048°
	do.	65	42° 24.63'	70° 54.13'	-0.37	-0.59	+0.14	+0.14	-0.31	0.3	0.3	271°	—	—	0.3	035°
906	Bass Point, 1.2 n.mi. southeast of	10	42° 24.12'	70° 55.07'	-0.22	+1.20	+0.58	+0.58	-0.14	0.7	0.6	332°	—	—	0.7	066°
	do.	45	42° 24.12'	70° 55.07'	-0.29	-0.10	+0.52	+0.52	-0.29	0.3	0.2	351°	—	—	0.3	086°
	do.	60	42° 24.12'	70° 55.07'	-0.29	-0.10	+0.31	+0.31	-0.59	0.2	0.2	250°	—	—	0.2	091°
911	Bass Point, 0.5 n.mi. SSW of	15	42° 24.57'	70° 56.53'	See Table 5.	See Table 5.	See Table 5.	See Table 5.	See Table 5.							
916	Bass Point, 0.7 n.mi. west of	10	42° 25.13'	70° 57.25'	-0.02	-0.26	+1.32	+1.32	+0.46	0.4	0.4	033°	—	—	0.5	219°
921	Little Nahant Cupola, 0.6 n.mi. west of	10	42° 25.87'	70° 56.83'	+0.04	-0.17	+1.00	+1.00	+0.27	0.5	0.4	013°	—	—	0.5	203°
926	Sand Point, Black Marsh Channel	10	42° 27.28'	70° 56.78'	+0.29	-0.26	+2.35	+2.35	+1.25	0.2	0.2	274°	—	—	0.2	090°
931	Lynn Harbor	10	42° 26.58'	70° 56.78'	+0.05	+0.19	+1.08	+1.08	+0.41	0.4	0.5	009°	—	—	0.6	198°
936	Point of Pines, 0.5 n.mi. south of	6	42° 25.97'	70° 57.53'	+0.43	+0.29	+1.00	+1.00	+0.34	0.8	1.0	296°	—	—	1.2	131°
941	Point of Pines, 0.1 n.mi. northeast of	6	42° 26.52'	70° 57.62'	-0.01	+1.05	+0.26	+0.26	-0.02	0.5	0.6	226°	—	—	0.8	035°
946	Finn's Ledge Bell, 0.2 n.mi. west of	10	42° 22.17'	70° 55.42'	-0.41	+0.50	+0.36	+0.36	+0.28	0.3	0.4	229°	—	—	0.5	033°
	do.	25	42° 22.17'	70° 55.42'	-0.11	+0.19	+0.31	+0.31	+1.46	0.4	0.3	103°	—	—	0.2	297°
951	Winthrop Head, 1.1 n.mi. east of	10	42° 21.93'	70° 55.90'	-0.52	-0.57	-0.14	-0.14	-0.25	0.8	1.0	112°	—	—	3.00°	102°
956	Lovell Island, 1.3 n.mi. north of	10	42° 21.30'	70° 55.90'	-1.19	-0.59	-0.12	-0.12	-0.13	0.7	0.6	102°	—	—	0.1	135°
	do.	25	42° 21.30'	70° 55.90'												
	BOSTON HARBOR APPROACHES															
961	The Graves, 0.3 n.mi. SSE of	10	42° 21.60'	70° 52.00'	+0.16	+1.08	+1.21	+1.21	+0.19	0.5	0.5	227°	—	—	0.6	103°
	do.	45	42° 21.60'	70° 52.00'	-0.37	-0.52	-0.10	-0.10	-0.58	0.3	0.4	186°	—	—	0.5	085°
	do.	60	42° 21.60'	70° 52.00'	-0.49	-0.52	-0.16	-0.16	-1.23	0.2	0.3	252°	—	—	0.4	070°
966	Thieves Ledge	45	42° 19.28'	70° 50.28'	-0.15	-0.06	-0.40	-0.40	-1.37	0.2	0.2	030°	—	—	0.3	128°
971	Little Brewster Island, 1.5 n.mi. E of	10	42° 19.68'	70° 51.43'	+2.19	+0.41	-0.40	-0.40	+0.55	0.5	1.0	028°	—	—	0.6	337°
	do.	35	42° 19.68'	70° 51.43'	+0.53	-0.49	+0.03	+0.03	+1.30	0.3	0.4	236°	—	—	0.2	212°
	do.	60	42° 19.68'	70° 51.43'	-1.14	-1.23	+1.31	+1.31	-0.45	0.3	0.2	225°	—	—	0.2	047°
976	Hypocrite Channel	10	42° 20.95'	70° 53.63'	+0.13	+0.19	+0.49	+0.49	-0.31	0.8	0.8	265°	—	—	1.0	070°
981	Little Calf Island, 0.4 n.mi. NW of	10	42° 21.05'	70° 54.00'	+0.23	+0.04	-0.15	-0.15	-0.18	0.5	0.6	345°	—	—	0.1	290°
986	Boston Light, 0.2 n.mi. south of	10	42° 19.52'	70° 53.40'	+0.14	+0.19	+0.41	+0.41	+0.40	0.9	1.1	203°	—	—	1.4	100°
991	Point Allerton, 0.8 n.mi. NNW of	10	42° 19.28'	70° 53.25'	+0.25	+0.03	+0.46	+0.46	+0.05	1.0	1.1	270°	—	—	0.1	005°
	do.	25	42° 19.28'	70° 53.25'	+0.17	+0.13	+0.55	+0.55	+0.29	0.9	0.9	257°	—	—	1.1	086°
996	Point Allerton, 0.5 n.mi. NNW of	10	42° 19.05'	70° 53.10'	+0.14	+0.26	+0.41	+0.41	+0.11	0.9	1.0	280°	—	—	1.0	090°
	do.	25	42° 19.05'	70° 53.10'	+0.08	+0.29	+0.53	+0.53	+0.25	0.8	0.8	262°	—	—	1.3	079°
1001	Point Allerton, 0.4 n.mi. northwest of	10	42° 18.88'	70° 53.23'	-0.09	+0.53	+0.17	+0.17	-1.11	0.6	0.7	265°	—	—	0.9	080°
1006	Calf Island, 0.4 n.mi. west of	10	42° 20.33'	70° 54.38'	+0.02	+0.23	+0.10	+0.10	+0.13	0.5	0.5	198°	—	—	0.6	037°
	do.	25	42° 20.33'	70° 54.38'	-0.28	0.00	+0.16	+0.16	-1.36	0.5	0.3	203°	—	—	0.6	052°
	do.	45	42° 20.33'	70° 54.38'	-1.28	+0.04	+0.05	+0.05	-2.15	0.3	0.3	203°	—	—	0.3	020°
1011	Aldridge Ledge, 0.2 n.mi. north of	10	42° 20.97'	70° 54.80'	+0.22	+1.03	+0.43	+0.43	+0.02	0.8	1.0	139°	—	—	0.1	326°
	do.	25	42° 20.97'	70° 54.80'	+0.08	+0.35	+0.52	+0.52	+0.50	0.6	0.6	223°	—	—	0.7	042°
1016	Lovell Island and Calf Island, between	10	42° 20.35'	70° 54.80'	-0.08	-0.11	+0.24	+0.24	-0.01	0.6	0.8	325°	—	—	0.6	247°
1021	Black Rock Channel	10	42° 19.73'	70° 54.93'	-0.15	-0.10	-0.11	-0.11	-1.46	0.2	0.5	307°	—	—	0.9	116°
1026	Deer Island Light, 0.4 n.mi. NW of	35	42° 20.58'	70° 55.70'	+0.09	-0.11	+0.22	+0.22	-0.29	1.1	1.0	330°	—	—	1.2	259°
1031	Lovell Island, 0.4 n.mi. north of	10	42° 20.45'	70° 55.80'	-0.08	-0.14	+0.26	+0.26	-0.11	1.1	0.8	—	—	—	1.2	264°
	do.	25	42° 20.45'	70° 55.80'												

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	BOSTON HARBOR APPROACHES—cont. Time meridian, 75° W	ft	North	West	h	m	h	m			knots	Dir.	knots	Dir.
1036	Deer Island, 0.7 n.mi. ESE of	10	42° 20.65'	70° 56.30'	+0.27	+0.19	+0.38	+0.10	1.1	1.1	1.3	220°	1.1	048°
	do	35	42° 20.65'	70° 56.30'	-0.01	+0.11	+0.41	+0.20	1.0	0.7	1.1	221°	0.9	048°
1041	Deer Island Light, 0.8 n.mi. ESE of	10	42° 20.22'	70° 56.28'	-0.04	-0.20	+0.20	-1.23	0.8	0.8	0.9	233°	0.9	066°
1046	Deer Island Light, 0.4 n.mi. east of	10	42° 20.45'	70° 56.77'	+0.08	-0.13	+0.17	-0.16	0.8	0.8	0.9	240°	1.0	057°
	do				-0.11	+0.02			0.7	-	0.8	219°		
1051	Deer Island Light, 0.7 n.mi. ESE of	35	42° 20.45'	70° 56.77'	-0.32	+0.52	+0.44	+0.16	1.0	0.6	1.1	264°	0.8	053°
	do	35	42° 20.25'	70° 56.38'	-0.23	-0.10	+0.25	-1.01	0.9	0.5	1.0	233°	0.6	062°
	BOSTON HARBOR—PRESIDENT ROADS													
1056	BOSTON HARBOR (Deer Island Light)	10	42° 20.27'	70° 57.37'	+0.02	+0.19	+0.31	+0.13	0.4	0.4	1.1	254°	1.2	111°
1061	Deer Island Light, 0.3 n.mi. SSE of	35	42° 20.12'	70° 57.42'	-0.11	+0.46	+0.49	+0.28	1.3	0.9	1.4	265°	1.0	082°
	do	10	42° 20.12'	70° 57.42'	+0.06	+0.53	+0.43	+0.30	1.3	0.8	1.4	261°	1.0	090°
1066	Deer Island Light, 0.4 n.mi. SSE of	25	42° 19.97'	70° 57.42'	-0.02	+0.47	+0.52	+0.33	1.4	0.9	1.5	269°	1.2	073°
	do	10	42° 19.97'	70° 57.42'	+0.04	-0.26	-1.58	-1.08	0.4	0.5	0.4	351°	0.6	137°
1071	Deer Island, southwest of	10	42° 20.40'	70° 58.43'	-0.08	+0.30	+0.01	-0.44	0.6	0.5	0.6	302°	0.6	103°
1076	Long Island Head, 0.9 n.mi. NW of	35	42° 20.40'	70° 58.43'	-0.01	+1.21	+0.50	+0.33	0.4	0.3	0.4	304°	0.4	079°
	do	10	42° 20.83'	70° 58.65'	-0.27	-1.11	-1.32	-3.04	0.4	0.4	0.4	327°	0.5	107°
1081	Deer Island Flats	10	42° 21.12'	70° 58.74'	-0.05	+0.19	+0.31	+0.13	0.4	0.4	1.3	312°	0.5	134°
1086	Deer Island Light, 1.3 n.mi. NW of	10	42° 21.77'	70° 59.22'	+0.52	+1.14	+2.10	+1.05	1.2	0.7	1.3	254°	0.8	086°
1091	Snake Island, southwest of	10	42° 19.97'	70° 58.43'	+0.04	+1.33	+1.55	+0.23	1.1	0.3	1.2	273°	0.4	082°
1096	Deer Island Light, 1.0 n.mi. WSW of	35	42° 19.35'	70° 58.45'	-0.04	+0.04	-0.34	-0.22	0.5	0.5	0.5	217°	0.4	038°
1101	Spectacle I. and Long I., between	10	42° 18.98'	70° 59.15'	-0.13	-1.05	-0.52	-1.46	0.4	0.4	0.1	349°	0.1	180°
1106	Spectacle Island, 0.2 n.mi. south of	10	42° 19.95'	70° 59.13'	+0.37	+1.40	+1.42	+0.37	1.1	0.7	1.2	271°	0.2	359°
1111	Spectacle Island, 0.3 n.mi. north of	35	42° 19.95'	70° 59.13'	-0.07	+1.32	+1.31	+0.31	0.8	0.5	0.9	280°	0.6	086°
	do	10	42° 20.10'	70° 59.27'	+0.21	+1.09	+1.26	+0.29	0.6	0.5	0.7	287°	0.1	007°
1116	Spectacle Island, 0.7 n.mi. north of	25	42° 20.10'	70° 59.27'	-0.03	+0.56	+1.26	+0.29	0.6	0.5	0.9	280°	0.2	082°
	do	10	42° 19.83'	70° 59.27'	+0.17	+1.40	+1.20	+0.52	1.0	0.7	1.1	277°	0.1	007°
1121	Spectacle Island, 0.1 n.mi. north of	25	42° 19.83'	70° 59.27'	-0.11	+1.32	+1.20	-0.03	0.8	0.5	0.9	280°	0.8	080°
	do	10	42° 19.25'	70° 59.57'	-1.40	-3.54	-2.30	-2.56	0.2	0.3	0.2	306°	0.2	045°
1126	Spectacle I. and Thompson I., between	10	42° 19.97'	70° 59.90'	-0.28	+1.31	+1.10	-0.20	0.7	0.5	0.8	281°	0.2	086°
1131	Thompson Island, 0.7 n.mi. NNE of	35	42° 19.97'	70° 59.90'	-1.04	+1.31	+0.48	-0.40	0.4	0.2	0.5	277°	0.3	091°
	do	10	42° 20.33'	71° 00.22'	+0.36	+1.31	+1.30	+1.12	0.6	0.5	0.6	303°	0.2	061°
1136	Fort Independence, 0.3 n.mi. east of	10	42° 20.63'	71° 00.40'	-0.12	-0.25	-0.32	+0.01	0.4	0.5	0.4	288°	0.1	006°
1141	Fort Independence, 0.4 n.mi. NW of	10	42° 20.63'	71° 00.40'										
1146	South Boston, Reserved Channel	10	42° 20.57'	71° 01.97'										
1151	South Boston, Pier 4, 0.2 n.mi. NNE of	10	42° 21.13'	71° 01.85'	+0.38	+0.56	+0.16	+1.13	0.3	0.3	0.3	299°	0.3	118°
	do	25	42° 21.13'	71° 01.85'	-0.14	+0.19	+1.42	+0.15	0.3	0.1	0.4	030°	0.2	120°
1156	Charles River	10	42° 22.18'	71° 03.38'										
	do	10	42° 22.55'	71° 02.80'	+1.35	+0.50	+0.28	+0.16	0.2	0.3	0.2	017°	0.4	194°
1161	East Boston, Pier 10, southeast of	25	42° 22.55'	71° 02.80'	+0.01	+1.05	+1.23	+0.51	0.3	0.2	0.3	030°	0.2	193°
	do	10	42° 23.07'	71° 02.53'	+0.02	-0.26	+0.43	-0.46	0.2	0.2	0.2	048°	0.2	240°
1166	Chelsea River, west of bascule bridge	10	42° 23.07'	71° 02.53'	+0.29	-0.15	+0.37	-0.04	0.2	0.2	0.2	088°	0.3	272°
1171	Chelsea River, below bascule bridge	10	42° 23.03'	71° 01.70'	+0.31	-0.10	-0.46	-0.16	0.1	0.1	0.1	267°	0.1	093°
1176	Mystic River Bridge, 0.1 n.mi. west of	10	42° 23.15'	71° 03.02'	-0.20	+1.04	+0.22	-0.44	0.1	0.1	0.1	300°	0.1	098°
1181	Mystic River Bridge, northwest of	10	42° 23.15'	71° 02.95'										
1186	City Point, 0.8 n.mi. SSE of	10	42° 19.22'	71° 00.88'	+0.13	+0.34	+1.19	+1.03	0.5	0.5	0.6	248°	0.6	069°
1191	Squantum Point, 0.8 n.mi. northeast of	10	42° 18.63'	71° 01.70'	+0.18	+0.35	+1.16	+0.51	0.4	0.4	0.4	216°	0.5	036°
1196	Squantum Point, 0.4 n.mi. NNE of	10	42° 18.38'	71° 02.23'	+0.14	-0.06	+0.41	+0.52	0.4	0.4	0.4	266°	0.5	091°
1201	Neponset River	10	42° 18.25'	71° 02.58'	-0.25	-0.32	+0.45	+0.35	0.4	0.4	0.4	218°	0.4	025°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS							
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb				
	BOSTON HARBOR–NANTASKET ROADS Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.				
1206	Lovell Island, 0.1 n.mi. south of	10	42° 19.40'	70° 55.48'	+0 08	-1 54	-0 30	+0 17	0.6	0.9	0.2	205°	0.7	275°	0.2	169°	1.0	092°
	do.	24	42° 19.40'	70° 55.48'	-0 25	+1 08	-0 20	-1 01	0.4	--	--	--	0.4	263°	--	--	0.9	095°
1211	Georges Island, northeast of	10	42° 19.37'	70° 55.53'	-0 13	+0 19	-0 29	-2 10	0.5	--	0.2	191°	0.6	282°	0.2	183°	0.8	100°
1216	Georges Island, north of	25	42° 19.42'	70° 55.67'	-1 25	+0 15	-0 01	-1 46	0.4	--	--	--	0.6	279°	--	--	0.9	112°
1221	Gallops Island, 0.2 n.mi. SSE of	10	42° 19.38'	70° 55.93'	+0 01	+0 25	+0 01	+0 21	0.7	0.8	--	--	0.8	274°	--	--	1.0	062°
1226	Gallops Island, 0.1 n.mi. southeast of	10	42° 19.45'	70° 55.90'	-0 01	+0 16	+0 04	+0 27	0.8	0.9	--	--	0.8	305°	--	--	1.0	063°
1231	do.	35	42° 19.45'	70° 55.90'	-0 01	+0 38	+0 04	+0 27	0.9	0.8	--	--	0.9	225°	0.2	130°	1.0	063°
1236	Gallops Island, The Narrows	20	42° 19.62'	70° 56.03'	-1 25	-0 11	+1 13	-0 46	0.4	0.1	--	--	0.5	135°	--	--	0.9	052°
1241	Lovell Island, The Narrows	10	42° 19.67'	70° 56.03'	+0 43	+0 34	+1 00	-0 05	0.4	0.4	0.2	172°	0.6	138°	--	--	0.2	262°
	do.	10	42° 19.72'	70° 55.97'	+0 16	+0 26	+0 49	+0 29	0.4	1.0	0.2	232°	0.4	134°	--	--	0.5	293°
1246	Georges Island, 0.5 n.mi. ESE of	24	42° 19.72'	70° 55.97'	-0 04	+0 14	+1 22	+0 02	0.4	1.0	0.2	232°	0.4	136°	--	--	1.2	299°
1251	Georges Island, 0.4 n.mi. east of	10	42° 19.17'	70° 54.97'	+0 32	+0 46	+1 00	+0 13	0.9	1.0	0.2	165°	1.0	244°	--	--	1.2	065°
1256	Georges Island, 0.5 n.mi. southeast of	10	42° 19.12'	70° 54.97'	-0 17	+0 04	+0 08	+0 11	1.0	0.9	0.3	180°	1.0	248°	--	--	1.1	057°
	do.	25	42° 18.62'	70° 55.00'	-0 11	+0 56	+0 45	+0 03	1.1	1.2	0.2	132°	0.2	243°	0.2	151°	1.5	070°
1261	Georges Island, 0.3 n.mi. SSE of	10	42° 18.78'	70° 55.55'	+0 21	+0 24	+0 34	+0 41	1.0	1.0	0.1	159°	1.1	247°	0.4	126°	1.2	069°
	do.	35	42° 18.78'	70° 55.55'	+0 08	+0 55	+0 58	+0 02	0.9	0.7	0.2	145°	1.0	237°	0.2	346°	0.8	073°
1266	Georges Island, 0.4 n.mi. SSE of	10	42° 18.67'	70° 55.53'	+0 16	+0 53	+0 52	-0 03	1.2	0.8	0.2	145°	1.3	236°	0.3	161°	0.9	046°
	do.	35	42° 18.67'	70° 55.53'	+0 14	+0 56	+0 56	-1 40	--	1.0	--	--	1.2	240°	0.1	347°	0.9	074°
1271	Nubble Channel	10	42° 19.73'	70° 56.93'	-0 12	+0 45	+0 45	+0 36	1.1	0.8	0.1	282°	0.8	187°	0.1	347°	1.0	065°
1276	Georges Island, 0.2 n.mi. WSW of	10	42° 19.02'	70° 56.10'	--	See Table 5	--	+0 43	0.7	0.6	--	--	0.1	282°	--	--	0.8	006°
1281	Hull Gut	20	42° 19.02'	70° 56.10'	-0 10	+0 35	-0 01	+0 25	1.1	1.5	0.1	073°	1.2	163°	--	--	1.8	350°
1286	Peddocks Island, 0.2 n.mi. north of	25	42° 18.20'	70° 55.60'	-0 09	+0 40	-0 01	+0 25	1.2	1.6	0.1	073°	1.3	153°	--	--	2.0	354°
1291	Peddocks Island, 0.3 n.mi. northwest of	25	42° 18.32'	70° 56.00'	+0 37	+1 22	+1 20	-0 29	0.9	0.6	0.1	337°	1.0	246°	--	--	0.7	257°
	do.	25	42° 18.40'	70° 56.13'	+0 51	+1 25	+1 25	+0 56	0.9	0.5	0.1	337°	1.0	255°	0.1	178°	0.6	060°
	do.	40	42° 18.40'	70° 56.13'	-0 08	+1 09	+1 32	+0 15	0.9	0.5	0.2	342°	1.1	245°	--	--	1.0	060°
1296	Rainsford I. and Windmill Pt., between	10	42° 18.40'	70° 56.13'	+0 37	+0 54	+0 34	+0 46	0.7	0.8	--	--	1.0	261°	--	--	0.6	055°
1301	Gallops Island, 0.5 n.mi. southwest of	25	42° 18.52'	70° 56.32'	+0 22	+0 19	+1 36	+0 05	0.7	0.4	--	--	0.8	251°	0.3	168°	1.0	056°
1306	Rainsford Island, 0.2 n.mi. NE of	25	42° 19.13'	70° 56.82'	+0 50	+0 14	-0 57	+0 47	0.6	0.6	0.2	165°	0.8	256°	0.2	329°	0.5	053°
1311	Rainsford Island, 0.4 n.mi. SE of	20	42° 18.90'	70° 56.95'	-0 17	+0 18	-0 28	-1 10	0.4	0.3	--	--	0.6	238°	0.3	204°	0.7	074°
1316	Long I. and Rainsford I., between	10	42° 18.50'	70° 56.62'	+0 01	-0 49	+0 19	+1 01	0.5	0.4	--	--	0.5	237°	--	--	0.4	072°
1321	West Head, Peddocks I., 0.1 n.mi. W of	25	42° 18.70'	70° 57.78'	+0 31	+0 13	+0 39	+0 55	0.6	0.6	0.2	143°	0.6	237°	0.1	143°	0.5	084°
1326	Sunken Ledge, 0.2 n.mi. northwest of	10	42° 17.45'	70° 57.22'	-1 26	+0 38	+0 43	-0 01	0.6	0.7	--	--	0.5	237°	--	--	0.8	085°
1331	West Head, Long I., 0.4 n.mi. south of	20	42° 17.87'	70° 57.87'	+0 28	+0 24	+0 38	-0 02	0.3	0.4	0.2	299°	0.7	236°	0.2	127°	0.8	055°
1336	West Head, 0.4 n.mi. east of	20	42° 18.32'	70° 58.28'	+0 15	+1 00	+1 00	+0 25	0.5	0.4	--	--	0.5	231°	--	--	0.6	060°
1341	West Head, 0.2 n.mi. southwest of	10	42° 18.15'	70° 57.18'	-0 09	+1 54	-0 25	-1 31	0.3	1.2	0.3	310°	0.5	231°	--	--	0.5	043°
	do.	10	42° 18.15'	70° 57.18'	-0 04	+0 21	+1 05	+0 09	1.2	1.2	0.3	310°	0.3	259°	--	--	1.4	080°
	do.	10	42° 18.15'	70° 57.18'	-0 04	+0 21	+1 05	+0 09	1.2	1.2	0.3	310°	0.3	259°	--	--	1.4	080°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	BOSTON HARBOR—NANTASKET ROADS—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
1346	Nut Island, 0.4 n.mi. NNE of	10	42° 17.08'	70° 57.22'	+0 20	+0 25	+1 06	+0 43	1.2	1.2	0.2	223°	1.3	158°
	do	20	42° 17.40'	70° 57.22'	+0 20	+0 29	+1 13	+0 41	1.1	1.2	0.1	220°	1.2	155°
1351	Nut Island, 0.2 n.mi. NNE of	10	42° 16.98'	70° 57.32'	+0 40	+0 35	+1 20	+0 43	1.1	1.0	0.1	245°	1.2	146°
	do	20	42° 16.98'	70° 57.32'	+0 39	+0 38	+1 30	+0 28	0.9	0.8	0.1	216°	1.0	131°
1356	Peddocks Island, west of	10	42° 17.23'	70° 57.92'	+0 33	+0 15	+1 01	-0 31	0.4	0.3	0.2	305°	0.5	187°
1361	Moon Head, 0.9 n.mi. southeast of	10	42° 17.50'	70° 58.93'	+0 39	+1 04	+1 32	+0 44	0.3	0.3	0.2	314°	0.3	227°
1366	Squantum, 0.3 n.mi. southeast of	8	42° 17.40'	71° 00.10'	Current weak and variable									
	BOSTON HARBOR—HINGHAM BAY													
1371	Weir River entrance	10	42° 16.53'	70° 52.83'	+0 18	+0 34	+0 47	+0 42	0.7	0.6	--	--	0.7	076°
1376	Strawberry Hill, 0.4 n.mi. west of	6	42° 17.40'	70° 53.60'	Current weak and variable									
1381	Crow Point, 0.2 n.mi. north of	10	42° 15.97'	70° 53.70'	+0 14	-0 41	+0 09	+1 42	0.3	0.2	--	--	0.3	146°
1386	Bumkin Island, 0.1 n.mi. west of	10	42° 16.85'	70° 54.37'	+0 07	+1 13	+1 02	+1 04	0.6	0.6	0.1	248°	0.6	166°
	do	20	42° 16.85'	70° 54.37'	-0 14	+1 11	+1 02	+0 53	0.5	0.5	0.1	248°	0.5	161°
1391	Windmill Point, 0.7 n.mi. SSE of	10	42° 17.55'	70° 54.97'	+0 07	+0 35	+0 16	-1 29	1.0	0.4	--	--	1.1	128°
	do	25	42° 17.55'	70° 54.97'	+0 02	+0 50	+1 48	+1 01	0.9	0.1	--	--	1.0	136°
1396	Bumkin Island, 0.4 n.mi. west of	10	42° 16.83'	70° 54.75'	-0 14	+0 46	+0 28	-2 46	0.5	0.2	--	--	0.5	195°
1401	Peddocks Island, east of	10	42° 17.50'	70° 55.52'	See Table 5.									
	do	20	42° 17.50'	70° 55.52'	See Table 5.									
1406	Sheep Island, 0.3 n.mi. west of	10	42° 16.87'	70° 55.98'	+0 20	+1 09	+1 20	+1 01	0.9	0.4	0.2	245°	1.0	075°
	do	25	42° 16.87'	70° 55.98'	+1 19	+1 09	+1 37	-0 10	0.8	0.3	0.2	150°	0.7	082°
1411	Grape Island and Lower Neck, between	10	42° 15.87'	70° 55.50'	-0 14	-1 21	+0 11	+0 23	0.6	0.7	--	--	0.8	094°
1416	Grape Island	10	42° 16.08'	70° 55.88'	-0 38	+0 08	+0 43	-0 06	0.4	0.3	--	--	0.4	203°
1421	Pig Rock, north of	10	42° 16.93'	70° 56.45'	+0 49	-0 41	-0 10	+0 59	0.6	0.8	--	--	0.7	078°
	do	25	42° 16.93'	70° 56.45'	+0 44	+0 19	+1 26	+0 34	0.5	0.6	--	--	0.6	082°
1426	Pig Rock, northwest of	20	42° 16.88'	70° 56.55'	+1 13	+0 47	+1 58	+1 12	0.9	0.7	--	--	1.0	085°
1431	Stodders Neck, Weymouth Back River	10	42° 15.20'	70° 55.65'	-0 23	+0 49	+0 39	-0 31	0.5	0.2	--	--	0.5	268°
1436	Gull Point, 0.4 n.mi. ESE of	10	42° 15.18'	70° 56.82'	-0 10	-0 37	+0 13	+0 07	0.4	0.4	--	--	0.4	229°
	do	25	42° 15.18'	70° 56.82'	-0 40	-0 47	+0 47	+0 19	0.4	0.1	--	--	0.4	235°
1441	Kings Cove, off	10	42° 14.83'	70° 57.65'	+0 13	-1 26	+0 02	-0 46	0.3	0.3	--	--	0.1	014°
1446	Germantown Point	20	42° 14.78'	70° 57.88'	+0 14	+0 49	+0 54	+0 13	0.3	0.3	--	--	0.3	269°
1451	Pine Point, southeast of	10	42° 14.28'	70° 58.08'	-0 58	+1 00	+0 53	-1 16	0.2	0.1	--	--	0.2	149°
1456	Philip Head, Town River Bay	10	42° 15.00'	70° 58.22'	+0 20	+1 28	+1 16	+0 29	0.3	0.2	--	--	0.4	289°
1461	Hole Point Reach, Town River	10	42° 15.23'	70° 58.78'	Negligible current									
	CAPE COD BAY													
1466	Race Point, 7 miles north of		42° 11'	70° 16'	-0 01	-0 01	-0 01	-0 01	1.4	1.2	--	--	1.5	290°
1471	Race Point, 1 mile northwest of		42° 05'	70° 15'	-0 06	-0 06	-0 06	-0 06	0.9	0.8	--	--	1.0	226°
1476	Provincetown Harbor		42° 03'	70° 10'	+0 04	+0 04	+0 04	+0 04	0.5	0.3	--	--	0.6	315°
1481	Wellfleet Harbor		41° 54'	70° 03'	+0 09	+0 09	+0 09	+0 09	0.6	0.4	--	--	0.7	020°
1486	Barnstable Harbor		41° 43.6'	70° 16.4'	+0 19	+0 58	+0 22	+0 29	1.1	1.2	--	--	1.2	192°
1491	Sandwich Harbor		41° 46'	70° 29'	Current weak and variable									
	do		--	--	Current weak and variable									
1496	Cape Cod Canal (see Index)		41° 48'	70° 31'	Current weak and variable									
1501	Sagamore Beach		41° 51'	70° 30'	+0 14	+0 14	+0 14	+0 14	0.3	0.2	--	--	0.3	200°
1506	Ellisville Harbor, 1 mile east of		41° 56'	70° 32'	+0 04	+0 04	+0 04	+0 04	1.0	0.7	--	--	1.1	155°
1511	Manomet Point		42° 00'	70° 35'	-0 06	-0 06	-0 06	-0 06	1.3	0.8	--	--	1.4	250°
1516	Gurnet Point, 1 mile east of		41° 58'	70° 39'	+0 04	+0 04	+0 04	+0 04	0.5	0.3	--	--	0.5	245°
1521	Plymouth Harbor		41° 58'	70° 39'	-0 21	-0 21	-0 21	-0 21	1.0	0.8	--	--	1.1	180°
	Farnham Rock, 1 mile east of		42° 06'	70° 35'	-0 21	-0 21	-0 21	-0 21	1.0	0.8	--	--	1.1	180°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS				
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb	
	MASSACHUSETTS COAST—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.	
1526	Nauset Beach Light, 5 miles northeast of		41° 56'	69° 54'	See table 5.										
1531	Georges Bank and vicinity		—	—	See table 5.										
1536	Davis Bank		—	—	See table 5.										
1541	Monomoy Point, 23 miles east of		41° 35'	69° 30'	See table 5.										
1546	Nantucket Shoals		40° 37'	69° 37'	See table 5.										
1551	Nantucket Island, 28 miles east of		41° 20'	69° 21'	See table 5.										
1556	Old Man Shoal, Nantucket Shoals		41° 13.6'	69° 59.0'	See table 5.										
1561	Miacomet Pond, 3.0 miles SSE of		41° 11.4'	70° 05.8'	+1 23	+1 03	+1 17	+1 14	0.9	0.9	1.9	080°	—	1.6	225°
1566	Tuckernuck Island, 4.2 miles SSW of		41° 13.57'	70° 16.90'	+4 08	+2 03	+2 22	+2 16	0.6	0.8	1.3	080°	—	1.4	280°
1571	Martha's Vineyard, 1.4 miles S of <1>		41° 19.50'	70° 39.90'	—	+3 13	+2 17	+3 56	0.3	0.6	0.5	090°	—	1.0	280°
	NANTUCKET SOUND ENTRANCE														
1576	Pollock Rip Channel, east end		41° 33.9'	69° 55.4'	—0 14	—0 39	—0 23	—0 38	1.0	1.1	2.0	053°	—	1.8	212°
1581	POLLOCK RIP CHANNEL (Butler Hole)		41° 33'	69° 59'	—	—	—	—	—	—	2.0	037°	—	1.8	226°
1586	Great Round Shoal Channel		—	—	See table 5.										
	NANTUCKET SOUND														
1591	Monomoy Pt., channel 0.2 mile west of		41° 33.0'	70° 01.3'	0 00	+0 39	+0 18	—0 23	0.8	1.2	1.7	170°	—	2.0	346°
1596	Chatham Roads		41° 38.6'	70° 01.7'	+3 07	+1 29	+2 24	+4 28	0.3	0.6	0.5	335°	—	1.0	144°
1601	Stage Harbor, west of Morris Island		41° 39.4'	69° 58.5'	+1 28	+0 52	+0 27	+1 04	0.2	0.2	0.3	077°	0.1	0.3	269°
1606	Dennis Port, 2.2 miles south of		41° 37.0'	70° 06.9'	+1 22	+1 52	+1 09	+1 22	0.2	0.3	0.1	138°	0.1	0.5	275°
1611	Monomoy Point, 6 miles west of		41° 33.5'	70° 09.0'	+1 08	+1 10	+0 49	+0 59	0.6	0.8	1.3	080°	—	1.3	251°
1616	Handkerchief Lighted Whistle Buoy 'H'		41° 29.3'	70° 04.0'	+1 42	+1 49	+1 24	+1 44	0.4	0.4	0.3	110°	—	0.6	265°
1621	Hallmoon Shoal, 1.9 miles northeast of		41° 29.05'	70° 11.55'	+1 13	+1 23	+1 06	+1 11	0.5	0.6	1.1	088°	—	1.0	295°
1626	Hallmoon Shoal, 3.5 miles east of		41° 28.1'	70° 09.2'	+0 25	+1 37	+1 13	+0 33	0.6	0.7	1.1	029°	—	1.2	195°
1631	Great Point, 0.5 mile west of		41° 23.6'	70° 03.7'	+1 15	+1 23	+0 51	+1 08	0.4	0.5	0.8	066°	—	0.9	248°
1636	Great Point, 3 miles west of		41° 23.4'	70° 06.8'	+1 22	+1 34	+0 51	+1 10	0.5	0.5	0.3	000°	0.3	0.8	287°
1641	Tuckernuck Shoal, off east end		41° 24.3'	70° 10.4'	—	+1 43	—	+2 36	0.2	0.2	—	—	—	0.3	275°
1646	Biant Point, 2 miles NNW of <1>		41° 19.25'	70° 06.30'	+3 22	+1 55	+2 44	+3 58	0.6	0.9	1.2	171°	—	1.5	350°
1651	Nantucket Harbor entrance channel		41° 18.4'	70° 06.0'	+1 13	+1 12	+1 02	+1 15	0.3	0.2	0.6	094°	—	0.4	284°
1656	Eel Pt., Nantucket I., 2.5 miles NE of		41° 19.3'	70° 10.2'	+1 29	+0 45	+0 57	+0 56	0.6	0.9	1.1	108°	—	1.5	295°
1661	Muskeget I., channel 1 mile northeast of		41° 21.0'	70° 17.1'	+1 10	+0 23	+0 57	+0 18	0.6	0.6	1.1	108°	—	1.0	192°
1666	Muskeget Rock, 1.3 miles southwest of		41° 19.2'	70° 23.6'	+1 40	+0 38	+1 29	+1 02	1.9	1.9	3.8	021°	—	3.3	200°
1671	Muskeget Channel		41° 20.9'	70° 25.2'	+1 30	+1 04	+1 11	+0 32	0.6	0.6	1.3	075°	—	1.2	280°
1676	Wasque Point, 2.0 miles southwest of		41° 19.90'	70° 29.25'	+1 31	+1 04	+1 11	+1 15	0.5	0.5	0.9	280°	—	0.9	280°
1681	Long Shoal—Norton Shoal, between		41° 24.50'	70° 20.00'	+1 31	+1 12	+1 26	+1 13	0.7	0.6	1.4	100°	—	1.1	280°
1686	Cape Poge Lt., 1.7 miles SSE of		41° 24.0'	70° 25.6'	+0 58	—0 07	+0 49	+0 48	0.8	0.7	1.6	025°	—	1.1	260°
1691	Cross Rip Channel		41° 26.9'	70° 17.5'	+1 48	+1 48	+1 55	+1 59	0.6	0.5	1.3	091°	—	0.9	272°
1696	Cape Poge Lt., 3.2 miles northeast of		41° 27.5'	70° 24.0'	+2 42	+2 03	+2 33	+2 37	0.8	0.7	1.6	095°	—	1.2	300°
1701	Broken Ground—Horseshoe Shoal, between		41° 33.0'	70° 17.1'	+1 46	+1 55	+1 35	+1 20	0.5	0.5	0.2	000°	0.1	0.9	276°
1706	Point Gammon, 1.2 miles south of		41° 35.3'	70° 15.4'	+1 15	+1 03	+1 06	+1 02	0.5	0.6	1.1	107°	—	1.0	260°
1711	Hyannis Harbor, entrance off breakwater		41° 37.4'	70° 17.5'	+2 46	+0 53	+2 44	+4 22	0.5	0.8	0.9	004°	—	1.3	184°
1716	Lewis Bay entrance channel		41° 37.9'	70° 16.4'	+2 44	+2 33	+2 51	+3 35	0.3	0.4	0.7	062°	—	0.7	218°
1721	Cotuit Bay entrance (Bluff Point)		41° 36.6'	70° 25.8'	+1 47	+1 32	+1 44	+1 45	0.8	0.8	1.5	062°	—	1.4	245°
1726	Wreck Shoal—Eldridge Shoal, between		41° 32.0'	70° 25.7'	+2 48	+2 34	+2 38	+2 44	0.7	0.7	1.4	108°	—	1.2	268°
1731	Hedge Fence Lighted Gong Buoy 22		41° 29.0'	70° 29.0'	+2 13	+1 54	+1 26	+1 39	0.2	0.1	0.3	095°	—	0.2	250°
1736	Cape Poge Light, 1.4 miles west of		41° 25.45'	70° 29.00'	+0 25	—1 04	+0 35	—0 20	0.6	0.6	1.1	075°	—	1.1	270°
1741	Edgartown, Inner Harbor		41° 23.4'	70° 30.5'	+0 38	+1 58	+0 35	+1 08	0.3	0.3	0.6	070°	—	0.5	265°
					+1 58			+1 52	0.4	0.4	0.8	075°	—	0.7	260°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
NANTUCKET SOUND—cont. Time meridian, 75° W														
1746	Katama Pt., 0.6 mi. NNW of, Katama Bay	ft	North	West	+0 12	-0 43	+0 20	-0 31	0.3	0.3	0.6	325°	0.5	180°
1751	East Chop—Squash Meadow, between		41° 27.9'	70° 32.2'	+2 07	+1 46	+1 43	+1 57	0.2	0.1	0.3	325°	0.2	195°
1756	East Chop, 1 mile north of		41° 29.1'	70° 33.5'	+2 40	+1 52	+2 17	+2 11	0.2	0.2	0.4	325°	0.3	175°
1761	Vineyard Haven		41° 28.1'	70° 35.2'	Current weak and variable				1.1	1.3	2.2	116°	2.2	297°
1766	West Chop, 0.8 mile north of		41° 29.6'	70° 35.7'	+2 49	+1 58	+2 20	+2 35	1.6	1.8	3.1	096°	3.0	282°
1771	Hedge Fence—L'Hommedieu Shoal, between		41° 30.3'	70° 32.2'	+2 27	+1 38	+2 01	+1 52	1.0	1.3	2.2	276°	1.4	203°
1776	Waquoit Bay entrance		41° 32.9'	70° 31.8'	+3 21	+2 14	+3 40	+4 01	0.8	0.8	1.5	348°	2.1	203°
1781	L'Hommedieu Shoal, north of west end		41° 31.6'	70° 34.6'	+2 30	+2 03	+2 12	+2 11	1.2	1.4	2.3	080°	2.3	268°
1786	Nobska Point, 1.8 miles east of		41° 31.1'	70° 37.1'	+2 13	+1 45	+1 55	+1 49	1.2	1.0	2.3	063°	1.7	240°
VINEYARD SOUND														
1791	West Chop, 0.2 mile west of		41° 29.0'	70° 36.6'	+1 19	+1 34	+1 50	+1 16	1.3	0.8	2.7	059°	1.4	241°
1796	Nobska Point, 1 mile southeast of		41° 30.1'	70° 38.6'	+2 33	+2 15	+2 25	+2 19	1.3	1.4	2.6	071°	2.4	259°
1801	Norton Point, 0.5 mile north of		41° 28.1'	70° 39.9'	+1 55	+1 44	+2 01	+1 12	1.7	1.4	3.4	050°	2.4	240°
1806	Tarpaulin Cove, 1.5 miles east of		41° 28.3'	70° 43.5'	+2 49	+2 07	+2 12	+2 33	1.0	1.4	1.9	055°	2.3	232°
1811	Robinsons Hole, 1.2 miles southeast of		41° 26.1'	70° 46.8'	+2 30	+1 51	+2 11	+2 02	1.0	1.2	1.9	060°	2.1	240°
1816	Gay Head, 3 miles northeast of		41° 23.1'	70° 47.0'	+2 25	+1 50	+1 42	+2 11	0.5	0.8	0.9	081°	1.3	238°
1821	Menemsha Light <6>		41° 21.3'	70° 46.3'	+2 13	+0 54	+1 55	+1 17	0.6	0.7	1.1	074°	1.2	255°
1826	Gay Head, 3 miles north of		41° 24.1'	70° 51.2'	+1 30	+0 24	+1 42	+1 16	1.0	1.2	2.0	012°	2.0	249°
1831	Gay Head, 1.5 miles northwest of		41° 21.8'	70° 51.8'	See table 5.									
1836	Cuttyhunk Island, 3.2 miles southwest of		41° 23.1'	71° 00.1'	See table 5.									
1841	Browns Ledge		41° 19.8'	71° 05.9'	on Cape Cod Canal, p.24									
VINEYARD SOUND—BUZZARDS BAY														
1846	Woods Hole <59>		41° 30.8'	70° 40.2'	+0 29	+1 40	+1 17	+0 08	0.4	0.2	1.5	135°	1.1	318°
1851	South end		41° 31.2'	70° 41.1'	+0 20	+1 41	+0 55	+0 31	0.9	0.8	3.5	094°	3.6	276°
1856	North end		41° 31.5'	70° 41.6'	-0 29	+1 25	+1 09	-0 04	0.2	0.2	0.8	160°	0.7	007°
1861	Robinsons Hole		41° 26.7'	70° 48.2'	+1 14	+1 42	+1 20	+1 01	0.2	0.2	0.8	162°	1.0	339°
1866	South end		41° 27.0'	70° 48.4'	+1 30	+2 00	+1 02	+0 47	0.7	0.6	2.8	146°	2.9	316°
1871	Middle		41° 27.4'	70° 48.7'	+1 54	+2 00	+0 52	+1 17	0.2	0.3	1.0	161°	1.2	338°
1876	North end		41° 26.3'	70° 50.5'	+2 18	+1 42	+1 17	+0 53	0.5	0.4	1.9	140°	2.0	300°
1881	South end		41° 26.6'	70° 50.9'	+2 21	+2 00	+1 26	+0 41	0.6	0.5	2.5	167°	2.2	339°
1886	Middle		41° 27.1'	70° 51.0'	+2 42	+2 06	+1 44	+0 23	0.5	0.6	2.0	165°	2.6	002°
1891	North end		41° 25.4'	70° 54.5'	+2 03	+2 27	+1 02	+0 26	0.6	0.4	2.6	156°	1.7	312°
Canapitsit Channel														
BUZZARDS BAY <7>														
1896	Westport River entrance		41° 30.5'	71° 05.3'	+0 09	-0 05	-0 26	-1 13	1.1	1.5	2.2	290°	2.5	108°
1901	Gooseberry Neck, 2 miles SSE of		41° 27.1'	71° 01.1'	See table 5.									
1906	Ribbon Reef—Sow & Pigs Reef, between		41° 25.3'	70° 58.2'	-0 19	-1 31	-2 44	-1 54	0.4	0.7	0.8	062°	1.2	237°
1911	Penikese island, 0.8 mile northwest of		41° 27.9'	70° 56.2'	-1 37	-0 23	-0 55	-0 57	0.6	0.6	1.2	050°	1.1	254°
1916	Penikese island, 0.2 mile south of		41° 26.6'	70° 55.5'	-1 43	-0 15	-1 30	-2 39	0.4	0.5	0.7	093°	0.9	287°
1921	Gull I. and Nashawena I., between		41° 26.2'	70° 54.2'	-2 15	-0 57	-2 01	-2 41	0.5	0.6	0.9	091°	1.1	247°
1926	Weepecket Island, south of		41° 30.4'	70° 44.3'	-3 16	-1 07	-1 28	-2 27	0.4	0.4	0.8	069°	0.6	255°
1931	Quamissett Harbor entrance		41° 32.4'	70° 39.8'	Current weak and variable									
1936	West Falmouth Harbor entrance		41° 36.5'	70° 39.3'	Current weak and variable									
1941	Megansett Harbor		41° 38.8'	70° 39.2'	+0 26	-0 36	-0 06	-0 23	0.4	0.6	0.8	035°	1.0	216°
1946	Abieis Ledge, 0.4 mile south of		41° 41.1'	70° 40.4'	-1 43	-1 03	-1 32	-2 09	0.4	0.6	0.8	066°	1.1	190°
1951	Dumpling Rocks, 0.2 mile southeast of		41° 32.0'	70° 55.1'										

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS						
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb			
	BUZZARDS BAY <7>—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.			
1956	Appoganset Bay		41° 35'	70° 57'	on Pollock Rip Channel, p.32												
1961	Clarks Cove		41° 36'	70° 55'	Current weak and variable												
1966	New Bedford Harbor and approaches		41° 35.6'	70° 50.4'	Current weak and variable												
1971	West Island and Long Island, between		41° 34.0'	70° 48.6'	Current weak and variable												
1976	West Island, 1 mile southeast of	6	41° 37.1'	70° 50.2'	-0.43	-0.43	-1.28	-1.42	0.4	0.5	0.3	--	0.7	079°	0.8	203°	
1981	Nasketucket Bay		41° 38'	70° 47'	Current weak and variable												
1986	Mattapoiset Harbor		41° 41'	70° 44'	Current weak and variable												
1991	Sippican Harbor		41° 41'	70° 43.0'	-1.41	-0.31	-1.22	-1.23	0.3	0.4	0.3	--	0.6	022°	0.4	202°	
1996	Wareham River, off Long Beach Point		41° 44.0'	70° 43.0'	-1.49	-0.27	-1.22	-1.31	0.4	0.4	0.7	010°	0.6	010°	0.6	185°	
2001	Wareham River, off Barneys Point		41° 44.7'	70° 42.4'	on Cape Cod Canal, p.24												
2006	Onset Bay, south of Onset Island		41° 43.9'	70° 38.7'	Current weak and variable												
2011	Onset Bay, south of Wickets Island		41° 44.1'	70° 39.3'	Current weak and variable												
	CAPE COD CANAL																
2016	CAPE COD CANAL, railroad bridge		41° 44.5'	70° 36.8'	Daily predictions												
2021	Bourne Highway bridge		41° 45'	70° 35'	-0.03	-0.01	-0.03	-0.04	0.8	0.9	4.0	070°	4.5	250°	4.0	245°	
2026	Bourneale		41° 46'	70° 34'	-0.07	-0.03	-0.09	-0.10	0.8	0.8	3.3	065°	3.6	210°	3.6	210°	
2031	Sagamore Bridge		41° 46'	70° 33'	-0.09	-0.04	-0.11	-0.13	0.7	0.6	2.8	095°	2.5	275°	2.5	275°	
2036	Cape Cod Canal, east end	15	41° 46.5'	70° 30.0'	-0.13	-0.06	-0.17	-0.19	0.6	0.6	2.4	065°	2.6	245°	2.6	245°	
	NARRAGANSETT BAY <8>																
2041	Sakonnet River (except Narrows)		--	--	Current weak and variable												
2046	Black Point, SW of Sakonnet River	15	41° 30.4'	71° 13.2'	-2.54	-1.55	-2.13	-2.26	0.2	0.2	0.4	012°	0.4	194°	1.5	180°	
2051	Almy Point Bridge, south of Sakonnet River	15	41° 37.3'	71° 13.2'	-3.00	-2.10	-2.30	-3.13	0.2	0.8	2.7	010°	2.7	190°	2.7	190°	
2056	Tiverton, Stone bridge, Sakonnet R. <9>		41° 37.5'	71° 13.0'	-2.58	-5.02	-2.26	-3.06	1.4	1.6	0.6	010°	2.5	010°	2.5	010°	
					-2.54	-0.36	-0.17	-0.19	1.3	1.3	2.5	010°	2.5	010°	2.5	010°	
2061	Tiverton, RR. bridge, Sakonnet R. <10>		41° 38.3'	71° 12.9'	-3.26	-5.06	-2.48	-3.41	1.2	1.4	2.3	000°	2.4	180°	2.4	180°	
					-3.04	-1.15	-2.32	-2.41	--	--	--	--	--	--	--	--	
2066	Common Fence Point, northeast of	10	41° 39.5'	71° 12.5'	-2.38	-4.50	-2.32	-2.41	0.1	0.2	0.2	026°	0.3	210°	0.3	210°	
					-0.58	-0.38	-1.20	-1.04	0.1	0.1	0.1	046°	0.1	046°	0.1	046°	
2071	Brenton Point, 1.4 n.mi. southwest of	7	41° 25.9'	71° 22.6'	-1.03	-0.38	-1.20	-1.04	0.2	0.4	0.4	347°	0.6	170°	1.2	237°	
2076	Castle Hill, west of, East Passage	15	41° 27.4'	71° 22.7'	-0.06	-0.42	-1.07	-0.29	0.4	0.7	0.7	013°	1.2	237°	1.2	237°	
2081	Bull Point, east of	10	41° 28.8'	71° 21.0'	-1.10	-0.47	-1.10	-1.33	0.6	0.8	1.2	001°	1.5	206°	1.5	206°	
2086	Mackerel Cove		41° 28.5'	71° 22.8'	Current weak and variable												
2091	Newport Harbor, S and E of Goat Island	15	41° 29'	71° 20'	-1.57	-0.07	-1.17	-2.08	0.4	0.5	0.8	310°	1.0	124°	1.0	124°	
2096	Rose Island, northeast of	15	41° 30.2'	71° 19.9'	-1.38	-0.26	-1.38	-1.39	0.4	0.5	0.7	007°	1.0	190°	1.0	190°	
2101	Rose Island, northwest of	15	41° 30.4'	71° 21.1'	-0.42	-0.34	-1.20	-1.28	0.4	0.6	0.7	001°	1.0	172°	1.0	172°	
2106	Gould Island, west of	7	41° 29.8'	71° 21.0'	-1.40	-1.28	-1.14	-1.16	0.3	0.4	0.5	033°	0.7	217°	0.7	217°	
2111	Gould Island, southeast of	7	41° 31.5'	71° 20.2'	-1.40	-0.32	-1.13	-1.07	0.3	0.4	0.6	351°	0.8	193°	0.8	193°	
2116	Gould Island, west of	15	41° 31.9'	71° 21.5'	-1.56	-1.13	-0.50	-1.37	0.4	0.4	0.8	040°	0.6	236°	0.6	236°	
2121	Dyer Island-Carrs Point (between)	15	41° 34.5'	71° 17.8'	-2.05	-0.24	-1.18	-1.13	0.2	0.2	0.1	111°	0.1	106°	0.1	106°	
2126	Conanicut Point, ENE of	15	41° 34.5'	71° 20.5'	-2.05	-0.24	-1.18	-1.13	0.2	0.2	0.8	023°	1.0	216°	1.0	216°	
2131	Dyer Island, west of	7	41° 35.2'	71° 18.5'	-1.04	-0.46	-0.53	-1.34	0.4	0.6	0.3	021°	1.1	047°	1.1	047°	
2136	QUONSET POINT	16	41° 35.01'	71° 23.74'	Daily Predictions, p.28												
2141	Mount Hope Bridge	7	41° 38.4'	71° 15.5'	-1.22	-1.34	-1.08	-0.58	0.6	0.8	0.1	105°	0.1	102°	0.1	102°	
2146	Hog Island, northwest of	10	41° 38.8'	71° 17.7'	-2.16	-0.04	-0.30	-1.04	0.2	0.2	0.4	011°	1.1	047°	1.1	047°	
2151	Common Fence Point, west of	10	41° 39.0'	71° 14.7'	-1.13	+0.08	-1.00	-0.37	0.2	0.4	0.5	050°	0.5	050°	0.5	050°	

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	NARRAGANSETT BAY <8>—cont. Time meridian, 75° W		North	West										
2156	Mount Hope Point, northeast of	10	41° 40.8'	71° 12.7'	-2 01	-0 20	-1 03	-0 57	0.2	0.2	0.1	038°	0.4	217°
2161	Kickamuit R. (Narrows), Mt. Hope Bay		41° 41.9'	71° 14.7'	-2 04	-3 34	-1 19	-0 48	0.7	1.0	--	1.4 000°	1.7	191°
						-1 40			0.5			0.9 000°		
						-0 04			0.9			1.7 000°		
2166	Warren River entrance		41° 42.7'	71° 17.8'	Current weak and variable									
2171	Warren, Warren River		41° 43.7'	71° 17.3'	-0 14	+0 11	-0 22	-1 05	0.5	0.5	--	1.0 358°	0.3	200°
2176	Beavertail Point, 0.8 mile northwest of		41° 27.5'	71° 24.7'	-0 11	-0 54	-1 31	-0 19	0.3	0.6	--	0.5 003°	0.9	171°
2181	Dutch Island, east of, West Passage	15	41° 30.2'	71° 23.7'	-3 02	-5 10	-2 37	-2 46	0.2	0.5	0.1	103°	0.2	126°
						-3 55			0.2			0.3 032°	0.9	186°
						-1 10			0.3			0.6 038°		
2186	Dutch Island and Beaver Head, between		41° 29.8'	71° 24.2'	-1 56	-1 32	-1 58	-1 47	0.5	0.6	--	1.0 030°	1.0	233°
2191	Dutch Island, west of	7	41° 30.3'	71° 24.6'	-1 33	-1 49	-1 21	-1 16	0.7	0.7	--	1.3 014°	1.2	206°
2196	Jamestown—North Kingstown Bridge	15	41° 31.8'	71° 23.8'	-2 16	-4 10	-1 22	-1 33	0.2	0.7	0.1	112°	0.1	097°
						-3 10			0.2			0.5 011°	1.3	176°
						-0 31			0.4			0.8 007°		
2201	Wickford Harbor		41° 34'	71° 26'	Current weak and variable									
2206	Greenwich Bay entrance		41° 40.0'	71° 23.6'	-2 41	-2 29	-2 44	-2 37	0.4	0.5	--	0.3 --	0.3	--
2211	Patience Island, narrows east of		41° 39.5'	71° 21.2'	-1 40	-1 21	-1 18	-1 13	0.3	0.5	--	0.6 040°	0.9	157°
2216	Patience I. and Warwick Neck, between		41° 39.8'	71° 22.4'	-2 24	+0 47	-1 00	-1 11	0.1	0.1	--	0.2 325°	0.8	224°
2221	Nayatt Point, WNW of	10	41° 43.7'	71° 21.6'	-1 48	-2 30	-1 31	-1 06	0.5	0.8	--	1.0 020°	0.2	128°
2226	India Point RR. bridge, Seekonk River <9>		41° 49.0'	71° 23.3'	-3 02	+0 08	-0 27	-1 34	0.2	0.7	--	1.3 020°	1.4	180°
						-1 12			0.1	0.1	--	0.2 343°	0.1	166°
2231	Fox Point, south of, Providence River	10	41° 48.8'	71° 24.0'	-1 48	-2 24	-1 31	-1 02	0.4	0.8	--	0.8 030°	1.4	210°
2236	Cold Spring Pt., Seekonk River <10>		41° 49.6'	71° 22.8'		-0 26			0.1	0.6	--	0.2 030°		
									0.6			1.1 030°		
	BLOCK ISLAND SOUND													
	<i>Point Judith</i>													
2241	Harbor of Refuge, south entrance		41° 21.48'	71° 29.75'	-2 02	-2 31	-2 17	-4 10	0.2	0.3	--	0.6 329°	0.8	141°
									0.2	0.2	--		0.4	141°
											--		0.7	141°
2246	Harbor of Refuge, west entrance		41° 22'	71° 31'	See table 5.									
2251	Pond entrance		41° 23'	71° 31'	-3 02	-2 40	-3 07	-4 03	0.7	0.5	--	1.8 351°	1.5	186°
2256	2.4 miles southwest of		41° 19.87'	71° 30.65'	-0 27	+0 20	+0 27	-0 35	0.3	0.2	--	0.7 258°	0.6	090°
2261	4.5 miles southwest of		41° 18'	71° 33'	See table 5.									
2266	Block Island													
2271	four miles north of		41° 18'	71° 32'	-0 19	+0 21	+0 30	+0 07	0.3	0.3	--	0.8 285°	0.8	076°
2276	Sandy Point, 2.1 miles NNE of	15	41° 15.85'	71° 34.00'	+0 30	-0 32	-0 21	-0 54	0.4	0.6	--	1.0 296°	1.7	066°
2281	Sandy Pt., 1.5 miles north of	7	41° 15'	71° 34'	-0 11	-0 12	-1 08	-1 04	0.7	0.7	--	1.9 315°	2.1	063°
2286	Clay Head, 1.2 miles ENE of	15	41° 13.35'	71° 31.85'	-1 59	-1 11	-0 28	-1 06	0.3	0.2	0.5	220°	0.5	164°
2291	Old Harbor Pt., 0.5 mile southeast of		41° 09'	71° 32'	+0 01	-0 11	-0 39	+0 05	0.1	0.2	--	0.2 336°	0.6	175°
2296	Lewis Pt., 1.0 mile southwest of		41° 08.20'	71° 37.30'	-1 16	-0 47	-0 25	-1 24	0.5	0.6	--	1.9 298°	1.8	136°
2301	Lewis Pt., 1.5 miles west of		41° 09'	71° 38'	-1 20	-0 57	-0 49	-1 11	0.7	0.6	--	1.4 318°	1.7	170°
2306	Great Salt Pond entrance		41° 11.97'	71° 35.50'	-3 57	-3 14	-3 25	-4 33	0.1	0.1	--	0.3 165°	0.3	326°
2311	Sandy Point, 0.4 mile west of <11>	7	41° 12'	71° 36'	-0 41	-0 40	-1 55	-1 46	0.2	0.1	--	0.4 158°	0.4	035°
2316	Green Hill Point, 1.1 miles south of		41° 13.80'	71° 35.73'	--	-1 03	--	-1 46	--	--	--	--	--	--
2321	Sandy Point, 4.1 miles northwest of	15	41° 20.90'	71° 35.77'	-0 45	+0 32	+0 25	-1 06	0.2	0.1	--	0.6 258°	0.7	071°
2326	Grace Point, 2.0 miles northwest of		41° 17.10'	71° 38.00'	+0 17	+0 32	+0 31	-0 07	0.3	0.2	--	0.7 270°	0.6	084°
2331	Quonochontaug Beach, 1.1 miles S of		41° 12'	71° 38'	See table 5.									
2336	Quonochontaug Beach, 3.8 miles S of	15	41° 18.80'	71° 42.82'	-0 30	+0 27	+0 46	-0 31	0.4	0.1	--	1.1 248°	0.4	078°
2341	Lewis Point, 6.0 miles WNW of	15	41° 16.35'	71° 43.00'	+0 16	+0 15	+0 38	-0 03	0.3	0.2	--	0.7 243°	0.6	058°
			41° 11.60'	71° 44.20'	+1 12	+1 01	+0 15	+0 24	0.2	0.4	--	0.6 286°	1.2	097°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS								
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb					
															North	West	h m	h m	h m	h m	knots	Dir.	knots	Dir.
	BLOCK ISLAND SOUND—cont. Time meridian, 75° W	ft																	
2346	Southwest Ledge		41° 07'	71° 42'	-0.22	+0.15	+0.15	-0.22	0.6	0.7	--	--	1.5	321°	--	--	2.1	141°	
2351	Southwest Ledge, 2.0 miles west of	15	41° 06.80'	71° 43.00'	+0.23	+0.31	+0.10	-0.52	0.5	0.6	--	--	1.5	354°	--	--	1.9	168°	
2356	Watch Hill Point, 2.2 miles east of	15	41° 18.16'	71° 48.60'	-0.16	+0.13	+0.44	-0.32	0.4	0.2	--	--	1.2	260°	--	--	0.7	086°	
2361	Watch Hill Point, 5.2 miles SSE of	15d	41° 13.20'	71° 49.00'	+0.48	+0.39	+0.38	+0.01	0.4	0.4	--	--	1.2	265°	--	--	1.2	064°	
2366	Watch Hill Point, 5.3 n.mi. SE of	15	41° 14.65'	71° 46.43'	+0.05	+0.15	+0.18	-0.02	0.3	0.3	0.1	176°	0.1	176°	--	--	0.9	092°	
2371	Montauk Point, 5.4 miles NNE of	15	41° 09.55'	71° 49.48'	+0.46	+0.18	-0.39	-0.03	0.4	0.5	--	--	1.1	279°	--	--	1.6	079°	
2376	Montauk Point, 1.2 miles east of		41° 04.50'	71° 49.80'	+0.09	+0.48	-0.39	-2.04	1.0	0.9	--	--	2.8	346°	--	--	2.8	162°	
2381	Montauk Point, 1.1 miles northeast of		41° 05.11'	71° 51.11'	-1.51	+1.11	-1.15	-1.55	0.6	0.6	--	--	2.4	356°	--	--	1.9	145°	
2386	Wicopasset Island, 1.1 miles SSE of		41° 16.50'	71° 54.80'	-0.41	+0.11	+0.48	-0.18	0.6	0.3	--	--	1.5	250°	--	--	0.8	073°	
2391	East Pt., Fishers I., 4.1 miles S of	15	41° 13.40'	71° 55.50'	+1.03	+0.53	+0.18	+0.01	0.3	0.6	--	--	0.9	238°	--	--	1.8	073°	
2396	Cerberus Shoal, 1.5 miles east of	15	41° 10.45'	71° 55.17'	-0.02	+0.06	-0.24	-1.03	0.4	0.6	--	--	1.1	256°	--	--	1.8	092°	
2401	Shagwong Reef & Cerberus Shoal, between		41° 07.90'	71° 55.50'	-0.17	+0.26	-0.26	-1.09	0.7	0.6	--	--	1.9	241°	--	--	1.8	056°	
2406	Montauk Harbor entrance	6	41° 04.78'	71° 56.35'	-2.04	-2.26	-3.03	-5.00	0.4	0.1	--	--	1.2	226°	--	--	0.6	033°	
					-2.43	-2.43	-3.03	-2.43	0.2	0.1	--	--	0.2	024°	--	--	0.2	024°	
					-0.55	+0.09	+0.09	-0.55	0.6	0.5	--	--	1.7	275°	--	--	0.5	353°	
2411	Mt. Prospect, 0.6 mile SSE of	15	41° 14.75'	71° 59.80'	-0.21	+0.15	+0.09	-1.10	0.6	0.5	--	--	1.3	264°	--	--	1.6	054°	
2416	Cerberus Shoal and Fishers I., between	7	41° 13.17'	71° 58.17'	-0.46	+0.13	+0.06	-0.20	0.5	0.4	--	--	1.3	264°	--	--	1.3	096°	
2421	Little Gull Island, 3.7 miles ESE of		41° 10.71'	72° 02.11'			See table 5.												
2426	Gardiners Island, 3 miles northeast of	10	41° 07.91'	72° 02.01'	-0.34	-0.38	-0.26	-0.40	0.3	0.3	--	--	0.9	305°	--	--	1.0	138°	
2431	Eastern Plain Point, 1.2 miles N of		41° 07.12'	72° 04.85'	-2.32	-1.30	-1.09	-2.34	0.4	0.3	--	--	1.0	290°	--	--	0.8	110°	
2436	Eastern Plain Pt., 3.9 miles ENE of		41° 07.05'	71° 59.80'	-0.48	-1.04	-0.23	-1.12	0.4	0.3	--	--	1.0	246°	--	--	1.0	096°	
2441	Little Gull Island, 0.8 mile SSE of <43>		41° 11.67'	72° 06.23'	-1.57	-0.29	-0.24	-2.05	0.5	0.2	--	--	1.3	331°	--	--	0.6	105°	
					-0.43	-0.43	-0.43	-0.43	0.2	0.2	--	--	0.6	174°	--	--	0.6	174°	
2446	Rocky Point, 2 miles WNW of	15	41° 03.55'	72° 01.80'	-1.09	-0.40	-0.50	-1.10	0.1	0.1	0.1	192°	0.3	255°	0.2	340°	0.3	065°	
	GARDINERS BAY, etc.																		
2451	Goff Point, 0.4 mile northwest of		41° 01.49'	72° 03.75'	-1.33	-2.04	-1.26	-2.42	0.4	0.5	--	--	1.2	225°	--	--	1.6	010°	
2456	Acabonack Hbr. ent., 0.6 mile ESE of		41° 01.30'	72° 07.40'	-1.21	-1.49	-1.06	-2.41	0.5	0.4	--	--	1.4	345°	--	--	1.2	140°	
2461	Hog Creek Point, north of		41° 04.10'	72° 09.70'	-0.43	-0.28	-1.22	-2.03	0.1	0.1	--	--	0.3	281°	--	--	0.3	067°	
2466	Ram Island, 2.2 miles east of		41° 04.70'	72° 13.80'	-0.06	-0.03	-0.15	-0.23	0.1	0.1	--	--	0.2	250°	--	--	0.3	090°	
2471	Orient Point, 2.4 miles SSE of		41° 07.50'	72° 12.30'	+0.32	+0.13	+1.10	-0.42	0.2	0.1	--	--	0.4	250°	--	--	0.3	025°	
2476	Gardiners Pt. Ruins, 1.1 miles N of		41° 09.50'	72° 08.83'	+0.01	+0.04	-0.10	-0.08	0.4	0.6	--	--	1.2	270°	--	--	1.8	066°	
2481	Gardiners Point & Plum Island, between	15	41° 09.33'	72° 09.52'	-0.05	-0.10	-0.33	-0.41	0.5	0.5	--	--	1.4	288°	--	--	1.6	100°	
2486	Ram Island, 1.4 miles NNE of		41° 05.81'	72° 15.81'	+0.14	+0.19	+0.06	+0.06	0.2	0.2	--	--	0.4	240°	--	--	0.6	075°	
2491	Long Beach Pt., 0.7 mile southwest of	15	41° 06.25'	72° 18.40'	+0.46	+0.10	+0.43	-0.11	0.5	0.6	--	--	1.3	307°	--	--	1.8	101°	
2496	Hay Beach Point, 0.3 mile NW of <44>		41° 06.65'	72° 20.43'	+0.33	+0.41	+1.00	+0.27	0.6	0.4	--	--	1.5	210°	--	--	1.2	025°	
					+0.45	+0.30	+0.36	+1.24	0.2	0.2	--	--	0.6	025°	--	--	0.6	025°	
2501	Jennings Point, 0.2 mile NNW of	13	41° 04.48'	72° 22.95'	+0.45	+0.30	+0.36	+1.24	0.6	0.3	--	--	1.6	290°	--	--	0.8	020°	
2506	Cedar Point, 0.2 mile west of		41° 02.38'	72° 16.07'	+0.02	+0.05	+0.28	-0.08	0.6	0.5	--	--	1.8	195°	--	--	1.5	055°	
2511	North Haven Peninsula, north of		41° 02.47'	72° 19.25'	+0.39	+0.09	+0.38	-0.45	0.9	0.7	--	--	2.4	230°	--	--	2.1	035°	
2516	Paradise Point, 0.4 mile east of	13	41° 02.88'	72° 22.57'	+0.39	+0.24	+0.44	-0.05	0.6	0.5	--	--	1.5	145°	--	--	1.5	345°	
2521	Little Peconic Bay entrance	19	41° 01.58'	72° 23.08'	+0.48	+0.22	+0.52	+0.10	0.6	0.5	--	--	1.6	240°	--	--	1.5	015°	
2526	Robins Island, 0.5 mile south of		40° 56.98'	72° 27.18'	+0.45	+0.09	+0.55	+0.24	0.6	0.2	--	--	1.7	245°	--	--	0.6	065°	
	FISHERS ISLAND SOUND																		
2531	Edwards Pt. and Sandy Pt., between	4	41° 19.90'	71° 53.88'	-2.13	-2.56	-2.16	-3.52	0.4	0.3	--	--	1.1	035°	--	--	1.0	227°	
					-0.35	-0.46	-0.48	-1.42	0.1	0.1	--	--	0.2	243°	--	--	0.2	243°	
2536	Napatree Point, 0.7 mile southwest of		41° 17.92'	71° 54.00'	-0.35	-0.46	-0.48	-1.29	0.6	0.7	--	--	1.7	284°	--	--	2.2	113°	
2541	Little Narragansett Bay entrance		41° 20.11'	71° 53.11'	-1.45	-1.41	-2.14	-2.49	0.5	0.4	--	--	1.3	092°	--	--	1.3	268°	

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS					
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	h m	h m	h m	Dir.	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	FISHERS ISLAND SOUND—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m	Flood	Ebb	knots	Dir.	knots	Dir.	knots	Dir.
2546	Avondale, Pawcatuck River <43>	6	41° 19.90'	71° 50.73'	-1 35	-2 21	-2 08	-3 51	0.2	0.2	0.6	058°	0.5	265°	0.1	243°
2551	Ram Island Reef, south of	7	41° 18.1'	71° 58.5'	-0 41	-0 29	-0 46	-0 07	0.1	0.1	1.3	255°	0.2	263°	0.2	263°
2556	Noank <43>	4	41° 19.12'	71° 59.30'	-1 15	-2 55	-4 01	-1 04	0.5	0.5	0.5	340°	1.6	088°	0.3	088°
2561	Mystic, Highway Bridge, Mystic River	6	41° 21.25'	71° 58.18'	-1 41	-2 29	-1 58	-1 35	0.0	0.0	0.5	039°	0.5	162°	0.5	162°
2566	Clay Point, 1.3 miles NNE of	15	41° 17.88'	71° 58.53'	-0 21	-0 28	-0 31	-3 50	0.2	0.1	1.4	264°	0.4	231°	0.2	234°
2571	North Hill Point, 1.1 miles NNW of	15	41° 17.57'	72° 01.68'	-0 44	-0 05	-0 09	-1 51	0.1	0.1	1.5	258°	0.3	232°	0.3	232°
	LONG ISLAND SOUND															
2576	<i>The Race</i>	38d	41° 14.70'	72° 02.60'	-0 03	-0 14	-0 34	-0 56	1.0	1.2	2.6	388°	3.5	135°	3.0	112°
2581	Race Point, 0.4 mile southwest of		41° 14.00'	72° 03.58'	-0 19	+0 04	-0 16	-0 40	1.2	1.0	2.7	302°	0.3	220°	3.1	107°
2586	THE RACE, 0.6 n.mi. NW of Valiant Rock	45d	41° 13'	72° 06'	+0 15	+0 38	+0 07	-0 33	0.5	0.5	1.5	304°	0.5	036°	1.6	100°
2591	0.5 mile NE of Little Gull Island		41° 13.53'	72° 05.52'	+0 14	+0 10	+0 10	-0 56	1.5	1.5	4.0	301°	4.7	130°	4.7	130°
2596	Little Gull Island, 1.4 n.mi. NNE of		41° 13.10'	72° 05.10'	+0 38	-0 58	-2 20	-0 57	0.7	1.0	2.9	258°	2.9	043°	2.9	043°
2601	Little Gull Island, 1.1 miles ENE of	15	41° 13.10'	72° 06.93'	+0 30	-0 12	-0 22	-1 53	1.0	1.1	2.6	299°	3.2	133°	3.2	133°
2606	Great Gull Island, 0.7 mile NNW of		41° 11.67'	72° 08.02'	-1 46	-1 32	-1 08	-2 04	0.2	0.1	0.4	249°	0.4	053°	0.4	053°
2611	Eastern Point, 1.5 miles south of		41° 17.8'	72° 04.4'	-1 01	-1 30	-2 03	-1 26	0.1	0.1	0.1	348°	0.2	211°	0.2	211°
2616	New London Harbor entrance		41° 19.08'	72° 05.02'	-0 56	-1 38	-0 45	-2 46	0.2	0.1	0.4	012°	0.4	180°	0.4	180°
2621	Thames River Winthrop Point		41° 21.63'	72° 05.30'	-0 57	-1 59	-1 20	-0 05	0.3	0.2	0.7	019°	0.5	185°	0.3	185°
2626	Off Smith Cove	5	41° 23.98'	72° 05.18'	-0 56	-2 02	-0 31	-1 41	0.3	0.2	0.7	332°	0.2	202°	0.2	202°
2631	Off Stoddard Hill	15	41° 27.65'	72° 04.12'	-0 56	-2 02	-0 31	+0 02	0.3	0.1	0.7	332°	0.6	198°	0.6	198°
2636	Lower Coal Dock	15	41° 30.88'	72° 04.72'	-0 44	-0 39	-0 54	-2 00	0.5	0.5	1.2	285°	1.6	062°	1.6	062°
2641	Goshen Point, 1.9 miles SSE of	15	41° 16.00'	72° 06.30'	-1 50	-0 32	-1 05	-1 45	0.5	0.4	1.4	255°	1.3	090°	1.3	090°
2646	Bartlett Reef, 0.2 mile south of		41° 16.2'	72° 07.7'	-0 45	-1 06	-0 34	-1 53	0.4	0.5	1.2	267°	1.4	099°	1.6	099°
2651	Twotree Island Channel	11	41° 17.87'	72° 08.47'	-0 32	-0 42	-0 44	-0 51	0.6	0.3	1.6	352°	0.8	178°	0.8	178°
2656	Niantic (Railroad Bridge)	5	41° 19.40'	72° 10.62'	-0 29	-0 50	-0 16	-1 21	0.5	0.5	1.2	260°	1.4	073°	1.4	073°
2661	Black Point, 0.8 mile south of	15	41° 16.40'	72° 12.50'	+0 46	+0 25	+0 38	+0 15	0.8	0.8	2.1	236°	2.4	076°	2.4	076°
2666	Black Point and Plum Island, between	15	41° 14.00'	72° 12.30'	+0 25	+0 05	-1 12	-0 52	0.6	0.8	1.7	247°	1.7	247°	2.4	065°
2671	Plum Island, 0.8 mile NNW of		41° 11.87'	72° 11.92'	-1 08	-1 22	-1 12	-2 00	0.7	1.0	0.1	069°	0.1	118°	3.2	118°
2676	Plum Gut	30d	41° 09.91'	72° 12.75'	-0 46	-0 41	-0 28	-2 03	0.6	0.6	1.3	240°	1.9	075°	1.9	075°
2681	Hatchett Point, 1.6 n. mi. S of	15d	41° 15.40'	72° 15.37'	-2 16	-0 50	-0 43	-2 48	0.5	0.4	1.3	240°	1.2	045°	1.2	045°
2686	Hatchett Point, 1.1 miles WSW of		41° 16.35'	72° 16.92'	-0 48	-1 41	-0 24	-1 26	0.5	1.0	1.4	245°	3.1	055°	3.1	055°
2691	Orient Point, 1 mile WNW of		41° 10.02'	72° 15.11'	-1 09	-0 50	-0 46	-2 08	0.7	0.7	1.9	260°	2.0	070°	2.0	070°
2696	Saybrook Breakwater, 1.5 miles SE of Connecticut River		41° 14.78'	72° 19.05'	+0 53	+1 08	+0 13	+0 15	0.3	0.2	0.5	344°	0.7	161°	0.7	161°
2701	Lynde Point, channel east of		41° 16'	72° 20'	+0 56	+1 12	+0 56	+0 19	0.6	0.5	1.5	355°	1.5	160°	1.5	160°
2706	Saybrook Point, 0.2 mile northeast of		41° 17.02'	72° 20.87'	+0 48	-0 05	+1 03	+0 55	0.4	0.3	0.6	359°	1.0	198°	1.0	198°
2711	Railroad drawbridge	15	41° 19.00'	72° 20.77'	+2 14	+1 59	+1 32	+1 15	0.3	0.5	0.9	356°	1.4	070°	1.4	070°
2716	Eustasia Island, 0.6 mile ESE of		41° 23.30'	72° 24.23'	+2 02	+2 37	+2 10	+1 09	0.3	0.2	1.1	290°	0.6	155°	0.6	155°
2721	Eddy Rock Shoal, west of	15	41° 26.57'	72° 27.78'												

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS				
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb	
	LONG ISLAND SOUND-cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m	0.3	0.3	knots	Dir.	knots	Dir.	
	<i>Connecticut River-cont.</i>				on The Race, p.36										
2726	Higgenum Creek, 0.5 mile ESE of	9	41° 30.02'	72° 32.62'	+3.27	+3.13	+2.44	+2.50	0.3	0.3	0.8	270°	1.0	080°	
2731	Wilcox Island Park, east of	9	41° 34.33'	72° 38.88'	+4.27	+3.57	+3.16	+3.24	0.3	0.3	0.9	355°	1.0	160°	
2736	Rocky Hill	9	41° 39.82'	72° 37.73'	+5.02	+3.58	+3.30	+3.19	0.2	0.2	0.6	330°	0.8	135°	
2741	Hartford Jetty <35>	15	41° 45.07'	72° 39.02'	+6.06	+5.00	+3.31	+3.18	0.0	0.2	1.9	269°	0.7	095°	
2746	Mulford Point, 3.1 miles northwest of	15	41° 12.00'	72° 19.08'	+0.15	-0.44	+0.04	-0.35	0.7	0.8	0.8	255°	2.3	066°	
					+0.12	+0.11	-0.52	-0.39	0.8	0.7	2.1	245°	2.1	041°	
2751	Rocky Point, 0.3 mile north of	15	41° 08.63'	72° 21.42'	-0.06	-0.42	-0.36	-1.43	0.7	0.5	1.8	279°	1.4	085°	
2756	Cornfield Point, 2.8 n.mi. SE of	15d	41° 13.95'	72° 20.33'	-1.14	-0.36	-0.33	-1.43	0.7	0.6	1.9	248°	1.7	094°	
2761	Cornfield Point, 3 miles south of	7	41° 12.9'	72° 22.4'	-0.45	+0.01	-0.08	-0.34	0.7	0.6	2.0	256°	1.6	108°	
2766	Cornfield Point, 1.1 miles south of	15	41° 14.65'	72° 23.40'	-0.40	-1.13	-0.53	-2.14	0.5	0.5	1.4	293°	1.5	091°	
2771	Cornfield Point, 1.9 n.mi. SW of	15d	41° 14.48'	72° 25.30'	-0.56	-1.14	-1.25	-1.11	0.1	174°	1.3	272°	1.8	070°	
2776	Kelsey Point, 2.1 miles southeast of	15	41° 14.10'	72° 27.93'	-0.14	-0.41	-0.45	-1.11	0.6	0.6	1.5	260°	1.5	090°	
2781	Kelsey Point, 1 mile south of	15	41° 14.1'	72° 30'	-1.21	-0.42	-1.08	-2.05	0.7	0.5	2.0	249°	1.5	118°	
2786	Six Mile Reef, 1.5 miles north of	15	41° 12.66'	72° 28.87'	+0.04	+0.09	-0.14	-0.52	0.4	0.4	1.0	290°	1.3	095°	
2791	Six Mile Reef, 2 miles east of	15	41° 10.83'	72° 26.90'	-0.15	+0.09	+0.02	-0.46	0.6	0.7	1.6	235°	2.1	040°	
2796	Horton Point, 1.4 miles NNW of	15	41° 06.30'	72° 27.40'	+0.25	+0.29	+0.06	-0.29	0.5	0.7	1.4	260°	2.0	040°	
2801	Hammonasset Point, 1.2 miles SW of	15	41° 14.22'	72° 34.00'	-0.38	-0.54	-0.38	-1.42	0.4	0.3	1.0	106°	1.0	106°	
2806	Hammonasset Point, 5 miles south of	15	41° 09.80'	72° 34.17'	+0.18	+0.18	-0.07	-0.17	0.5	0.5	1.4	284°	1.5	090°	
2811	Duck Pond Point, 3.2 n.mi. NW of	15d	41° 04.73'	72° 33.91'	-0.12	+0.12	-0.07	-0.14	0.2	161°	0.1	343°	1.2	071°	
2816	Mattituck Inlet, 1 mile northwest of	15	41° 01.68'	72° 34.22'	0.00	+0.06	+0.01	-0.37	0.4	0.3	0.9	241°	1.0	053°	
2821	Sachem Head, 1 mile SSE of	15	41° 13.65'	72° 42.30'	-0.17	-0.15	-0.26	-1.13	0.4	0.3	1.1	255°	1.0	065°	
2826	Sachem Head, 6.2 miles south of	15	41° 08.73'	72° 42.30'	+0.50	+0.45	-0.03	-0.15	0.2	0.2	0.6	260°	0.9	065°	
2831	Roanoke Point, 5.6 miles north of	15	41° 04.37'	72° 42.53'	+0.19	+0.19	-0.06	-0.35	0.3	0.3	0.7	255°	0.9	050°	
2836	Roanoke Point, 2.3 miles NNW of	15	41° 00.92'	72° 42.97'	+0.58	-0.01	-0.01	-0.40	0.3	0.2	0.9	270°	0.7	070°	
2841	Brantford Reef, 1.5 miles southwest of	15	41° 12.57'	72° 49.83'	+0.08	+0.07	0.00	-0.29	0.3	0.2	0.8	272°	0.7	068°	
2846	Brantford Reef, 5.0 miles south of	15	41° 08.65'	72° 49.67'	+0.20	+0.30	+0.20	-0.08	0.3	0.3	0.7	260°	0.8	074°	
2851	Herod Point, 6.5 miles north of	15	41° 04.65'	72° 49.93'	-0.06	+0.27	+0.21	-0.18	0.3	0.2	0.9	254°	0.7	070°	
2856	Herod Point, 2.8 miles north of	15	41° 00.97'	72° 49.93'	-0.08	+0.04	-0.18	-0.17	0.2	0.2	0.4	290°	0.6	090°	
2861	Herod Point, 5.0 n.mi. NW of	15d	41° 01.64'	72° 54.73'	+0.04	+0.04	-0.28	0.00	0.2	0.2	0.1	020°	0.1	020°	
2866	New Haven Harbor entrance <12>	15d	41° 14.1'	72° 55.1'	-1.00	-0.16	-0.42	-1.29	0.5	0.3	1.4	319°	0.7	089°	
2871	City Point, 1.3 miles northeast of	15	41° 17.83'	72° 54.42'	+0.32	+0.51	+0.42	-0.03	0.1	0.1	0.3	015°	0.4	152°	
2876	Oyster River Pt., 1.3 miles SSE of <1>	15	41° 12.87'	72° 58.00'	--	+0.06	--	-0.58	0.1	0.1	0.3	255°	0.3	060°	
2881	Pond Point, 4.2 miles SSE of	15	41° 08.60'	72° 58.08'	+0.01	+0.25	+0.05	-0.25	0.2	0.2	0.6	265°	0.6	065°	
2886	Stratford Shoal, 6 miles east of	15	41° 04.52'	72° 58.43'	+0.22	+0.19	+0.02	-0.20	0.2	0.2	0.6	265°	0.6	060°	
2891	Sound Beach, 2.2 miles north of	15	41° 00.33'	72° 58.45'	+0.18	+0.15	-0.06	-0.36	0.3	0.3	0.9	270°	0.9	075°	
2896	Charles Island, 0.8 mile SSE of	15d	41° 10.77'	73° 02.63'	-0.30	-0.15	-0.21	-1.05	0.2	0.1	0.4	250°	0.4	070°	
	<i>Housatonic River</i>														
2901	Milford Point, 0.2 mile west of	10	41° 10.35'	73° 06.82'	+0.15	+0.22	+0.24	-1.06	0.4	0.4	1.2	330°	1.2	135°	
2906	Railroad drawbridge, above	5	41° 12.53'	73° 06.67'	+0.55	+0.31	+0.38	-1.06	0.4	0.4	1.1	350°	1.3	185°	
2911	Fowler Island, 0.1 mile NNW of	5	41° 14.40'	73° 06.23'	+1.09	+0.31	+0.39	+0.37	0.4	0.4	1.1	040°	1.1	270°	
2916	Wooster Island, 0.1 mile southwest of	5	41° 16.67'	73° 05.20'	+1.40	+0.54	+0.29	+0.11	0.2	0.2	0.6	020°	0.7	220°	
2921	Derby-Shelton Bridge, below <13>	15	41° 18.73'	73° 04.78'	--	--	--	-0.17	0.1	0.1	--	--	0.4	095°	
2926	Point No Point, 2.1 miles south of	15	41° 06.75'	73° 07.13'	-0.09	+0.15	+0.01	-0.12	0.5	0.4	1.3	251°	1.2	074°	
2931	Stratford Point, 4.3 miles south of	60	41° 04.77'	73° 06.67'	+0.33	+0.40	+0.14	+0.03	0.4	0.3	1.0	254°	1.0	075°	
	do.	15	41° 04.77'	73° 06.67'	-0.15	+0.12	-0.14	+0.04	0.2	0.3	0.6	291°	0.8	078°	
2936	Stratford Point, 6.1 miles south of	15	41° 02.97'	73° 05.80'	+0.03	+0.24	+0.25	+0.19	0.3	0.3	1.0	267°	0.8	080°	
	do.	51	41° 02.97'	73° 05.80'	-0.22	-0.10	-0.25	-0.23	0.3	0.2	0.9	087°	0.9	080°	
2941	Old Field Point, 2.9 n.mi. NNW of	15d	41° 01.32'	73° 08.37'	+0.40	+0.10	-0.36	-0.14	0.2	0.2	0.5	254°	0.6	076°	
2946	Old Field Point, 2 miles northeast of	15	41° 00.23'	73° 05.70'	+0.54	+0.34	-0.02	+0.47	0.4	0.4	1.0	266°	1.1	092°	
	do.	40	41° 00.23'	73° 05.70'	+0.43	+0.29	-0.03	+0.30	0.2	0.2	0.5	236°	0.6	081°	
2951	Old Field Point, 1 mile east of	15	40° 58.47'	73° 05.80'	+3.47	+2.52	+2.34	+1.45	0.1	0.2	0.2	105°	0.6	308°	
	do.	22	40° 58.47'	73° 05.80'	+2.51	+2.15	+2.26	+1.33	0.1	0.2	0.2	110°	0.5	297°	
2956	Port Jefferson Harbor entrance	15	40° 58.47'	73° 06'	+0.22	+0.58	+0.27	0.00	1.0	0.6	2.6	151°	1.9	323°	
2961	Crane Neck Point, 0.5 mile northwest of	15	40° 58'	73° 10'	-0.34	-1.06	-1.43	-1.48	0.5	0.5	1.3	256°	1.5	016°	

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	LONG ISLAND SOUND-cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
2966	Bridgeport Hbr. ent., bin. jetties <14>	4	41° 05' 05"	73° 11'	+0.01	-0.04	0.00	-0.17	0.3	0.2	0.7	340°	0.6	176°
2971	Pine Creek Point, 2.3 miles SSE of	15	41° 05' 05"	73° 14.40'	+0.01	+0.27	0.30	+0.12	0.3	0.2	0.7	272°	0.6	084°
2976	Shoal Point, 6 miles south of	15	41° 01' 70"	73° 14.03'	+0.43	+0.49	+0.51	+0.44	0.2	0.1	0.4	232°	0.4	047°
2981	Crane Neck Point, 3.4 miles WNW of	15	40° 59.00'	73° 13.87'	+0.09	+0.23	-0.16	-0.02	0.2	0.2	0.5	261°	0.6	079°
2986	Crane Neck Point, 3.7 miles WSW of	15	40° 56.30'	73° 13.87'	+0.09	-0.10	-0.15	-0.29	0.2	0.1	0.4	066°	0.4	232°
2991	Saugatuck River, 0.3 mi. NW of Bluff Pt.	15	41° 06.27'	73° 21.92'	+0.09	-0.20	+0.29	-0.01	0.2	0.1	0.5	265°	0.4	080°
2996	Saugatuck R., 0.5 mile above Bluff Pt.	15	41° 06'	73° 23'	Current weak and variable									
3001	Norwalk River, off Gregory Point	15	41° 05.20'	73° 24.22'	+0.09	0.00	+0.38	+0.19	0.2	0.2	0.6	322°	0.5	155°
3006	Sheffield I. Hbr., 0.5 mile southeast of	12	41° 03.32'	73° 25.25'	-2.20	-3.33	-3.27	-2.23	0.1	0.1	0.2	229°	0.4	042°
3011	Sheffield I. Tower, 1.1 miles SE of	15	41° 01.97'	73° 24.33'	+0.54	+1.00	+1.08	+0.22	0.3	0.3	0.9	283°	0.8	081°
3016	..... do.	60	41° 01.97'	73° 24.33'	-0.06	+0.45	+1.09	+0.25	0.2	0.2	0.6	269°	0.5	076°
3021	Eatons Neck Pt., 3 miles north of	15	41° 00.38'	73° 23.80'	+1.01	+0.51	+0.45	+0.06	0.3	0.3	0.7	253°	0.9	046°
3026	..... do.	40	41° 00.38'	73° 23.80'	+0.38	+0.34	+0.35	+0.17	0.2	0.2	0.6	264°	0.6	078°
3031	Eatons Neck Pt., 1.3 miles north of	170	41° 00.38'	73° 23.80'	-0.17	-0.01	+1.35	+0.33	0.2	0.2	0.6	188°	0.5	054°
3036	Eatons Neck Pt., 1.8 miles west of	15d	40° 59.73'	73° 24.60'	+1.38	-2.07	-2.07	-2.20	0.3	0.3	0.6	263°	0.1	341°
3041	Huntington Bay, off East Fort Point	15	40° 58.60'	73° 23.77'	+0.42	+0.42	+0.14	+0.10	0.5	0.5	1.4	283°	1.6	075°
3046	..... do.	40	40° 57.1'	73° 26'	-0.58	-0.43	-0.33	-0.43	0.2	0.2	0.5	199°	0.6	068°
3051	..... do.	15	40° 55.60'	73° 25.05'	+0.15	+0.35	+0.23	+0.40	0.2	0.2	0.5	190°	0.5	014°
3056	..... do.	30	40° 55.60'	73° 25.05'	-0.33	+0.31	+0.14	-0.27	0.1	0.1	0.4	179°	0.3	007°
3061	Northport Bay entrance (in channel)	15	40° 54.53'	73° 24.45'	+0.42	+0.35	+0.21	+0.19	0.2	0.1	0.4	100°	0.4	267°
3066	Northport Bay, south of Duck I. Bluff	15	40° 55'	73° 23'	+0.42	+1.12	+0.27	-0.19	0.2	0.1	0.4	007°	0.3	286°
3071	Long Neck Point, 0.6 mile south of	15	41° 01.58'	73° 28.68'	-0.59	+0.16	+1.23	0.00	0.3	0.2	0.8	252°	0.5	073°
3076	..... do.	27	41° 01.58'	73° 28.68'	-0.44	+0.13	+1.21	-0.02	0.2	0.2	0.8	257°	0.5	080°
3081	Lloyd Point, 1.3 miles NNW of	15	40° 57.95'	73° 29.70'	+1.37	+1.15	+1.29	+0.54	0.4	0.3	1.0	255°	0.9	055°
3086	..... do.	40	40° 57.95'	73° 29.70'	+0.13	+0.34	+1.16	+0.26	0.4	0.2	1.0	269°	0.7	052°
3091	Shippan Point, 1.3 miles SSE of	15	40° 59.90'	73° 31.00'	+0.49	+0.28	+0.22	+0.05	0.3	0.3	0.9	239°	0.9	055°
3096	..... do.	40	40° 59.98'	73° 31.03'	+0.31	+0.32	+0.55	-0.21	0.3	0.3	0.7	247°	0.8	071°
3101	Stamford Harbor entrance	12	41° 00.88'	73° 32.20'	-1.09	-0.56	-1.58	-0.33	0.1	0.3	0.4	329°	0.8	134°
3106	Oyster Bay													
3111	Rocky Point, 1 mile east of	15	40° 55.15'	73° 30.03'	+0.32	+0.41	+0.23	+0.31	0.2	0.2	0.6	117°	0.5	306°
3116	Harbor ent., south of Plum Point	15	40° 54'	73° 31'	+0.07	+0.25	-0.01	-0.10	0.3	0.2	0.7	244°	0.7	054°
3121	Harbor, west of Soper Point	15	40° 53'	73° 32'	+0.37	+0.46	-0.04	+0.12	0.2	0.1	0.6	333°	0.4	140°
3126	..... do.	40	40° 53'	73° 29'	Current weak and variable									
3131	Greenwich Point, 1.1 miles south of	15	40° 59.02'	73° 34.02'	+1.34	+1.24	+1.48	+1.02	0.3	0.3	0.7	258°	0.8	073°
3136	..... do.	55	40° 59.02'	73° 34.02'	+1.37	+1.17	+0.50	+1.04	0.2	0.2	0.6	265°	0.4	069°
3141	Greenwich Point, 2.5 miles south of	15	40° 57.60'	73° 33.68'	+1.00	+0.36	+0.56	+0.30	0.3	0.2	0.7	242°	0.7	052°
3146	..... do.	55	40° 57.60'	73° 33.68'	-0.54	+0.22	-0.28	-0.16	0.2	0.1	0.5	256°	0.4	079°
3151	Oak Neck Point, 0.6 mile north of	15	40° 55.50'	73° 34.02'	+3.04	+2.24	+2.24	+2.12	0.2	0.2	0.5	260°	0.6	072°
3156	..... do.	30	40° 55.50'	73° 34.02'	+1.07	+2.01	+1.40	+1.52	0.2	0.2	0.5	300°	0.5	090°
3161	Cos Cob Harbor, off Goose Island	15	41° 01'	73° 36'	+0.24	+0.11	-0.01	-0.54	0.2	0.1	0.5	013°	0.4	188°
3166	Captain Hbr. Ent., 0.6 mile southwest of	15	40° 59.65'	73° 35.67'	+1.45	+2.10	+1.48	+2.01	0.2	0.2	0.6	312°	0.7	118°
3171	..... do.	30	40° 59.65'	73° 35.67'	+1.35	+1.40	+0.57	+1.59	0.2	0.2	0.5	319°	0.7	142°
3176	Parsonage Point, 1.3 n.mi. ESE of	15d	40° 56.25'	73° 39.49'	+1.00	+0.50	+1.09	+1.01	0.2	0.1	0.5	230°	0.4	051°
3181	..... do.	15	40° 56.32'	73° 40.50'	+1.22	+0.49	+1.15	+0.28	0.3	0.2	0.7	226°	0.7	035°
3186	Peningo Neck, 0.6 mi. off Parsonage Pt.	15	40° 55.48'	73° 39.37'	+1.33	+1.25	+1.06	+1.03	0.1	0.1	0.4	234°	0.4	055°
3191	..... do.	15	40° 55.48'	73° 39.37'	+1.27	+0.53	+1.33	+0.37	0.2	0.2	0.6	233°	0.6	048°
3196	Mattinecock Point, 0.7 mile NNW of	40	40° 54.80'	73° 38.40'	+0.48	+0.33	+1.32	+0.21	0.3	0.2	0.7	262°	0.5	053°
3201	..... do.	40	40° 54.80'	73° 38.40'	Current weak and variable									
3206	Hempstead Harbor, 0.3 mile north of	15	40° 51.72'	73° 40.47'	--	+0.26	--	-0.30	0.1	--	0.3	157°	0.1	331°
3211	..... do.	15	40° 51.50'	73° 39.98'	-0.25	+0.16	+0.02	-0.58	0.3	0.2	0.9	138°	0.7	320°
3216	Hempstead Harbor, 0.5 mile east of	15	40° 49.68'	73° 39.00'	--	-0.01	--	--	0.1	--	0.4	196°	--	--
3221	Hempstead Harbor, off Glenwood Landing	5	40° 48.78'	73° 39.08'	+0.58	+0.32	+1.13	-0.04	0.2	0.1	0.5	244°	0.4	059°
3226	Old Town Wharf, 0.5 mile north of	15	40° 55.00'	73° 42.73'	--	+0.35	+1.08	-0.38	0.2	0.1	0.4	239°	0.3	069°
3231	Delancey Point, 1 mile southeast of	33	40° 55.00'	73° 42.73'	Current weak and variable									
3236	..... do.	33	40° 55.00'	73° 43'	Current weak and variable									
3241	Mamaroneck Harbor													
3246	Echo Bay entrance													

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	LONG ISLAND SOUND—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
3171	Davids Island, channel 0.1 mile east of	15	40° 53'	73° 46'	-2 54	-3 36	-2 29	-3 48	0.2	0.4	0.2	069°	0.2	234°
3176	Huckleberry Island, 0.2 mile NW of	15	40° 53.43'	73° 45.43'	-2 04	+0 07	-1 01	-2 32	0.4	0.4	0.4	025°	0.3	226°
3181	Huckleberry Island, 0.6 mile SE of	15	40° 52.80'	73° 44.75'	-2 17	-2 32	-1 35	-2 46	0.6	0.4	0.6	058°	0.4	246°
3186	Execution Rocks, 0.4 mile southwest of	15	40° 52.40'	73° 43.00'	+3 19	+2 58	+3 40	+2 56	0.4	0.5	0.4	115°	0.3	307°
3191	Manhasset Bay entrance	15	40° 49.75'	73° 43.78'	-2 02	-3 24	-3 04	-3 18	0.2	0.2	0.2	098°	0.3	264°
3196	Hart Island, 0.2 mile north of	15	40° 51.82'	73° 46.27'				-0 43	0.2	0.4			0.1	283°
3201	Hart Island, southeast of	15	40° 50.62'	73° 45.77'	-1 23	+0 24	-0 19	-0 13	0.6	0.6			0.2	283°
3206	Hart Island, 0.3 n.mi. SSE of	15d	40° 50.43'	73° 45.94'	-1 06	-0 48	-0 54	-1 18	0.5	0.8	0.1	114°	0.5	040°
3211	Hart Island and City Island, between	15	40° 51.37'	73° 46.73'	-1 27	-2 20	-1 06	-2 35	0.2	0.3			0.2	143°
3216	City Island Bridge	10	40° 51.47'	73° 47.60'	-2 38	+0 03	-4 21	-0 30	0.4	0.4			0.2	349°
3221	Eastchester Bay, near Big Tom	5	40° 50.20'	73° 47.72'	-0 39	-1 59	-0 35	-1 59	0.1	0.3			0.1	327°
3226	Hutchinson R., Pelham Highway Bridge	5	40° 51.70'	73° 49.00'	-2 44	-3 20	-2 54	-3 22	0.4	0.6			0.3	097°
3231	City Island, 0.6 mile southeast of	15	40° 49.72'	73° 46.47'	+3 02	+3 08	+3 04	+2 05	0.9	0.7			0.8	305°
3236	Elm Point, 0.2 mile west of	15	40° 48.92'	73° 46.02'	-0 56	-0 14	-1 46	-2 14	0.5	0.7			0.5	251°
3241	THROGS NECK, 0.3 n.mi. NE of	15d	40° 48.64'	73° 47.13'	-1 12	-2 45	-0 35	-0 21	0.2	0.9			0.2	026°
3246	Throgs Neck, 0.4 mile south of	15	40° 47.90'	73° 47.45'	+0 57	+0 49	+1 33	+0 11	0.8	1.0	0.1	312°	0.1	286°
3251	Throgs Neck, 0.2 mile S of (Willits Point)	15	40° 48.12'	73° 47.48'	+0 21	+0 31	+1 13	+0 05	0.7	1.2			0.6	090°
3256	Throgs Neck Bridge	15	40° 48.1'	73° 47.6'	-0 24	+0 43	+0 50	-0 04	1.6	1.5	0.1	194°	1.5	122°
	EAST RIVER													
3261	Cryders Point, 0.4 mile NNW of	14	40° 48.02'	73° 47.92'	-0 29	-0 43	-0 30	-1 00	0.4	0.2			1.3	110°
3266	Bronx-Whitestone Bridge, East of	15d	40° 48.1'	73° 49.6'	-0 34	-0 46	-0 10	-1 27	0.5	0.2			1.7	076°
3271	Clason Point, 0.3 n.mi. S of	15d	40° 47.98'	73° 50.81'	-0 25	-1 06	-0 19	-0 33	0.4	0.4			1.5	083°
3276	College Point Reef, 0.25 n.mi. NW of	15d	40° 48.06'	73° 51.28'	-0 27	-0 47	-0 32	-1 00	0.4	0.3	0.1	351°	0.1	350°
3281	Flushing Creek entrance	3281	40° 45.9'	73° 50.7'										
3286	Rikers I. chan., off La Guardia Field	3286	40° 47'	73° 50.7'										
3291	Bronx River (1 mile north of Hunts Pt.)	3291	40° 48.9'	73° 52.5'										
3296	Hunts Point, southwest of	3296	40° 48'	73° 53'										
3301	South Brother Island, NW of	3301	40° 47.8'	73° 54.1'	+0 01	-0 10	+0 01	-0 05	0.5	0.3			1.7	108°
3306	Off Winthrop Ave., Astoria	3306	40° 47.2'	73° 55.0'	-0 17	+0 04	-0 06	-0 12	0.4	0.3			1.5	054°
3311	Mill Rock, northeast of	3311	40° 46.9'	73° 56.2'	+0 04	+0 02	-0 01	-0 11	1.0	0.5			3.4	040°
3316	Mill Rock, west of	3316	40° 46.8'	73° 56.5'	-0 23	+0 05	-0 29	-0 32	0.7	0.1			2.3	103°
3321	HELL GATE (off Mill Rock)	3321	40° 46.7'	73° 56.3'	-0 26	+0 08	-0 02	-0 17	0.4	0.2			1.2	000°
3326	Roosevelt Island	3326	40° 46'	73° 57'										
3331	west of, off 75th Street	3331	40° 46'	73° 57'	-0 02	-0 04	-0 08	+0 07	1.1	1.0			3.8	037°
3336	east of, off 36th Avenue	3336	40° 45.74'	73° 57.24'	-0 08	-0 04	-0 08	-0 11	1.0	0.7			3.5	030°
3341	west of, off 67th Street	3341	40° 45.58'	73° 57.27'	+0 13	-0 08	+0 06	+0 11	1.1	0.9			3.6	011°
3346	east of, off 63rd Street	3346	40° 45.49'	73° 57.08'	-0 10	-0 08	0 00	+0 03	0.8	0.6			2.8	036°
3351	Manhattan, off 31st Street	3351	40° 44.38'	73° 58.17'	0 00	-0 06	+0 02	+0 07	0.8	0.6			2.8	028°
3356	Newtown Creek entrance	3356	40° 44'	73° 57'	+0 09	-0 11	-0 02	+0 36	0.4	0.5			1.5	000°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	EAST RIVER—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m	h m	h m	Dir.	Dir.	Dir.	Dir.
3361	Pier 67, off 19th Street		40° 43.08'	73° 58'	-0.08	+0.08	-0.08	+0.07	0.5	0.4	1.8	355°	1.9	179°
3366	Williamsburg Bridge, 0.3 mile north of	15	40° 44.3'	73° 58.24'	-0.05	+0.12	-0.01	+0.10	0.8	0.6	2.7	020°	2.9	220°
3371	Manhattan Bridge, East of	15d	40° 42.5'	73° 59.4'	-0.28	+0.19	-0.13	+0.03	0.7	0.5	2.5	083°	2.2	259°
3376	Brooklyn Bridge		40° 42.36'	73° 59.85'	+0.29	+0.41	+0.33	+0.29	0.8	0.6	2.7	063°	2.8	253°
3381	Brooklyn Bridge, 0.1 mile southwest of		40° 42.2'	74° 00.0'	-0.18	+0.08	-0.04	-0.07	0.9	0.8	2.9	046°	3.5	222°
3386	Buttermilk Channel (SEE CAUTION NOTE)	15	40° 41.3'	74° 00.8'	-0.31	0.00	+0.03	-0.18	0.5	0.6	1.8	050°	2.6	221°
3391	Buttermilk Channel		40° 41.15'	74° 00.81'	-0.12	-0.18	-0.06	+0.18	0.5	0.5	1.8	050°	2.4	220°
	HARLEM RIVER													
3396	East 107th Street	15	40° 47.4'	73° 56.1'	-0.08	-0.03	-1.09	-1.39	0.2	0.2	0.8	206°	0.8	030°
3401	Willis Ave. Bridge, 0.1 mile NW of		40° 48.3'	73° 55.8'	-0.30	0.00	-0.12	-0.13	0.4	0.3	1.2	140°	1.3	330°
3406	Madison Ave. Bridge		40° 48.8'	73° 56.1'	-0.20	+0.18	-0.21	-0.14	0.5	0.4	1.8	180°	1.7	000°
3411	Macombs Dam Bridge		40° 49.7'	73° 56.1'	-0.20	+0.14	-0.22	-0.11	0.5	0.3	1.7	180°	1.4	000°
3416	High Bridge		40° 50.5'	73° 55.9'	-0.20	+0.08	-0.23	-0.08	0.6	0.4	2.0	189°	2.0	015°
3421	West 207th Street Bridge		40° 51.8'	73° 54.9'	-0.22	+0.05	-0.22	-0.02	0.6	0.4	2.0	215°	2.0	035°
3426	Broadway Bridge		40° 52.4'	73° 54.7'	-0.23	+0.08	-0.20	+0.04	0.6	0.5	2.1	116°	2.3	299°
3431	Henry Hudson Bridge, 0.7 nmi. SE of	16	40° 52.6'	73° 55.3'	+0.12	+0.31	-0.31	+0.41	0.2	0.3	1.8	137°	1.3	326°
	LONG ISLAND, South Coast													
3436	Fire Island Lighted Whistle Bouy 2F1		40° 29'	73° 11'										
3441	Fire Island Inlet, 22 miles S of <15>		40° 16'	73° 16'										
3446	Shinnecock Canal, railroad bridge <16>		40° 53.2'	72° 30.1'	+1.04	+0.34	+0.19	+0.30	0.8	0.3	0.8	250°	1.5	180°
3451	Ponquogue bridge, Shinnecock Bay		40° 50.7'	72° 30.1'	+0.04	-0.22	-0.38	-0.50	1.6	1.2	2.5	350°	2.3	170°
3456	Shinnecock Inlet		40° 50.6'	72° 28.7'	+0.07	-0.02	+0.21	-0.08	1.5	1.3	2.4	082°	2.4	244°
3461	Fire I. Inlet, 0.5 mi. S of Oak Beach		40° 37.78'	73° 18.40'	-1.05	-0.50	-1.04	-1.12	2.0	1.4	3.1	035°	2.6	217°
3466	Long Beach, inside, between bridges		40° 35.5'	73° 34.0'	-0.44	+0.22	+0.24	-0.07	0.3	0.3	0.5	076°	0.6	277°
3471	East Rockaway Inlet		40° 35.7'	73° 39.6'	-1.36	-1.36	-1.11	-1.45	1.4	1.2	2.2	042°	2.3	227°
3476	East Rockaway Inlet		40° 35.4'	73° 45.3'										
3481	Ambrose Light		40° 27'	73° 49'										
3486	Sandy Hook App. Lighted Horn Bouy 2A		40° 27'	73° 55'										
	JAMAICA BAY													
3491	Rockaway Point	15	40° 32.18'	73° 56.48'	-2.26	-2.35	-1.46	-3.09	1.2	0.6	1.9	301°	1.1	140°
3496	Rockaway Inlet entrance		40° 33.7'	73° 56.1'	-1.45	-2.21	-1.41	-2.18	1.1	1.4	1.8	085°	2.7	244°
3501	Rockaway Inlet	14	40° 34.12'	73° 53.48'	-1.43	-2.01	-1.23	-2.36	1.0	0.8	1.6	066°	1.5	261°
3506	Barren Island, east of		40° 35.0'	73° 53.0'	-1.49	-2.39	-2.11	-2.26	0.8	0.9	1.2	004°	1.7	192°
3511	Canarsie (midchannel, off pier)		40° 37.6'	73° 53.0'	-1.44	-1.39	-1.26	-2.13	0.3	0.4	0.5	045°	0.7	222°
3516	Beach Channel (bridge)		40° 35.0'	73° 49.0'	-1.38	-1.14	-1.05	-1.32	1.2	1.1	1.9	062°	2.0	225°
3521	Grass Hassock Channel		40° 36.6'	73° 47.1'	-1.11	-1.03	-1.05	-1.01	0.6	0.5	1.0	052°	1.0	228°
	NEW YORK HARBOR ENTRANCE													
3526	Ambrose Channel	15	40° 31.00'	73° 58.48'	-0.47	-1.11	-0.33	-0.14	1.0	0.9	0.1	025°	1.7	123°
3531	Norton Point, WSW of	16	40° 33.30'	74° 01.30'	-0.03	-1.02	+0.18	+0.20	0.6	0.7	0.3	263°	1.2	166°
3536	THE NARROWS, midchannel	17	40° 36.56'	74° 02.77'			<i>Daily predictions</i>				0.2	064°	1.6	164°
	do.	30	40° 36.56'	74° 02.77'	-0.23	-0.07	+0.13	+0.14	1.1	0.9	1.7	332°	1.7	160°
	do.	43	40° 36.56'	74° 02.77'	-0.44	-0.11	+0.17	+0.00	1.2	0.9	1.8	332°	1.6	156°
	do.	63	40° 36.56'	74° 02.77'	-1.10	-0.31	+0.10	-0.13	1.1	0.7	0.1	240°	1.3	147°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS					
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb		
	NEW YORK HARBOR, Upper Bay Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.		
3541	Bay Ridge, west of	22	40° 37.54'	74° 03.24'	-0.01	+0.19	+0.34	+0.52	0.9	0.8	0.1	104°	1.4	354°	1.5	185°
3546	Bay Ridge Channel	15	40° 39.18'	74° 01.54'	-0.48	-0.27	-0.04	-1.24	0.7	0.4	--	--	1.0	032°	0.7	212°
3551	Red Hook Channel	36	40° 39.18'	74° 01.54'	-1.25	-2.37	-0.58	-0.16	0.4	0.2	--	--	0.6	037°	0.4	225°
3556	Robbins Reef Light, east of		40° 40.0'	74° 01.2'	-0.53	-0.45	-0.16	-0.37	0.6	0.4	--	--	1.0	353°	0.7	170°
3561	Red Hook, 1 mile west of		40° 39.45'	74° 03.50'	+0.26	+0.15	-0.06	+0.17	0.8	0.9	--	--	1.3	016°	1.6	204°
3566	Statue of Liberty, east of		40° 40.5'	74° 02.5'	+0.51	+0.05	+0.39	+0.45	0.8	1.2	--	--	1.3	024°	2.3	206°
			40° 41.4'	74° 01.8'	+1.07	+0.57	+0.48	+0.52	0.9	1.0	--	--	1.4	031°	1.9	205°
	HUDSON RIVER, Midchannel <17>															
3571	Hudson River entrance	14	40° 42.30'	74° 01.12'	-0.28	-0.28	-0.25	+0.18	0.8	0.5	0.1	292°	1.4	009°	1.4	199°
3576	Grants Tomb	18	40° 48.48'	73° 58.06'	-0.13	-0.22	+0.11	-0.33	1.0	0.7	--	--	1.8	025°	1.8	208°
3581	George Washington Bridge	14d	40° 50.97'	73° 56.99'	-0.35	-0.38	-0.04	-0.19	1.0	0.8	0.2	288°	1.8	010°	2.5	203°
	do	40d	40° 50.97'	73° 56.99'	-0.56	-0.40	+0.04	-0.36	0.9	0.4	0.1	285°	1.7	012°	1.9	198°
3586	Spuvten Duyvil	63d	40° 50.97'	73° 56.99'	-0.06	-0.28	+0.10	+0.24	0.7	0.4	0.1	266°	1.3	355°	1.1	177°
3591	Riverdale		40° 53'	73° 56'	-0.06	+0.28	+0.10	+0.24	0.9	0.8	--	--	1.6	020°	2.1	--
3596	Riverdale		40° 54'	73° 55'	+0.54	+0.27	+0.15	+0.32	0.8	0.8	--	--	1.4	015°	2.0	200°
3601	Mount St. Vincent College, SW of	15	40° 54.42'	73° 54.48'	+0.09	+0.20	+0.27	+0.29	0.8	0.5	--	--	1.5	007°	1.4	190°
3606	Dobbs Ferry	5d	41° 01'	73° 53'	+1.13	+0.53	+0.37	+0.49	0.7	0.7	--	--	1.3	010°	1.7	--
	do	16d	41° 04.00'	73° 52.90'	+1.12	+0.55	+0.52	+1.06	0.6	0.8	--	--	1.9	174°	1.9	175°
	do	35d	41° 04.00'	73° 52.90'	+0.50	+0.29	+1.04	+1.05	0.7	0.7	0.1	265°	1.2	354°	1.6	174°
3611	Tarrytown		41° 05'	73° 53'	+1.20	+1.06	+0.53	+1.02	0.5	0.4	0.1	265°	0.8	349°	0.9	178°
3616	Ossining		41° 10'	73° 54'	+1.33	+1.22	+1.16	+2.19	0.5	0.5	--	--	1.1	000°	1.5	--
3621	Haverstraw	4d	41° 12.55'	73° 57.07'	+2.29	+2.11	+1.58	+2.01	0.4	0.6	--	--	0.9	320°	1.3	--
	do	12d	41° 12.55'	73° 57.07'	+2.04	+2.10	+2.14	+1.45	0.5	0.4	--	--	1.0	348°	1.5	165°
	do	20d	41° 12.55'	73° 57.07'	+1.26	+1.46	+2.14	+1.31	0.5	0.3	0.1	076°	1.0	344°	1.1	166°
3626	Stony Point	14d	41° 14.49'	73° 58.00'	+2.09	+1.55	+1.46	+2.00	0.6	0.6	0.1	069°	0.8	348°	0.7	162°
	do	50d	41° 14.49'	73° 58.00'	+1.26	+1.50	+2.21	+1.40	0.7	0.5	0.1	069°	1.0	348°	1.5	154°
	do	83d	41° 14.49'	73° 58.00'	+1.34	+1.57	+2.22	+1.36	0.7	0.2	--	--	1.3	334°	1.1	165°
3631	Peekskill		41° 17'	73° 57'	+1.53	+1.44	+1.46	+2.02	0.5	0.5	--	--	0.6	170°	0.6	170°
3636	Bear Mountain Bridge	13d	41° 18.95'	73° 59.03'	+2.18	+1.32	+1.40	+2.02	0.4	0.6	--	--	0.8	000°	1.2	--
	do	52d	41° 18.95'	73° 59.03'	+1.58	+1.46	+2.02	+2.05	0.6	0.5	--	--	1.0	343°	1.4	180°
	do	88d	41° 18.95'	73° 59.03'	+1.34	+1.38	+2.07	+2.07	0.6	0.4	--	--	1.0	339°	1.2	167°
3641	Highland Falls		41° 22'	73° 58'	+2.07	+1.57	+1.57	+2.02	0.6	0.5	--	--	1.0	005°	0.9	161°
3646	West Point, off Duck Island		41° 24'	73° 57'	+2.15	+2.07	+2.04	+2.04	0.6	0.4	--	--	1.0	010°	1.1	185°
3651	Newburgh Beacon Bridge	4d	41° 31.00'	73° 59.50'	+2.19	+2.19	+2.25	+2.19	0.6	0.5	--	--	1.2	350°	1.2	171°
	do	17d	41° 31.00'	73° 59.50'	+2.15	+2.08	+2.25	+2.18	0.6	0.4	--	--	1.0	346°	1.0	169°
	do	24d	41° 31.00'	73° 59.50'	+2.13	+2.07	+2.23	+2.18	0.6	0.4	--	--	0.9	345°	0.9	168°
3656	Roseton	5d	41° 33.75'	73° 58.23'	+2.57	+2.36	+2.41	+2.51	0.6	0.6	0.1	123°	1.1	039°	1.4	213°
	do	15d	41° 33.75'	73° 58.23'	+2.56	+2.37	+2.43	+2.50	0.6	0.5	--	--	1.1	038°	1.4	213°
	do	15d	41° 33.75'	73° 58.23'	+2.53	+2.32	+2.44	+3.01	0.5	0.4	--	--	0.9	031°	1.3	214°
3661	New Hamburg		41° 35'	73° 57'	+2.48	+2.40	+2.24	+3.09	0.6	0.4	--	--	1.0	005°	1.1	188°
3666	Mid-Hudson Suspension Bridge	16d	41° 42.10'	73° 56.76'	+3.15	+2.47	+2.54	+3.09	0.7	0.6	--	--	1.2	005°	1.5	188°
	do	32d	41° 42.10'	73° 56.76'	+3.14	+2.47	+2.50	+3.08	0.6	0.5	--	--	1.1	005°	1.4	186°
	do	48d	41° 42.10'	73° 56.76'	+3.12	+2.45	+2.46	+3.09	0.5	0.5	--	--	0.9	005°	1.2	185°
3671	Hyde Park		41° 47'	73° 57'	+3.25	+3.08	+2.43	+3.00	0.7	0.5	--	--	1.2	005°	1.3	--
	Kingston Point, south of	4d	41° 55.10'	73° 57.57'	-0.31	-0.09	-0.07	-0.24	1.2	1.1	0.1	090°	1.3	009°	1.5	177°
	do	17d	41° 55.10'	73° 57.57'	-0.30	-0.10	-0.10	-0.22	1.2	1.1	0.1	090°	1.2	010°	1.4	178°
	do	30d	41° 55.10'	73° 57.57'	-0.30	-0.07	-0.07	-0.25	1.0	0.9	0.1	090°	1.0	011°	1.1	178°
3681	Kingston-Rhinecliff Bridge	14d	41° 58.63'	73° 57.13'	+0.00	-0.01	+0.01	-0.01	1.1	1.1	--	--	1.1	011°	1.3	191°
	do	4d	41° 58.63'	73° 57.13'	-0.02	-0.01	+0.02	+0.01	0.8	0.9	--	--	0.9	010°	1.4	192°
	do	27d	51° 58.63'	73° 57.13'	-0.02	-0.01	-0.02	+0.01	0.8	0.9	--	--	0.9	010°	1.1	190°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	HUDSON RIVER, Midchannel <17>—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m	1.3	1.3	knots	Dir.	knots	Dir.
3686	Barnytown		42° 00'	73° 56'	+0.21	+0.24	-0.05	-0.04	1.3	1.3	1.4	010°	1.7	--
3691	Saugerties	4d	42° 04'	73° 56'	+0.38	+0.45	+0.14	+0.06	1.4	1.5	1.5	000°	1.9	--
3696	Silver Point, south of	14d	42° 08.29'	73° 54.51'	+0.38	+0.54	+0.41	+0.28	1.3	1.2	1.4	025°	1.5	205°
	do.	14d	42° 08.29'	73° 54.51'	+0.38	+0.54	+0.40	+0.27	1.2	1.1	1.3	025°	1.5	205°
	do.	14d	42° 13'	73° 51'	+0.28	+0.54	+0.37	+0.27	1.0	0.8	1.5	355°	2.0	--
3701	Catskill	14d	42° 14.88'	73° 49.10'	+1.11	+1.30	+0.54	+0.36	1.5	1.5	1.6	355°	2.0	--
3706	Hudson	24d	42° 14.88'	73° 49.10'	+1.22	+1.17	+0.46	+0.48	1.4	1.4	1.5	061°	1.9	242°
	do.	40d	42° 14.88'	73° 49.10'	+1.22	+1.14	+0.44	+0.47	1.3	1.4	1.4	061°	1.8	242°
	do.	4d	42° 21.08'	73° 47.40'	+1.31	+1.17	+1.01	+1.04	1.4	1.1	1.1	007°	1.4	238°
3711	Coxsackie	14d	42° 21.08'	73° 47.40'	+1.30	+1.16	+1.00	+1.04	1.3	1.1	1.5	007°	1.5	190°
	do.	31d	42° 21.08'	73° 47.40'	+1.28	+1.16	+0.58	+1.04	1.1	0.8	1.4	007°	1.4	189°
	do.	4d	42° 21.08'	73° 47.40'	+1.41	+1.12	+1.10	+1.12	1.2	0.9	1.1	007°	1.1	184°
3716	Houghtaling Island, south of	14d	42° 25.36'	73° 46.80'	+1.41	+1.12	+1.09	+1.15	1.1	0.8	1.2	000°	1.2	180°
	do.	27d	42° 25.36'	73° 46.80'	+1.40	+1.09	+1.07	+1.14	0.9	0.7	1.2	359°	1.1	180°
	do.	6d	42° 27'	73° 47'	+2.07	+2.07	+1.58	+1.58	1.2	1.1	1.0	357°	0.9	181°
3721	New Baltimore	6d	42° 30.26'	73° 46.64'	+1.50	+1.09	+1.06	+1.23	1.0	0.7	1.0	051°	0.9	233°
3726	Castleton-on-Hudson Bridge	16d	42° 30.26'	73° 46.64'	+1.50	+1.10	+1.04	+1.20	0.9	0.7	1.0	050°	0.9	232°
	do.	32d	42° 30.26'	73° 46.64'	+1.48	+1.09	+1.00	+1.16	0.8	0.6	0.8	049°	0.8	229°
3731	Port of Albany	7d	42° 37.39'	73° 45.34'	+2.08	+1.09	+1.27	+0.48	0.4	0.4	0.5	021°	0.5	198°
	do.	16d	42° 37.39'	73° 45.34'	+2.18	+1.10	+1.26	+0.44	0.4	0.4	0.4	020°	0.5	198°
	do.	30d	42° 37.39'	73° 45.34'	+2.18	+1.11	+1.27	+2.06	0.4	0.4	0.4	018°	0.5	200°
3736	Troy (below the locks) <19>		42° 44'	73° 42'	--	--	--	--	--	--	--	--	--	--
	NEW YORK HARBOR, Lower Bay													
	Sandy Hook Channel	15	40° 29.06'	74° 00.06'	-1.23	-2.04	-1.14	-1.30	1.0	0.5	1.6	286°	1.9	094°
3741	Sandy Hook Chan., 0.4 mi. W of N. Tip		40° 28.79'	74° 01.30'	-1.41	-1.56	-1.38	-1.57	1.3	0.9	2.0	235°	1.6	050°
3751	Sandy Hook Pt., 2 mi. W of (channel)		40° 28.8'	74° 03.6'	-1.35	-2.01	-1.58	-1.49	0.4	0.3	0.6	263°	0.6	086°
3756	Chapel Hill South Channel		40° 29.90'	74° 03.8'	-2.02	-2.31	-1.48	-2.15	0.4	0.3	0.7	255°	0.6	075°
3761	New Dorp Beach, 1.2 miles south of		40° 32.4'	74° 05.8'	-4.09	-3.37	-4.43	-4.23	0.3	0.3	0.4	225°	0.5	030°
3766	Old Orchard Shoal Lt., 1.2 mi. ENE of		40° 31.1'	74° 04.4'	-2.09	-2.08	-1.31	-2.09	0.4	0.2	0.7	270°	0.4	085°
3771	New Dorp Beach, 1.8 miles SE of <20>		40° 32.9'	74° 03.7'	--	--	--	--	--	--	0.5	045°	0.5	225°
3776	Midland Beach, 2.6 miles SE of <21>		40° 32.8'	74° 02.35'	--	+0.06	--	-0.06	0.5	0.7	0.8	335°	1.3	160°
3781	Coney Island Lt., 1.5 miles SSE of		40° 33.1'	74° 00.3'	-1.17	-1.57	-1.06	-1.00	0.7	0.7	1.1	310°	0.8	210°
3786	Hoffman Island, 0.2 mile west of		40° 35'	74° 04'	-1.33	-1.49	-0.25	-0.57	0.6	0.4	0.9	020°	0.8	210°
3791	Rockaway Inlet Jetty, 1 mile SW of		40° 31.8'	73° 57.2'	-2.06	-2.13	-1.36	-1.50	0.8	0.8	1.2	287°	1.4	142°
3796	Coney Island Channel, west end		40° 34.2'	74° 00.5'	-1.14	-0.45	-0.32	-0.55	0.7	0.6	1.1	293°	1.2	102°
	SANDY HOOK BAY <22>													
3801	Highlands Bridge, Shrewsbury River		40° 23.8'	73° 58.8'	+0.31	+0.35	+0.25	+0.12	1.7	1.3	2.6	170°	2.5	--
3806	Seabright Bridge, Shrewsbury River		40° 21.9'	73° 58.5'	+1.05	+1.05	+0.44	+0.44	0.9	0.9	1.4	185°	1.7	--
	RARITAN BAY													
3811	Raritan Bay Reach Channel	15	40° 29.36'	74° 07.06'	-1.55	-2.41	-0.46	-0.58	0.4	0.2	0.6	285°	0.4	094°
3816	Keyport Channel entrance		40° 26.9'	74° 11.9'	--	--	--	--	--	--	--	--	--	--
3821	Red Bank, 1.4 miles south of	14	40° 28.9'	74° 12.6'	-1.35	-2.13	-1.30	-1.51	0.4	0.3	0.6	278°	0.5	079°
3826	Seguine Point	34	40° 30.24'	74° 11.12'	-1.52	-2.51	-0.56	-2.15	0.4	0.2	0.7	281°	0.3	079°
	do.	14	40° 30.24'	74° 11.12'	-3.28	-2.52	-0.21	-2.31	0.3	0.1	0.5	285°	0.2	105°
3831	Ward Point, ESE	14	40° 29.30'	74° 13.48'	-1.45	-1.59	-0.19	-1.01	0.5	0.3	0.7	244°	0.5	048°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	RARITAN RIVER Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
3836	Railroad Bridge, Raritan River	15	40° 29.54'	74° 17.00'	-2 02	-2 26	-1 23	-2 08	0.6	0.4	0.9	326°	0.7	147°
3841	Washington Canal, north entrance		40° 28.3'	74° 22.1'	-1 02	-1 26	-1 38	-2 58	1.0	0.8	1.5	240°	1.5	060°
3846	South River entrance		40° 28.7'	74° 22.7'	-1 45	-2 15	-0 35	-1 51	0.7	0.5	1.1	180°	1.0	000°
	ARTHUR KILL													
3851	Tottenville, Arthur Kill River	15	40° 30.8'	74° 15.3'	-1 04	-1 26	-0 41	-1 30	0.7	0.6	1.0	023°	1.1	211°
	do.	32	40° 30.8'	74° 15.3'	-1 23	-1 06	-0 56	-1 10	0.4	0.3	0.6	026°	0.5	207°
3856	Tufts Point-Smoking Point		40° 33.4'	74° 13.4'	-0 38	-0 45	-0 32	-1 07	0.8	0.6	1.2	109°	1.2	267°
3861	Tremley Point Reach	21	40° 35.18'	74° 12.30'	-0 08	-0 55	+0 23	+0 22	0.6	0.4	0.9	015°	0.8	198°
3866	Elizabethport		40° 36.8'	74° 10.9'	+0 15	-0 10	+0 24	-0 03	0.9	0.6	1.4	090°	1.1	262°
	KILL VAN KULL													
3871	BERGEN POINT REACH (BAYONNE BRIDGE)	16	40° 38.5'	74° 08.6'	on Bergen Point Reach, p.60				0.1	346°	1.9	260°	1.4	078°
	do.	29	40° 38.5'	74° 08.6'	Daily predictions				--	--	1.6	263°	1.3	079°
					on The Narrows, p.48									
3876	Bergen Point, East Reach	15	40° 38.42'	74° 07.48'	-1 24	-2 14	-1 43	-1 51	0.7	0.6	1.1	274°	1.2	094°
3881	New Brighton	15	40° 39.00'	74° 05.06'	-1 34	-2 09	-1 32	-1 50	0.8	1.0	1.3	262°	1.9	072°
	NEWARK BAY													
3886	South Reach, Newark Bay	15	40° 39.36'	74° 08.24'	-0 46	-1 46	-0 59	-1 13	0.4	0.4	0.7	031°	0.7	218°
	HACKENSACK RIVER													
3891	Lincoln Highway Bridge, north of		40° 44'	74° 06'	+0 04	+0 11	+0 39	-0 21	0.6	0.4	0.9	017°	0.8	181°
	PASSAIC RIVER													
3896	Lincoln Highway Bridge		40° 44'	74° 07'	-0 21	-0 20	-0 20	-0 27	0.4	0.3	0.6	009°	0.5	180°
	NEW JERSEY COAST													
3901	Shark River Entrance	5d	40° 11.24'	74° 00.76'	-2 05	-1 52	-2 06	-1 12	1.4	1.1	1.9	273°	1.5	098°
	do.	15d	40° 11.24'	74° 00.76'	-2 06	-1 51	-2 06	-1 14	1.1	0.9	1.5	275°	1.2	097°
3906	Manasquan Inlet		40° 06.1'	74° 02.1'	-0 43	-0 30	-1 12	-0 57	1.2	1.4	1.7	300°	1.8	120°
3911	Manasquan R., hwy. bridge, main chan		40° 06.1'	74° 03.1'	-0 41	-0 30	-1 15	+0 10	1.6	1.6	2.2	230°	2.1	050°
3916	Point Pleasant Canal, north bridge <34>		40° 05.1'	74° 04.1'	+1 46	+1 28	+0 48	+2 10	1.3	1.5	1.8	170°	2.0	350°
3921	Barneget Inlet		39° 46.1'	74° 07.1'	+1 01	+0 12	+0 15	+0 48	1.6	1.9	2.2	270°	2.5	090°
3926	Manahawkin Drawbridge		39° 39.1'	74° 11.1'	+2 33	+2 43	+2 25	+4 21	0.8	0.7	1.1	030°	0.9	210°
3931	Absecon Inlet	9d	39° 22.59'	74° 24.87'	-1 07	-0 51	-0 54	-1 18	1.6	1.6	2.2	328°	2.0	147°
	do.	42d	39° 22.59'	74° 24.87'	-1 02	-1 06	-0 56	-1 08	1.3	1.3	1.9	327°	1.8	144°
3936	Corson's Inlet Entrance	15d	39° 12.50'	74° 39.11'	-1 33	-1 18	-1 37	-1 59	1.1	1.4	1.6	308°	1.8	129°
3941	Cape May, 72 miles east of <23>		39° 04.1'	73° 25.1'	See table 5.									
3946	Five-Fathom Bank NE, Buoy 2 FB		38° 59.1'	74° 32.1'	See table 5.									
3951	Five Fathom Bank Traffic Lane	35d	38° 47.30'	74° 42.68'	-1 50	-1 42	-1 02	-0 40	0.4	0.3	0.6	304°	0.4	121°
	do.	50d	38° 47.30'	74° 42.68'	-2 24	-1 18	-1 21	-1 20	0.3	0.2	0.4	302°	0.3	128°
3956	McCrie Shoal		38° 51.1'	74° 51.1'	-0 34	-0 26	-0 43	-0 04	0.9	1.1	1.3	280°	1.4	100°
3961	Cape May Harbor entrance	5d	38° 58.85'	74° 52.36'	-1 41	-1 20	-1 34	-1 10	1.1	1.3	1.6	324°	1.7	142°
	do.	15d	38° 58.85'	74° 52.36'	-1 42	-1 23	-1 34	-1 07	1.1	1.3	1.5	323°	1.7	142°
	do.	28d	38° 58.85'	74° 52.36'	-1 46	-1 22	-1 34	-1 05	0.9	1.1	1.2	322°	1.4	143°
3966	Cape May Canal, east end		38° 57.1'	74° 54.1'	-1 47	-1 48	-1 53	-1 05	1.4	1.5	1.9	310°	1.9	130°
3971	Cape May Canal, west end		38° 58.1'	74° 58.1'	-1 48	-1 48	-1 48	-1 16	0.6	0.7	0.9	264°	0.9	089°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	DELAWARE BAY and RIVER Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
3976	Cape May Channel	15d	38° 54'	74° 58'	-1 14	-1 30	-1 11	-0 45	1.1	1.8	1.5	306°	2.3	150°
3981	Cape May Point, 1.4 n.mi. SSW of	25d	38° 54.37'	74° 58.68'	-1 03	-1 18	-1 02	-0 47	1.0	1.3	1.5	309°	1.8	130°
3986	do.	15d	38° 54.37'	74° 58.68'	-0 56	-1 05	-1 00	-0 41	0.8	0.9	1.1	306°	1.2	139°
3991	Cape May Point, 2.7 n.mi. SSW of	22	38° 53.40'	74° 59.13'	-1 30	-1 08	-0 47	-0 36	0.9	0.6	1.2	299°	0.9	146°
3996	Cape Henlopen, 0.7 n.mi. ESE of	12d	38° 46.85'	75° 02.58'							1.4	327°	1.3	147°
	do.	70d	38° 47.97'	75° 04.90'					1.3	1.8	1.2	331°	2.4	139°
4001	Cape Henlopen, 2 miles northeast of	17d	38° 49.2'	75° 03.4'	-0 05	+0 07	-0 40	-0 03	0.8	0.5	0.1	042°	0.1	232°
4006	do.	31d	38° 51.22'	75° 04.62'	+0 21	+0 21	-0 03	+0 59	1.4	1.8	2.0	315°	2.3	145°
	do.	57d	38° 51.22'	75° 04.62'	+0 11	+0 27	+0 31	+0 58	1.3	1.2	0.2	252°	0.2	062°
	do.	96d	38° 51.22'	75° 04.62'	+0 02	+0 12	+0 44	+1 04	1.4	1.0	0.1	250°	0.1	065°
4011	Cape Henlopen, 4.8 n.mi. northeast of	18d	38° 51.22'	75° 04.62'	-0 10	+0 11	+0 38	+0 57	1.3	0.9	0.1	053°	1.8	150°
4016	Cape Henlopen, 5 miles north of	28d	38° 51.55'	75° 01.47'	-0 23	-1 11	-0 42	+0 05	1.1	1.4	1.5	322°	1.2	149°
4021	Breakwater Harbor		38° 51.55'	75° 01.47'	-0 44	-1 00	-0 44	+0 05	0.7	0.9	0.2	241°	1.8	150°
4026	Roosevelt Inlet (between jetties) <24>		38° 47.6'	75° 06.5'	+0 22	+0 39	+0 41	+1 08	1.4	1.5	2.0	344°	1.9	173°
4031	Broadkill Slough	14d	38° 47.5'	75° 09.5'	-0 55	-0 50	-1 14	-0 14	0.6	0.7	0.8	266°	0.9	078°
4036	Mispillion River mouth		38° 53.78'	75° 12.63'	-0 36	+0 08	-0 03	+1 15	0.5	0.8	0.7	206°	1.1	030°
4041	Bay Shore Channel (north)	13d	38° 56.8'	75° 18.9'	+2 34	+2 29	+1 49	+2 14	1.1	0.8	1.5	025°	1.0	190°
4046	Bay Shore Channel (city of Town Bank)	15d	38° 59.08'	74° 58.88'	-0 29	+0 05	+0 03	+0 52	0.6	0.5	0.1	098°	0.1	275°
4051	BRANDYWINE SHOAL LIGHT, 0.5nm west of	15d	38° 59.26'	75° 07.62'	-0 31	-0 51	-0 45	+0 35	0.7	0.7	0.8	006°	1.0	183°
4056	Brandywine Ra. (off Brandywine Shoal N)	40d	39° 00.37'	75° 08.38'	-0 09	+0 01	+0 02	+0 27	0.8	0.8	1.5	330°	0.1	241°
4061	Big Stone Beach, 2.8 miles southeast of	15d	39° 00.37'	75° 08.38'	-0 36	0 00	-0 05	+0 24	0.5	0.4	0.1	061°	0.6	153°
4066	Big Stone Beach, 2.2 n.mi. ENE of	12d	39° 00.48'	75° 16.6'	-0 44	-0 51	-0 41	-0 11	0.5	0.7	0.7	334°	0.6	133°
4071	do.	30d	39° 02.32'	75° 09.48'	+0 07	+0 03	+0 13	+1 06	0.4	0.5	0.6	319°	0.1	233°
4076	do.	13d	39° 03.3'	75° 09.5'	+0 10	+0 13	+0 29	+1 01	0.9	1.2	1.2	344°	0.1	160°
4081	Deadman Shoal, 1.2 mi. east of	9d	39° 04.00'	75° 04.22'	-0 23	+0 04	-0 08	+0 37	0.6	0.5	0.1	085°	0.5	173°
4086	Egg Island Flats		39° 06.4'	75° 07.1'	-0 53	-0 26	-0 31	-0 30	0.5	0.5	0.7	355°	0.7	150°
4091	Brandywine Range at Miah Maul Range		39° 04.97'	75° 11.28'	+0 40	+0 03	+0 21	+1 40	0.7	0.9	1.0	341°	1.2	150°
4096	Maurice River entrance		39° 13.0'	75° 02.7'	+0 51	+0 45	+1 04	+1 35	0.8	0.8	1.1	012°	1.0	192°
4101	Maurice River entrance		39° 17.2'	74° 59.6'	+1 01	+1 27	+1 24	+2 47	1.7	1.7	2.4	000°	2.2	180°
4106	Millville Drawbridge, Maurice River		39° 23.7'	75° 02.4'	-0 01	-0 01	-0 01	+2 47	0.1	0.3	0.6	000°	0.4	180°
4111	St. Jones River ent., 1 mile east of		39° 04'	75° 23'	-0 01	+0 11	+0 11	+0 47	0.4	0.5	0.6	334°	0.7	122°
4116	Kelly Island, 1.5 miles east of		39° 12.8'	75° 21.7'	+0 51	+0 50	+0 44	+1 12	0.6	0.9	0.9	348°	1.2	164°
4121	Miah Maul Range at Cross Ledge Range		39° 10.72'	75° 16.40'	+0 19	+0 41	+1 27	+2 27	1.1	1.4	1.5	335°	1.8	160°
4126	False Egg Island Point, 2 miles off		39° 11.4'	75° 12'	+0 27	+0 04	+0 13	+1 02	0.8	1.0	0.2	254°	0.1	241°
4131	Ben Davis Pt. Shoal, southwest of	15d	39° 14.87'	75° 18.93'	+1 48	+1 30	+1 30	+2 37	1.3	1.4	0.2	047°	1.8	147°
4136	do.	12d	39° 16.13'	75° 20.88'	+2 06	+1 38	+1 51	+2 51	1.4	1.7	0.2	047°	2.2	140°
	do.	43d	39° 16.13'	75° 20.88'	+1 01	+1 17	+2 15	+3 09	0.6	0.3	0.8	319°	0.4	136°
4141	Ben Davis Point, 0.8 mile southwest of		39° 16.9'	75° 18.2'	+0 57	+0 68	+1 13	+1 21	0.9	0.6	1.2	308°	0.8	122°
4146	Cohansey River, 0.5 mile above entrance		39° 20.9'	75° 21.6'	+1 30	+1 20	+1 31	+1 49	0.9	1.1	1.2	074°	1.4	254°
4151	Bridgeton (Broad Street Bridge) <1>		39° 25.6'	75° 14.2'	-0 27	+0 27	-0 27	+0 52	0.1	0.2	0.2	000°	0.3	180°
4156	Arnold Point, 2.2 n.mi. WSW of	14d	39° 22.67'	75° 28.07'	+2 23	+2 18	+2 27	+3 10	1.5	1.4	2.1	324°	1.9	145°
	do.	29d	39° 22.67'	75° 28.07'	+1 50	+2 08	+2 16	+2 30	1.2	1.0	1.6	327°	1.3	140°
4161	Smyrna River entrance		39° 21.9'	75° 31.8'	+1 49	+1 41	+1 57	+2 28	0.9	1.2	2.1	250°	1.5	070°
4166	Stony Point, channel west of		39° 27.1'	75° 33.8'	+3 24	+2 49	+2 30	+3 27	1.1	1.5	1.5	324°	1.9	151°
4171	Appoquinimink River entrance		39° 26.8'	75° 34.9'	+3 02	+2 54	+2 14	+2 55	0.7	0.9	2.0	231°	1.2	048°
4176	Artificial Island (Baker Range)		39° 28.20'	75° 33.88'	+3 02	+2 38	+2 46	+4 06	1.5	2.0	0.2	267°	2.7	175°
4181	Reedy Island (off end of pier)		39° 30.7'	75° 33.4'	+3 02	+3 00	+2 46	+3 44	1.7	2.0	2.4	027°	2.6	194°
4186	Alloway Creek ent., 0.2 mile above		39° 31.6'	75° 31.5'	+2 22	+2 41	+2 11	+2 17	1.5	1.6	2.1	129°	2.1	325°
4191	New Bridge, Alloway Creek		39° 31.6'	75° 27.1'	+3 04	+3 56	+3 28	+3 57	0.9	1.1	1.3	090°	1.4	270°
4196	Chesapeake and Delaware Canal Entrance	15d	39° 33.63'	75° 34.20'	+6 05	+5 30	+6 31	+6 16	1.0	1.5	1.4	264°	2.0	087°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	DELAWARE BAY and RIVER—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
4201	REEDY POINT, 0.3nm east of south jetty	15d	39° 33.51'	75° 33.10'	+3.20	+3.10	+3.00	+3.57	1.3	1.3	1.7	351°	2.0	163°
4206	Reedy Point, 1.1 miles east of		39° 33.58'	75° 32.47'	+3.35	+2.35	+2.52	+3.51	1.2	1.6	1.8	354°	1.7	179°
4211	Reedy Point, 0.85 n.mi. northeast of	15d	39° 34.23'	75° 33.22'	+3.47	+3.32	+3.01	+4.30	1.1	1.2	1.6	341°	2.2	163°
4216	Salem River entrance	14d	39° 34.2'	75° 30.1'	+3.25	+2.44	+3.29	+4.03	1.3	1.6	1.8	299°	2.1	118°
4221	Bulkhead Shoal Channel, SE, Del. City		39° 35.0'	75° 34.52'	+3.17	+2.57	+3.25	+4.05	1.5	1.6	2.1	308°	2.1	138°
4226	Bulkhead Shoal Channel, off Del. City		39° 36.0'	75° 35.2'	+3.31	+3.12	+3.25	+4.30	1.6	1.8	2.3	319°	2.3	148°
4231	Pea Patch Island, channel east of		39° 36.37'	75° 33.9'	+3.35	+3.07	+3.17	+4.14	1.5	1.7	2.1	332°	2.3	152°
4236	Finns Point, 0.60 n.mi. Northwest of	16d	39° 36.37'	75° 34.47'	+3.39	+3.37	+3.06	+3.52	1.2	1.3	1.7	002°	1.7	167°
4241	Penns Neck, 0.6 mile west of		39° 37.05'	75° 34.92'	+3.23	+3.06	+3.00	+3.58	1.3	1.3	1.8	339°	1.7	152°
4246	Penns Neck, 0.3 mile west of		39° 37.07'	75° 34.58'	+3.37	+2.92	+2.58	+3.54	1.4	1.8	1.9	051°	2.4	230°
4251	New Castle, channel abreast of		39° 38.1'	75° 33.2'	+3.44	+3.34	+3.16	+3.52	1.1	1.2	1.6	049°	1.5	230°
4256	Kelly Point, 0.2 mile northwest of		39° 38.9'	75° 32.8'	+3.52	+3.22	+3.31	+4.28	1.4	1.5	2.0	038°	1.9	225°
4261	Riverview Beach, 0.75 n.mi. west of	15d	39° 39.40'	75° 32.38'	+3.45	+3.33	+3.37	+4.16	2.1	2.0	3.0	029°	2.6	215°
4266	Deepwater Point, channel northwest of		39° 42.1'	75° 30.6'	+3.53	+3.15	+2.33	+3.50	0.2	0.6	0.1	226°	0.8	137°
4271	Christina River, 0.9 n.mi. above ent	15d	39° 43.30'	75° 31.77'	+4.10	+4.07	+3.54	+4.18	1.1	1.1	1.6	027°	1.4	207°
4276	Cherry Island Flats, channel east of		39° 44.3'	75° 29.1'	+4.29	+3.41	+3.55	+5.01	1.1	1.2	1.5	027°	1.5	210°
4281	Oldsmans Point		39° 45.9'	75° 28.4'	+4.15	+3.26	+3.57	+4.49	1.4	1.3	1.9	059°	1.7	246°
4286	Marcus Hook Bar (north), Main Channel	15d	39° 47.70'	75° 26.08'	+4.59	+3.48	+3.54	+5.12	1.2	1.2	1.7	061°	1.6	232°
4291	Marcus Hook		39° 48.2'	75° 24.6'	+5.26	+4.40	+4.23	+5.16	1.0	0.9	1.7	058°	2.2	242°
4296	Eddystone		39° 50.8'	75° 20.5'	+4.10	+3.53	+3.56	+4.17	1.0	1.0	1.4	096°	1.9	268°
4301	Essington Harbor		39° 51.5'	75° 18.3'	+4.49	+4.43	+4.36	+5.13	1.5	1.5	2.1	094°	2.1	094°
4306	Crab Point, 0.5 mile east of		39° 50.8'	75° 17.0'	+4.54	+4.52	+4.34	+5.19	1.4	1.7	1.9	054°	2.2	231°
4311	Hog Island, channel southeast of		39° 52.0'	75° 12.9'	---	---	---	---	0.4	0.3	0.5	356°	0.4	178°
4316	Schuylkill River entrance <1>		39° 53.2'	75° 11.7'	---	---	---	---	0.2	0.2	0.2	351°	0.3	172°
4321	Eagle Point, 0.2 n.mi. northwest of	12d	39° 54.23'	75° 12.90'	+5.13	+2.31	+4.27	+3.51	0.2	0.2	1.6	091°	1.8	271°
4326	do	17d	39° 52.82'	75° 10.38'	+5.07	+3.44	+4.22	+4.57	0.8	1.0	2.2	020°	1.3	274°
4331	Gloucester	40d	39° 53.4'	75° 08.1'	+5.14	+5.01	+4.45	+5.21	1.6	1.5	2.2	020°	2.0	210°
4336	Greenwich Point, northeast of		39° 54.5'	75° 07.6'	+5.19	+4.52	+4.46	+5.22	1.1	1.2	1.6	002°	1.6	188°
4341	Camden Marine Terminals, E of Chan. <26>		39° 56.4'	75° 08.2'	+5.53	+5.12	+5.08	+5.28	0.9	0.8	1.3	005°	1.1	174°
4346	PHILADELPHIA, PENNS LANDING	15d	39° 56.76'	75° 08.33'	+5.34	+4.19	+4.40	+5.00	1.3	1.3	1.8	066°	2.0	201°
4351	Petty Island (west end), Main Channel	24d	39° 58.03'	75° 07.13'	+6.08	+5.45	+5.15	+5.27	1.0	1.3	1.7	248°	1.8	248°
4356	Fisher Point		39° 58.9'	75° 04.2'	+5.29	+4.52	+4.33	+4.20	1.1	1.0	1.5	038°	1.7	223°
4361	Fivemile Point Bridge, northeast of	35d	39° 59.18'	75° 03.75'	+6.58	+5.45	+4.51	+6.07	1.1	1.0	1.4	041°	1.3	214°
4366	Torresdale, west of channel		40° 02.4'	74° 59.4'	+6.55	+5.55	+4.51	+6.07	0.6	1.2	0.9	044°	1.6	223°
4371	Ranocas Creek, off Delanco		40° 02.6'	74° 57.6'	+6.37	+6.24	+5.43	+6.29	0.7	0.7	1.0	090°	0.9	272°
4376	College Point, 0.4 n.mi. east of	21d	40° 04.65'	74° 53.20'	+6.34	+6.54	+5.01	+4.50	0.8	0.9	1.2	084°	1.2	252°
4381	Bristol, south of	8	40° 05.16'	74° 51.6'	+6.56	+5.30	+4.49	+6.31	0.9	1.2	1.3	024°	1.6	200°
4386	Burlington Island, channel east of		40° 05.7'	74° 50.2'	+7.33	+5.45	+4.08	+7.07	0.6	1.4	0.9	018°	1.8	204°
4391	Newbold Island north of, Main Channel	15d	40° 08.03'	74° 45.38'	+6.27	+4.29	+4.28	+3.51	0.5	0.4	0.7	084°	0.5	250°
4396	Whitehill <27>		40° 08.2'	74° 44.2'	---	---	---	+7.28	---	1.1	---	---	1.4	233°
	DEL., MD. and VA. COAST													
4401	Indian River Inlet (bridge)		38° 37'	75° 04'	---	+0.04	---	+0.31	1.3	1.6	1.8	265°	2.1	085°
4406	Fenwick Shoal Lighted Whistle Buoy 2		38° 25'	74° 46'	---	---	---	---	---	---	---	---	---	---
4411	Winter-Quarter Shoal Buoy 6WQS <28>		37° 55'	74° 56'	---	---	---	---	---	---	---	---	---	---
4416	Smith Island Shoal, southeast of	7	37° 05.3'	75° 43.5'	-1.36	-1.17	-1.35	-1.34	0.4	0.3	0.3	298°	0.4	068°
4421	Cape Henry Light, 2.2 miles southeast of		36° 53.9'	75° 58.7'	-1.16	-0.23	-0.10	-1.10	1.2	0.7	1.0	346°	0.9	165°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS							
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb				
															h m	h m	h m	h m	knots	Dir.	knots	Dir.
	CHESAPEAKE BAY Time meridian, 75° W	ft	North	West														
4426	Cape Henry Light, 3.4nm NNE of	7d	36° 58.79'	75° 58.85'	-0.03	+0.00	+0.09	-0.01	1.3	1.3	0.2	206°	1.0	287°	0.2	016°	1.6	116°
	do.	15d	36° 58.79'	75° 58.85'	-0.14	+0.04	+0.11	-0.05	1.2	1.0	0.1	199°	1.0	284°	0.2	019°	1.2	112°
4431	Cape Henry Light, 2.35nm NNE of	30d	36° 58.79'	75° 58.85'	-0.49	+0.01	-0.03	-0.38	0.7	0.5	0.1	009°	0.6	277°	0.1	195°	0.6	104°
	do.	15d	36° 57.74'	75° 59.14'	+0.17	+0.33	+0.18	+0.07	1.3	1.0	0.1	009°	1.0	291°	0.1	208°	1.2	116°
	do.	30d	36° 57.74'	75° 59.14'	-0.36	+0.00	+0.07	-0.25	1.5	0.8	0.1	294°	1.2	294°	0.1	205°	0.9	125°
	do.	45d	36° 57.74'	75° 59.14'	-1.05	+0.08	+0.10	-0.41	1.7	0.4	0.1	204°	1.4	294°	0.1	205°	0.7	124°
4436	Cape Henry Light, 1.4nm NE of	60d	36° 57.74'	75° 59.14'	-1.22	+0.18	+0.04	-0.56	1.4	0.6	0.1	205°	0.9	298°	0.1	204°	0.7	124°
	do.	15d	36° 56.73'	75° 59.38'	+0.03	+0.44	+0.17	+0.21	1.1	1.2	0.1	205°	1.2	298°	0.1	199°	1.5	117°
	do.	30d	36° 56.73'	75° 59.38'	+0.00	+0.19	+0.25	+0.10	1.5	1.0	0.1	203°	1.2	293°	0.1	199°	1.1	114°
	do.	45d	36° 56.73'	75° 59.38'	-0.18	+0.09	+0.30	-0.01	1.5	0.9	0.1	203°	1.2	293°	0.1	191°	1.0	107°
4441	Cape Henry Light, 0.8 n.mi. NNE of	60d	36° 56.73'	75° 59.38'	-0.32	+0.07	+0.30	-0.11	1.3	0.8	0.1	203°	1.0	282°	0.1	191°	1.0	107°
	do.	15d	36° 56.33'	75° 59.98'	+0.26	+0.03	-0.04	+0.10	1.3	1.3	0.1	200°	1.0	298°	0.1	191°	1.7	113°
	do.	38d	36° 56.33'	75° 59.98'	-1.42	-1.41	+1.36	-1.52	1.4	1.0	0.2	003°	1.1	275°	0.2	189°	1.2	106°
4446	Cape Henry Light, 2.0 n.mi. north of	15d	36° 57.53'	76° 00.63'	+0.12	+0.25	+1.00	+0.20	1.5	0.9	0.1	210°	1.2	289°	0.1	110°	1.1	110°
	do.	39d	36° 57.53'	76° 00.63'	-0.23	+0.10	+0.55	-0.17	1.5	0.5	0.1	012°	1.2	277°	0.1	190°	0.7	110°
	do.	54d	36° 57.53'	76° 00.63'	-1.03	+0.07	+0.34	-1.05	1.1	0.4	0.1	002°	0.9	263°	0.2	177°	0.5	111°
	do.	15d	36° 58.80'	75° 59.88'	-0.27	+0.09	+0.19	+0.23	1.6	1.0	0.1	228°	0.8	300°	0.1	177°	1.2	129°
4451	CHESAPEAKE BAY ENTRANCE		37° 00.1'	75° 59.3'	-0.59	+0.09	+0.26	-0.36	0.8	0.5	0.1	228°	0.6	307°	0.1	177°	1.3	104°
4456	Cape Henry Light, 4.6 miles north of	14d	37° 01.40'	75° 59.55'	+0.16	+0.43	+0.45	+0.26	1.2	0.9	0.1	210°	1.0	329°	0.1	177°	0.7	140°
4461	Cape Henry Light, 5.9 n.mi. north of	12	37° 02.20'	76° 06.60'	-0.20	+0.18	+0.45	-0.10	1.0	0.7	0.1	210°	0.8	280°	0.1	177°	0.9	070°
4466	Lynnhaven Roads		36° 55.1'	76° 04.9'	-1.18	-1.10	-1.43	-2.30	0.7	1.1	0.1	002°	0.6	180°	0.1	177°	0.9	070°
4471	Lynnhaven Inlet bridge		36° 54.4'	76° 05.6'	+0.29	+0.48	+0.06	+0.08	1.0	0.7	0.1	205°	0.8	305°	0.1	177°	0.9	100°
4476	Chesapeake Bay Bridge Tunnel		36° 56.69'	76° 07.33'	-0.03	+0.18	+0.13	+0.08	1.5	0.8	0.3	205°	1.2	288°	0.2	013°	1.1	113°
4481	Chesapeake Beach, 1.5 miles north of	6d	36° 58.64'	76° 07.45'	-0.30	+0.19	+0.43	+0.02	1.4	0.6	0.1	200°	1.1	289°	0.1	017°	0.8	111°
4486	0.75nm west, Thimble Shoal Channel	16d	36° 58.64'	76° 07.45'	-0.42	+0.13	+1.05	+0.11	1.1	0.4	0.1	008°	0.9	284°	0.1	008°	0.5	101°
	do.	29d	36° 58.64'	76° 07.45'	-0.43	+0.19	+0.52	+0.01	0.8	0.4	0.1	008°	0.6	281°	0.1	008°	0.5	096°
	do.	39d	36° 58.64'	76° 07.45'	-0.43	+0.19	+0.52	+0.01	1.1	0.8	0.1	008°	0.9	300°	0.1	008°	1.0	110°
4491	Tail of the Horseshoe		36° 59.57'	76° 06.20'	+0.05	+0.30	+0.16	+0.28	2.2	1.2	0.1	008°	1.8	335°	0.1	229°	1.5	145°
4496	Chesapeake Channel (bridge tunnel)		37° 02.50'	76° 04.33'	+0.05	+0.38	+0.32	+0.19	2.2	1.2	0.2	037°	0.6	311°	0.1	232°	0.4	125°
4501	Chesapeake Channel (Buoy 15)	13d	37° 03.40'	76° 05.58'	-0.30	+0.33	+0.50	+0.38	0.7	0.4	0.2	032°	0.6	309°	0.1	232°	0.4	139°
	do.	34d	37° 03.40'	76° 05.58'	-0.21	+0.27	+0.57	-0.07	0.7	0.3	0.2	032°	0.6	309°	0.1	232°	0.4	139°
4506	Fishermans Island, 3.2 miles WSW of		37° 04.00'	76° 02.25'	-0.22	-0.12	-0.17	-0.36	1.5	1.3	0.1	032°	1.2	330°	0.1	232°	0.4	139°
4511	Fishermans Island, 1.4 miles WSW of	6d	37° 04.78'	76° 00.25'	-1.09	-0.02	-0.12	-1.02	2.2	0.9	0.2	220°	1.8	330°	0.1	028°	1.1	140°
4516	Fishermans Island, 2.45nm south of	16d	37° 02.64'	75° 57.77'	-0.17	-0.20	-0.17	-0.31	1.5	1.5	0.2	220°	1.2	301°	0.1	028°	1.8	126°
	do.	16d	37° 02.64'	75° 57.77'	-0.34	-0.28	-0.14	-0.33	1.4	1.3	0.1	213°	1.2	298°	0.1	028°	1.6	127°
	do.	31d	37° 02.64'	75° 57.77'	-1.01	-0.32	-0.13	-0.46	1.2	1.1	0.1	213°	1.0	298°	0.1	028°	1.1	123°
4521	Fishermans Island, 1.7 n.mi. south of	16d	37° 03.37'	75° 58.33'	-0.19	-0.29	-0.15	-0.26	1.2	1.1	0.2	218°	1.0	297°	0.1	028°	1.4	126°
	do.	26d	37° 03.37'	75° 58.33'	-0.37	-0.19	-0.16	-0.34	1.0	0.8	0.2	218°	0.8	290°	0.1	028°	1.0	120°
	do.	15d	37° 04.85'	75° 58.83'	-0.57	-0.15	-0.24	-0.35	1.9	1.5	0.2	223°	1.5	306°	0.1	218°	1.9	140°
4326	Fishermans Island, 0.5 n.mi. SW of		37° 05.57'	75° 59.33'	-0.21	-0.08	-0.06	-0.42	2.5	1.6	0.2	200°	2.0	005°	0.1	218°	2.0	175°
4531	Fishermans I., 0.4 mile west of		37° 06.10'	76° 00.33'	-0.28	-0.14	+0.12	-0.27	1.4	1.0	0.1	060°	1.2	333°	0.1	247°	1.2	155°
4536	Fishermans I., 1.4 n.mi. WNW of	16d	37° 06.50'	76° 00.00'	-0.09	+0.20	+0.23	+0.10	2.2	1.3	0.1	060°	1.8	355°	0.1	247°	1.6	165°
4541	Fishermans I., 1.1 miles northwest of		37° 06.88'	76° 00.00'	+0.39	+0.37	+0.56	+1.20	0.9	0.2	0.1	060°	1.8	355°	0.1	247°	1.6	165°
4546	Cape Charles, off Wise Point	5	36° 56.05'	76° 10.60'	-1.01	-1.18	-0.39	-1.01	0.4	0.3	0.1	060°	0.3	278°	0.1	060°	0.2	075°
4551	Little Creek, 0.2 n.mi. N of east jetty <63>	15d	36° 56.05'	76° 10.60'	+0.02	+0.14	+0.57	+0.02	0.9	0.7	0.1	060°	0.3	278°	0.1	060°	0.2	075°
4556	Butler Bluff, 2.1 n.mi. WSW of	14d	37° 09.37'	76° 01.60'	+0.02	+0.14	+0.57	+0.02	0.9	0.7	0.1	060°	0.3	278°	0.1	060°	0.2	075°
4561	York Spit Channel, N of Buoy '26'	7	37° 12.90'	76° 08.50'	+1.33	+1.50	+1.24	+1.26	1.0	0.9	0.1	060°	0.8	010°	0.1	060°	0.8	164°
4566	Old Plantation Flats Lt., 0.5 mi. W of	15d	37° 14.00'	76° 04.10'	+1.31	+2.01	+1.55	+1.06	1.5	1.0	0.2	280°	1.2	005°	0.1	094°	1.3	175°
4571	Cape Charles City, 3.3 n.mi. west of	40d	37° 15.87'	76° 05.62'	+0.38	+1.18	+1.03	+1.01	1.2	0.8	0.2	280°	1.0	355°	0.1	094°	1.0	187°
	do.	95d	37° 15.87'	76° 05.62'	+0.16	+0.43	+1.10	+0.30	1.1	0.7	0.1	223°	0.9	356°	0.1	284°	0.8	182°
	do.	15d	37° 17.40'	76° 11.45'	+1.03	+1.22	+1.47	+0.46	1.0	0.8	0.1	223°	0.8	018°	0.1	094°	0.8	182°
4576	New Point Comfort, 4.1 n.mi. ESE of	15d	37° 23.4'	76° 11.9'	+1.43	+2.00	+1.34	+1.36	1.2	1.0	0.3	296°	1.0	015°	0.3	098°	1.0	202°
4581	Wolf Trap Light, 0.5 mile west of		37° 23.1'	76° 04.3'	+2.23	+2.40	+2.14	+2.16	1.1	1.0	0.1	015°	0.9	015°	0.1	015°	1.2	190°
4586	Wolf Trap Light, 5.8 miles east of		37° 23.1'	76° 04.3'	+0.46	+1.37	+1.36	+0.50	0.6	0.3	0.1	015°	0.9	015°	0.1	015°	1.3	175°
4591	Church Neck Point, 1.9 n.mi. W of	15d	37° 24.20'	76° 00.78'	+0.46	+1.37	+1.36	+0.50	0.6	0.3	0.1	015°	0.9	015°	0.1	015°	1.3	175°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS					
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb		
	CHESAPEAKE BAY—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.		
4596	Wolf Trap Light, 6.1 n.mi. ENE of	14d	37° 24.50'	76° 03.83'	+1 40	+1 58	+2 28	+2 11	1.6	0.9	1.3	006°	0.2	098°	1.1	191°
	do	29d	37° 24.50'	76° 03.83'	+0 26	+0 55	+1 27	+1 07	0.8	0.5	0.7	012°	0.2	279°	0.7	173°
4601	Wolf Trap Light, 5.2 n.mi. ENE of	15d	37° 24.50'	76° 05.00'	+1 43	+2 34	+2 41	+2 09	1.6	0.9	1.3	010°	0.2	098°	1.1	187°
	do	63d	37° 24.50'	76° 05.00'	+1 07	+2 24	+2 43	+1 19	1.3	0.5	0.8	089°	0.2	266°	0.7	183°
4606	Wolf Trap Light, 1.4 n.mi. NNE of	15d	37° 24.67'	76° 05.00'	+0 24	+1 22	+2 05	+1 11	1.0	0.5	1.0	343°	0.2	088°	0.6	158°
4611	Wolf Trap Light, 2.0 n.mi. NW of	14d	37° 25.00'	76° 12.90'	+1 38	+2 16	+1 52	+1 19	1.4	0.9	1.1	005°	0.2	088°	1.2	175°
4616	Nassawadox Point, 1.9 n.mi. NW of	13d	37° 29.97'	76° 59.37'	+1 16	+1 43	+1 05	+0 08	0.7	0.4	0.6	345°	0.2	090°	0.6	166°
4621	Gwynn Island, 8.0 n.mi. east of	14d	37° 29.70'	76° 06.50'	+0 33	+1 07	+1 46	+2 33	1.2	0.9	1.0	352°	0.2	267°	0.6	178°
	do	28d	37° 30.03'	76° 06.50'	+0 59	+1 35	+2 01	+1 44	0.7	0.4	0.6	013°	0.3	281°	0.5	209°
4626	Gwynn Island, 1.5 n.mi. east of	16d	37° 30.03'	76° 14.70'	+0 54	+1 35	+2 01	+1 44	0.6	0.4	0.5	331°	0.1	227°	0.5	159°
4631	Stingray Point, 5.5 miles east of	16d	37° 35.0'	76° 10.4'	+2 28	+3 36	+3 21	+2 32	1.2	0.7	1.0	343°	0.1	227°	0.5	159°
4636	Stingray Point, 12.5 miles east of	17d	37° 33.8'	76° 02.3'	+2 18	+3 00	+2 09	+2 36	1.2	0.6	1.0	030°	0.1	120°	0.9	179°
4641	Powells Bluff, 2.2 n.mi. NW of	14d	37° 35.45'	76° 58.10'	+1 21	+1 29	+1 54	+1 23	0.8	0.5	0.6	015°	0.1	284°	0.8	201°
4646	Windmill Point Light, 8.3 n.mi. ESE of	14d	37° 34.60'	76° 03.80'	+2 18	+2 57	+3 04	+2 46	1.1	0.7	0.1	270°	0.1	095°	0.8	182°
	do	33d	37° 34.60'	76° 03.80'	+1 06	+1 22	+3 07	+2 14	0.6	0.3	0.5	017°	0.2	255°	0.4	172°
4651	Windmill Point Light, 2.2 n.mi. ESE of	14d	37° 35.30'	76° 11.50'	+2 49	+2 38	+2 21	+2 29	0.8	0.7	0.6	001°	0.1	081°	0.9	169°
	do	35d	37° 35.30'	76° 11.50'	+1 08	+1 35	+2 01	+1 44	0.8	0.3	0.6	342°	0.2	246°	0.4	175°
4656	Milby Point, 5.3 n.mi. WNW of	13d	37° 39.85'	76° 00.52'	+2 13	+2 30	+2 28	+1 32	0.7	0.5	0.6	016°	0.2	297°	0.7	210°
	do	38d	37° 39.85'	76° 00.52'	+0 33	+0 12	+1 12	+0 40	0.6	0.3	0.1	120°	0.1	120°	0.4	178°
4661	Bluff Point, 4.6 n.mi. east of	13d	37° 40.70'	76° 12.25'	+3 10	+3 25	+2 25	+2 46	0.4	0.6	0.5	043°	0.1	178°	0.7	178°
	do	33d	37° 40.70'	76° 12.25'	+1 30	+2 01	+2 32	+2 01	0.5	0.2	0.1	089°	0.1	089°	0.2	185°
4666	Tangier Sound Light, 5.8 n.mi. west of	15d	37° 47.03'	76° 05.68'	+3 34	+4 09	+3 56	+3 26	0.6	0.6	0.5	344°	0.2	255°	0.7	185°
4671	Great Wilcomico R. Lt., 3.8 n.mi. ESE of	14d	37° 47.00'	76° 11.50'	+3 20	+4 17	+3 54	+3 52	0.5	0.4	0.4	355°	0.1	280°	0.5	196°
	do	39d	37° 47.00'	76° 11.50'	+2 11	+3 27	+4 50	+3 22	0.8	0.2	0.6	013°	0.1	273°	0.5	196°
4676	Smith Point Light, 6.7 n.mi. east of	9d	37° 52.83'	76° 02.65'	+2 29	+2 57	+2 45	+1 59	0.5	0.3	0.4	352°	0.1	249°	0.3	178°
4681	Smith Point Light, 4.5 n.mi. east of	14d	37° 52.67'	76° 05.30'	+3 27	+4 04	+3 49	+3 35	0.7	0.6	0.5	341°	0.1	249°	0.7	171°
	do	24d	37° 52.67'	76° 05.30'	+3 18	+3 27	+3 09	+3 06	0.4	0.4	0.4	347°	0.1	256°	0.5	168°
4686	Smith Point Light, 3.0 n.mi. east of	15d	37° 52.65'	76° 07.08'	+4 30	+4 55	+3 42	+3 32	0.5	0.6	0.4	342°	0.1	167°	0.7	167°
	do	34d	37° 52.65'	76° 07.08'	+2 15	+2 22	+3 16	+3 34	0.5	0.2	0.1	080°	0.1	272°	0.3	149°
4691	Smith Point Light, 1.5 n.mi. east of	14d	37° 52.75'	76° 09.12'	+4 27	+4 33	+3 44	+4 23	0.5	0.6	0.4	347°	0.1	272°	0.3	149°
	do	39d	37° 52.75'	76° 09.12'	+2 49	+4 21	+4 29	+3 34	1.0	0.4	0.8	013°	0.1	098°	0.7	159°
	do	68d	37° 52.75'	76° 09.12'	+2 10	+2 42	+4 09	+2 37	0.5	0.3	0.4	356°	0.1	243°	0.5	160°
4696	Smith Point Light, 0.8 n.mi. NW of	8d	37° 53.23'	76° 11.90'	+2 28	+2 45	+3 13	+2 27	1.1	0.6	0.2	079°	0.2	079°	0.9	021°
4701	Smith Point Light, 5.0 n.mi. NW of	5d	37° 56.19'	76° 15.68'	+3 51	+3 43	+2 57	+3 24	0.6	0.7	0.5	306°	0.1	209°	0.9	125°
	do	15d	37° 56.19'	76° 15.68'	+4 28	+4 30	+3 27	+3 32	0.7	0.6	0.5	296°	0.1	209°	0.7	125°
4706	Smith Point Light, 6 miles north of	15d	38° 00.45'	76° 07.28'	+4 28	+4 30	+4 19	+4 06	0.5	0.8	0.4	350°	0.1	209°	1.0	135°
4711	Smith Island, 3.6 n.mi. northwest of	15d	38° 00.88'	76° 12.12'	+3 45	+3 12	+3 39	+3 18	0.6	0.4	0.5	014°	0.1	096°	0.4	187°
4716	Point Lookout, 5.9 n.mi. ESE of	51d	38° 00.88'	76° 12.12'	+2 45	+4 53	+4 57	+4 15	0.5	0.3	0.4	340°	0.1	096°	0.4	161°
	do	16d	38° 02.30'	76° 17.50'	+2 45	+4 30	+4 36	+3 32	0.4	0.1	0.4	330°	0.1	096°	0.2	167°
4721	Point Lookout, 1.5 n.mi. east of	16d	38° 02.30'	76° 17.50'	+5 13	+6 10	+5 04	+4 46	0.5	0.4	0.4	010°	0.1	096°	0.5	160°
4726	Point Lookin	12d	38° 06.6'	76° 13.1'	+4 35	+4 35	+2 57	+3 26	0.1	0.2	0.1	017°	0.1	096°	0.3	191°
4731	Adams Island, 1.1 n.mi. west of	16d	38° 08.67'	76° 06.87'	+4 58	+5 10	+4 03	+4 38	0.2	0.3	0.2	325°	0.1	257°	0.4	167°
4736	Point No Point, 3.4 n.mi. west of	17d	38° 08.13'	76° 09.80'	+4 49	+5 33	+6 04	+5 45	0.4	0.2	0.3	340°	0.1	257°	0.2	170°
4741	Point No Point, 4.3 n.mi. east of	15d	38° 08.13'	76° 13.75'	+5 21	+5 32	+4 44	+5 06	0.3	0.4	0.2	340°	0.1	257°	0.5	172°
4746	Point No Point, 2.8 n.mi. east of	39d	38° 08.38'	76° 15.67'	+3 37	+5 00	+5 42	+4 54	0.4	0.1	0.4	347°	0.1	257°	0.2	162°
	do	17d	38° 08.43'	76° 18.13'	+4 42	+5 06	+4 31	+4 34	0.4	0.4	0.3	001°	0.2	304°	0.5	172°
4751	Hooper Strait (west), at buoy 2'	15d	38° 13.25'	76° 06.20'	+2 05	+2 28	+2 33	+1 40	0.7	0.4	0.6	035°	0.2	304°	0.6	233°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS				
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb	
	CHESAPEAKE BAY—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.	
4761	Cedar Point, 4.7 n.mi. east of	5d	38° 17.92'	76° 16.38'	-3.29	-3.45	-4.07	-3.36	0.6	0.9	0.5	325°	0.7	145°	
	do.	16d	38° 17.92'	76° 16.38'	-3.54	-3.59	-4.04	-3.53	0.6	0.7	0.4	323°	0.6	144°	
4766	Cedar Point, 2.9 n.mi. ENE of	50d	38° 18.65'	76° 18.80'	-2.35	-2.34	-3.16	-2.55	0.5	0.8	0.4	347°	0.7	164°	
	do.		38° 18.65'	76° 18.80'	-4.08	-3.30	-2.36	-3.15	0.5	0.3	0.4	326°	0.3	141°	
4771	Cedar Point, 1.1 miles ENE of		38° 20.18'	76° 21.10'	-3.23	-3.03	-2.36	-3.42	0.5	0.8	0.4	010°	0.6	185°	
4776	Drum Point, 2.8 miles northeast of		38° 20.18'	76° 21.10'	-	-	-	-	0.2	0.5	0.2	335°	0.4	185°	
4781	Cove Point, 1.1 n.mi. east of		38° 22.88'	76° 21.62'	-2.57	-2.42	-2.40	-2.14	0.9	0.9	0.7	342°	0.7	165°	
	do.		38° 22.88'	76° 21.62'	-3.22	-3.19	-2.38	-2.26	0.8	0.7	0.6	343°	0.6	165°	
4786	Cove Point, 2.7 n.mi. east of	15d	38° 22.80'	76° 19.52'	-2.23	-2.41	-2.59	-2.40	0.5	0.9	0.4	344°	0.7	169°	
	do.	40d	38° 22.80'	76° 19.52'	-3.15	-2.39	-1.53	-2.40	0.9	0.6	0.8	347°	0.5	170°	
	do.	98d	38° 22.80'	76° 19.52'	-3.49	-4.02	-3.13	-3.36	0.7	0.5	0.6	341°	0.4	165°	
4791	Cove Point, 3.9 n.mi. east of	11d	38° 22.52'	76° 17.92'	-3.29	-3.36	-4.08	-3.44	0.4	0.6	0.3	346°	0.4	171°	
4796	Cove Point, 4.9 n.mi. NNE of	15d	38° 28.03'	76° 22.60'	-2.57	-2.29	-2.24	-2.26	0.7	0.7	0.6	333°	0.6	159°	
	do.	40d	38° 28.03'	76° 22.60'	-3.23	-2.47	-1.58	-2.17	1.0	0.4	0.8	332°	0.3	149°	
	do.	67d	38° 28.03'	76° 22.60'	-3.55	-3.28	-2.14	-2.58	0.6	0.4	0.4	321°	0.4	135°	
4801	Kenwood Beach, 1.5 miles northeast of		38° 31.1'	76° 28.9'	-1.56	-2.41	-2.46	-2.37	0.2	0.4	0.2	340°	0.3	160°	
4806	James Island, 1.6 n.mi. SW of	5d	38° 29.14'	76° 21.87'	-3.27	-3.33	-3.31	-3.41	0.6	0.8	0.5	352°	0.6	165°	
	do.	15d	38° 29.14'	76° 21.87'	-3.29	-3.33	-3.31	-3.27	0.6	0.7	0.1	068°	0.1	251°	
	do.		38° 31.5'	76° 25.2'	-2.16	-2.39	-3.01	-2.02	0.5	0.4	0.5	005°	0.4	174°	
4811	James Island, 3.4 miles west of		38° 32.0'	76° 23.6'	-1.31	-2.42	-2.18	-2.36	0.5	0.6	0.4	000°	0.5	175°	
4816	James Island, 2.5 miles WNW of		38° 36.75'	76° 28.65'	-1.31	-1.37	-2.20	-2.04	0.2	0.7	0.2	000°	0.6	155°	
4821	Plum Point, 1.4 miles ESE of	20d	38° 36.43'	76° 30.88'	-3.15	-3.34	-3.07	-2.54	0.8	0.4	0.1	116°	0.6	203°	
4826	Sharp Island Lt., 2.3 n.mi. SE of	18d	38° 38.60'	76° 25.22'	-1.49	-1.36	-1.33	-1.33	0.4	0.5	0.4	357°	0.4	183°	
4831	Sharp Island Lt., 2.1 n.mi. west of	18d	38° 38.63'	76° 26.88'	-1.39	-1.41	-1.57	-1.43	0.4	0.5	0.3	355°	0.4	186°	
4836	Sharp Island Lt., 3.4 n.mi. west of	35d	38° 38.63'	76° 26.88'	-2.34	-2.23	-2.23	-2.24	0.4	0.4	0.3	353°	0.3	189°	
	do.	15d	38° 38.70'	76° 29.23'	-1.50	-1.51	-1.51	-2.01	0.4	0.5	0.3	350°	0.4	174°	
4841	Plum Point, 2.1 n.mi. NNE of	14d	38° 45.37'	76° 25.77'	-0.44	-1.22	-0.57	-0.49	0.6	0.8	0.5	359°	0.6	185°	
4846	Poplar Island, 2.2 n.mi. WSW of	15d	38° 44.98'	76° 26.73'	-1.08	-1.26	-0.59	-1.08	0.6	0.5	0.4	355°	0.4	189°	
4851	Poplar Island, 3.0 n.mi. WSW of	15d	38° 44.98'	76° 26.73'	+0.58	+1.21	+2.01	+1.13	0.5	0.4	0.1	085°	0.3	172°	
	do.	48d	38° 44.98'	76° 26.73'	-1.20	-1.24	-1.45	-1.39	0.2	0.4	0.2	354°	0.3	180°	
4856	Holland Point, 2.0 n.mi east of	15d	38° 45.10'	76° 29.93'	-1.03	-1.04	-1.11	-1.05	0.6	0.6	0.5	025°	0.5	210°	
4861	Kent Point, 4 miles southwest of		38° 47.50'	76° 26.00'	-3.27	-3.38	-3.53	-3.47	0.6	0.5	0.4	056°	0.4	235°	
4866	Kent Point, 1.3 miles south of		38° 50.30'	76° 27.20'	-0.52	-0.39	-0.49	-1.10	0.6	0.6	0.5	005°	0.5	200°	
4871	Horseshoe Point, 1.7 miles east of	19	38° 50.37'	76° 24.17'	-0.08	-0.23	+0.02	-0.05	0.9	0.6	0.7	035°	0.5	190°	
4876	Bloody Point Bar Light, 0.6 mi. NW of		38° 52.50'	76° 27.70'	-2.24	-2.27	-1.43	-2.17	0.5	0.4	0.4	340°	0.3	190°	
4881	Thomas Pt. Shoal Lt., 1.8 mi. SW of	22d	38° 53.75'	76° 23.21'	-1.05	-0.14	-0.22	-0.20	0.6	0.6	0.5	007°	0.5	186°	
4886	Thomas Pt. Shoal Lt., 2.0 n.mi. east of	16d	38° 53.46'	76° 25.62'	-0.25	-0.09	-0.43	-0.41	1.0	1.3	0.1	102°	1.0	191°	
4891	Thomas Pt. Shoal Lt., 0.5 n.mi. SE of	33d	38° 53.46'	76° 25.62'	-0.54	-1.18	-1.25	-1.20	0.6	0.9	0.6	018°	0.6	196°	
	do.		38° 56.07'	76° 25.02'	-0.03	-0.19	-0.32	-0.24	0.6	0.9	0.5	355°	0.7	190°	
4896	Tolly Point, 1.6 miles east of		38° 59.50'	76° 23.10'	+0.16	+0.08	-0.17	+0.13	0.9	1.1	0.7	025°	0.9	230°	
4901	Chesapeake Bay Bridge, main channel	15d	39° 00.16'	76° 20.93'	+0.19	+0.15	+0.13	+0.29	1.1	0.9	0.8	020°	0.7	199°	
4906	Sandy Point, 2.3 n.mi. east of	41d	39° 00.16'	76° 20.93'	-1.33	-1.14	-0.48	-0.39	0.8	0.6	0.7	021°	0.5	210°	
	do.	15d	39° 00.24'	76° 22.80'	-0.11	+0.24	-0.15	+0.05	1.2	1.5	0.9	025°	1.2	199°	
4911	Sandy Point, 0.8 n.mi. ESE of	43d	39° 00.24'	76° 22.80'	-0.59	-1.10	-0.59	-1.02	1.0	1.0	0.1	116°	0.1	276°	
4916	BALTIMORE HBR APP (off Sandy Point)	15d	39° 00.78'	76° 22.10'	-0.04	+0.26	+0.01	+0.09	1.0	0.9	0.8	025°	0.8	189°	
4921	Craighill Channel entrance, Buoy 2C	38d	39° 02.42'	76° 22.67'	0.00	+0.01	-0.06	+0.18	0.5	0.6	0.4	325°	0.5	147°	
	do.		39° 04.7'	76° 16.3'	Current weak and variable										
4926	Love Point, 2.8 miles NNE of		39° 04.7'	76° 16.3'	-0.48	+0.19	+0.27	-0.07	0.8	0.5	0.6	055°	0.4	240°	
4931	Love Point, 2.5 miles north of	5d	39° 04.78'	76° 18.73'	-1.33	-0.45	-0.48	-0.38	0.5	0.6	0.1	146°	0.1	334°	
4936	Love Point, 2.0 nmi north of	15d	39° 04.44'	76° 18.19'	-0.45	-0.05	-0.07	-0.35	0.8	0.5	0.6	055°	0.4	240°	
	do.		39° 04.44'	76° 18.19'	+0.28	+0.40	+0.25	+0.34	0.8	0.9	0.6	350°	0.7	175°	
4941	Craighill Channel, NE of Mountain Pt		39° 04.88'	76° 23.67'	+0.10	+0.46	+0.33	+0.19	0.7	0.6	0.6	360°	0.5	186°	
4946	Craighill Channel, Belvidere Shoal	18d	39° 05.68'	76° 23.58'	+0.12	+0.27	+0.34	+0.23	0.6	0.6	0.5	345°	0.5	170°	
4951	Craighill Angle, right outside quarter		39° 07.70'	76° 23.27'	+0.12	+0.27	+0.34	+0.23	0.6	0.6	0.5	345°	0.5	170°	

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS				
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb	
	CHESAPEAKE BAY—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.	
4956	Swan Point, 2.7 n.mi. SW of	14d	39° 06.48'	76° 18.32'	+0 18	+0 42	+0 38	+0 25	0.6	0.5	0.5	006°	0.4	170°	
	do	27d	39° 06.48'	76° 18.32'	-0 27	+0 30	+1 17	+0 25	0.6	0.4	0.4	342°	0.3	142°	
4961	Swan Point, 2.15 n.mi. west of	18d	39° 08.85'	76° 19.48'	+0 18	+0 50	+1 05	+1 06	0.8	0.7	0.1	271°	0.5	203°	
4966	Brewerton Channel Eastern Ext., Buoy 7	14d	39° 09.75'	76° 18.28'	+0 53	+0 44	+0 38	+0 57	0.8	0.9	0.6	020°	0.7	215°	
4971	Tolchester Channel, SW of Buoy 588	17d	39° 10.95'	76° 23.38'	+0 16	-0 02	+0 14	-0 05	0.5	0.4	0.2	080°	0.3	175°	
4976	do	25d	39° 10.95'	76° 16.87'	+0 44	+0 20	+0 48	+0 54	1.1	1.1	0.2	302°	0.9	229°	
4981	Tolchester Channel, Buoy '22	15d	39° 11.47'	76° 15.95'	-0 09	+0 02	+0 38	-0 48	0.9	0.7	0.7	025°	0.5	217°	
4986	Tolchester Channel, south of Buoy '38B	15d	39° 11.57'	76° 17.27'	+0 51	+1 10	+0 59	+1 23	0.9	0.8	0.1	151°	0.7	231°	
4991	North Point, 2.5 miles northeast of	7	39° 12.87'	76° 23.72'	+1 25	+1 00	+0 53	+1 06	0.4	0.5	0.5	028°	0.6	208°	
4996	Tolchester Beach, 0.33 n.mi. west of	15d	39° 13.03'	76° 14.90'	+0 49	+1 20	+1 22	+1 12	1.2	1.1	0.1	285°	0.8	201°	
5001	Pooles Island, 4 miles southwest of	15d	39° 13.60'	76° 19.88'	+0 59	+0 48	+0 56	+1 12	0.6	0.8	1.0	015°	0.6	210°	
5006	Pooles Island, 2.0 n.mi. SSW of	15d	39° 14.78'	76° 17.80'	+1 01	+0 58	+1 03	+1 29	0.7	0.7	0.2	327°	0.6	238°	
5011	Miller Island, 0.8 mile south of	7	39° 15.7'	76° 16.4'	+1 29	+1 24	+1 12	+1 20	0.9	1.2	0.7	060°	1.0	255°	
5016	Pooles Island, 1.5 miles ENE of	7	39° 16.5'	76° 19.9'	+0 11	+0 15	+0 37	+0 25	0.6	0.3	0.5	000°	0.2	185°	
5021	Pooles Island, 1.6 n.mi. east of	16d	39° 16.47'	76° 13.57'	+1 28	+1 34	+1 45	+1 03	1.1	1.1	0.1	014°	0.8	208°	
5026	Robins Point, 0.7 mile ESE of	5	39° 17.75'	76° 16.10'	-0 03	-0 14	+0 37	-0 13	1.4	1.0	1.1	025°	0.8	210°	
5031	Worton Point, 1.5 n.mi. WSW of	17d	39° 18.70'	76° 13.03'	+2 04	+1 45	+1 27	+1 36	1.0	1.1	0.2	298°	0.9	211°	
5036	Worton Point, 1.1 miles northwest of	15d	39° 19.9'	76° 12.0'	+1 43	+1 43	+1 32	+1 32	1.4	1.5	1.1	040°	1.2	245°	
5041	Howell Point, 0.8 n.mi. west of	15d	39° 22.23'	76° 07.80'	+2 30	+1 48	+1 19	+1 33	1.0	1.3	0.8	051°	1.0	235°	
5046	Howell Point, 0.4 mile NNW of	14d	39° 22.6'	76° 06.9'	+1 28	+1 24	+1 18	+1 18	1.1	1.1	0.9	080°	0.9	245°	
5051	Grove Point, 0.7 n.mi. NW of	9d	39° 23.78'	76° 03.02'	+2 40	+2 01	+1 31	+2 03	0.6	1.0	0.1	131°	0.8	211°	
5056	Turkey Point, 1.2 n.mi. SW of	9d	39° 26.60'	76° 02.03'	+2 39	+1 30	+0 58	+1 00	0.6	0.8	0.2	101°	0.5	193°	
5061	Speeptide Island, channel north of	7	39° 28.83'	76° 04.90'	+1 42	+1 20	+1 14	+1 40	0.8	0.6	0.6	285°	0.5	100°	
5066	Rocky Pt. (Elk Neck), 0.25 n.mi. SW of	9d	39° 29.30'	75° 59.85'	+2 42	+1 28	+1 14	+1 49	0.6	0.7	0.5	009°	0.6	196°	
5071	Red Point, 0.2 mile W of, Northeast River	7	39° 31.75'	75° 59.08'	+1 42	+1 28	+1 57	+1 47	0.9	0.6	0.7	009°	0.5	196°	
5076	Havre de Grace, Susquehanna River		39° 33.13'	76° 05.08'	Current weak and variable										
	HAMPTON ROADS														
5081	Thimble Shoal Channel (west end)	15d	37° 00.32'	76° 13.60'	-0 15	+0 12	-0 02	+0 31	1.1	1.0	0.3	204°	0.9	293°	
5086	Hampton Roads entrance, midchannel	8d	36° 59.66'	76° 18.32'	-0 52	-0 31	-0 24	-0 57	2.1	1.5	0.2	018°	1.2	116°	
	do	15d	36° 59.66'	76° 18.32'	-0 59	-0 34	-0 26	-0 58	2.1	1.4	0.1	151°	1.9	059°	
	do	31d	36° 59.66'	76° 18.32'	-1 18	-0 36	-0 26	-1 03	2.1	1.3	0.1	018°	1.8	062°	
	do	44d	36° 59.66'	76° 18.32'	-1 50	-0 44	-0 37	-1 20	2.1	1.2	0.1	138°	1.6	065°	
	do	61d	36° 59.66'	76° 18.32'	-2 21	-1 12	-0 52	-1 38	1.4	0.9	0.1	144°	1.4	055°	
	Old Point Comfort														
5091	0.55 n.mi. east of	48d	37° 00.12'	76° 17.72'	-3 02	-0 32	+0 17	-2 11	1.7	0.5	0.6	251°	1.4	060°	
5096	0.2 mile south of		36° 59.77'	76° 18.88'	-0 37	-0 25	-0 53	-1 25	2.1	1.1	1.7	240°	1.4	075°	
5101	0.9 mile southwest of		36° 59.33'	76° 19.57'	-0 53	-0 14	-0 01	-1 11	2.1	1.2	1.7	240°	1.5	050°	
5106	Willoughby Spit, 0.8 mile northwest of		36° 59.6'	76° 18.4'	-1 32	-1 30	-1 41	-1 54	0.9	0.8	0.7	260°	1.0	040°	
5111	Willoughby Bay entrance		36° 57.7'	76° 17.9'	-2 12	-1 55	-2 21	-2 19	0.4	0.3	0.3	135°	0.4	330°	
5116	Sewells Point, channel west of		36° 57.00'	76° 20.4'	-0 41	-0 47	-1 11	-1 11	1.1	1.0	0.9	195°	1.2	000°	
5121	Norfolk Harbor Reach (Buoy R '8)	13d	36° 57.00'	76° 20.37'	-0 18	-0 42	-1 36	-0 16	0.8	0.7	0.1	094°	0.9	011°	
	do	42d	36° 57.00'	76° 20.37'	-0 33	-1 00	-0 22	+1 04	0.6	0.3	0.5	152°	0.3	000°	
5126	Sewells Point, pierhead	7	36° 56.8'	76° 20.1'	-0 52	-0 40	-1 01	-1 04	0.7	0.6	0.6	195°	0.8	010°	
	Newport News														
5131	Channel, middle	15	36° 57.38'	76° 22.90'	-0 43	-0 23	-0 12	-1 01	1.3	0.8	1.1	244°	1.1	076°	
5136	Channel, west end <63>	15	36° 57.20'	76° 24.80'	-0 16	-0 20	+0 03	-0 09	0.8	0.5	0.7	280°	0.6	092°	
5141	Middle Ground, 1 mile south of	7	36° 56.0'	76° 23.2'	+0 33	+0 50	+0 24	+0 26	1.4	1.0	1.1	270°	1.2	100°	

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	ELIZABETH RIVER Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
5146	Crane Island	15	36° 53.68'	76° 20.15'	-1 17	-1 15	-1 53	-1 48	0.9	0.7	0.7	177°	0.9	001°
5151	Crane Island Reach	17d	36° 53.43'	76° 20.15'	-2 00	-1 24	-1 18	-1 39	0.7	0.6	0.6	184°	0.7	009°
	do.	33d	36° 53.43'	76° 20.15'	-2 47	-1 45	-1 11	-2 00	0.8	0.5	0.6	184°	0.6	004°
	do.	43d	36° 53.43'	76° 20.15'	-3 12	-2 17	-1 26	-2 23	0.9	0.4	0.7	185°	0.5	008°
5156	Lamberts Point	15	36° 52.50'	76° 19.95'	-2 03	-1 21	-1 54	-1 50	0.8	0.4	0.7	182°	0.5	004°
5161	West Norfolk Bridge, Western Branch		36° 51.5'	76° 19.0'	-2 01	-1 40	-2 06	-2 04	0.6	0.6	0.6	260°	0.7	328°
5166	Seaboard Coast Line RR, Pinner Point		36° 51.6'	76° 19.0'	-2 05	-1 35	-1 31	-2 09	0.5	0.3	0.4	140°	0.4	290°
5171	Berkley Bridge, Eastern Branch		36° 50.5'	76° 17.0'	-2 28	-1 31	-1 36	-2 49	0.4	0.3	0.3	120°	0.4	295°
5176	Norfolk and Western RR, Bridge, E Branch		36° 50.2'	76° 14.7'	-1 32	-1 15	-1 41	-1 39	0.5	0.5	0.4	100°	0.6	280°
5181	Berkley, Southern Branch		36° 50.0'	76° 17.8'	-2 23	-1 17	-1 28	-2 27	0.4	0.4	0.3	215°	0.3	330°
5186	Chesapeake, Southern Branch		36° 48.5'	76° 17.4'	-1 58	-1 16	-1 30	-1 53	0.9	0.5	0.7	180°	0.6	360°
5191	Gilmerton Hwy. bridge, Southern Branch		36° 46.5'	76° 17.7'	-2 08	-1 19	-1 43	-2 03	0.7	0.6	0.6	180°	0.7	360°
5196	Money Point, Southern Branch	15d	36° 46.44'	76° 18.13'	-2 04	-0 48	-1 30	-2 21	0.5	0.3	0.4	088°	0.3	276°
	NANSEMOND RIVER													
5201	Pig Point, 1.8 miles northeast of		36° 55.4'	76° 25.1'	-0 48	-0 07	+0 05	-0 41	1.0	0.8	0.8	285°	1.0	070°
5206	Town Point Bridge, 0.5 mile east of		36° 53.3'	76° 29.0'	-1 25	-0 59	-0 51	-1 07	1.1	0.6	0.9	265°	0.8	070°
5211	Dumpling Island		36° 48.5'	76° 33.5'	-1 17	-1 00	-1 26	-1 24	1.2	0.8	1.0	175°	1.0	345°
	JAMES RIVER													
5216	Newport News 0.15nm WSW of Pier No.2	6d	36° 58.76'	76° 26.61'	+0 04	+0 15	+0 19	+0 01	1.4	1.2	1.2	342°	1.5	161°
	do.	15d	36° 58.76'	76° 26.61'	-0 14	+0 03	+0 25	-0 04	1.6	1.1	1.3	344°	1.4	161°
	do.	29d	36° 58.76'	76° 26.61'	-0 32	-0 12	+0 24	-0 13	1.5	1.0	1.2	347°	1.2	162°
5221	do.	42d	36° 58.76'	76° 26.61'	-0 48	-0 18	+0 14	-0 19	1.2	0.8	1.0	346°	1.0	165°
5226	0.8 mile SW of shipbuilding plant		36° 58.5'	76° 27.3'	+0 03	+0 18	+0 13	+0 04	1.2	1.0	1.0	325°	1.2	140°
	1.5 miles SW of shipbuilding plant	6	36° 58.1'	76° 28.2'	-0 36	0 00	-0 03	-0 43	1.2	0.9	1.0	350°	1.1	140°
	Rocklanding Shoal Channel													
5231	South end		37° 03.50'	76° 35.63'	+0 39	+1 01	+1 00	+1 14	1.0	0.9	0.8	310°	1.1	165°
5236	Middle		37° 03.20'	76° 36.83'	+0 49	+1 36	+1 43	+1 09	1.4	0.8	1.1	345°	1.0	155°
5241	North end		37° 06.60'	76° 37.95'	+1 00	+1 40	+1 47	+1 22	1.6	0.8	1.3	340°	1.0	145°
5246	Point of Shoals, west of		37° 03.9'	76° 39.6'	+2 28	+2 45	+2 19	+2 21	0.4	0.7	0.3	325°	0.9	195°
5251	Deepwater Shoals		37° 08.6'	76° 38.2'	+1 42	+2 12	+1 39	+0 57	0.5	0.7	1.2	353°	0.9	166°
5256	Hog Point		37° 12.2'	76° 41.5'	+2 28	+2 35	+2 19	+2 11	1.4	1.0	1.0	260°	1.3	070°
5261	Jamestown Island, Church Point		37° 12.2'	76° 47.0'	+2 24	+2 34	+2 43	+2 15	1.4	1.0	1.1	325°	1.3	145°
5266	Chickahominy River Bridge		37° 15.7'	76° 52.5'	+2 05	+2 29	+2 42	+1 59	1.6	1.0	1.3	332°	1.2	154°
5271	Carenont Landing		37° 14.0'	76° 57.2'	+3 43	+3 50	+3 34	+3 26	1.8	1.2	1.5	290°	1.5	125°
5276	Brandon Point, 0.3 mile northeast of		37° 16.5'	76° 59.2'	+3 56	+3 56	+3 37	+3 27	1.5	1.0	1.2	350°	1.3	170°
5281	Windmill Point		37° 18.7'	77° 05.7'	+4 30	+4 00	+4 04	+3 36	1.6	0.8	1.3	310°	1.0	065°
5286	Coggins Point, 0.5 mile north of		37° 18.0'	77° 10.0'	+4 48	+4 18	+4 39	+4 07	0.7	0.7	0.6	273°	0.9	088°
5291	City Point		37° 19.0'	77° 16.3'	+4 48	+4 35	+4 39	+4 11	1.6	1.0	1.3	320°	1.2	135°
5296	Appomattox River entrance		37° 20.7'	77° 17.7'	+5 24	+4 59	+4 37	+3 58	1.2	0.6	1.0	271°	0.8	080°
5301	Bermuda Hundred		37° 18.2'	77° 16.2'	+5 45	+4 52	+4 01	+4 26	1.1	1.0	0.9	019°	1.3	199°
5306	Dutch Gap Canal, 0.5 mile east of		37° 22.8'	77° 20.8'	+5 28	+5 20	+5 19	+4 56	1.0	0.7	0.8	270°	0.9	090°
5311	Rockets <19>		37° 31.2'	77° 25.0'	--	--	--	--	--	--	--	--	--	1.0
	YORK RIVER													
5316	York River Ent. Channel (SE end) <29>	13d	37° 07.38'	76° 09.20'	+0 50	+1 22	+1 32	+1 00	1.3	0.8	0.3	256°	1.0	162°
5321	do.	32d	37° 07.38'	76° 09.20'	-0 45	+0 58	+1 04	-0 08	0.6	0.3	0.2	083°	0.5	329°
5326	York Spit Light, 0.8 mile southwest of		37° 12.0'	76° 16.0'	-0 37	+0 06	+0 24	-0 13	1.0	0.6	0.8	323°	0.8	145°
	York River Ent. Channel (NW end)	15d	37° 13.55'	76° 18.47'	-1 47	-0 06	+0 43	-0 19	0.8	0.4	0.7	298°	0.5	128°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	YORK RIVER—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
5331	Tue Marshes Light, 0.7 n.mi. north of	14d	37° 14.80'	76° 23.28'	+1 32	+2 05	+1 58	+1 25	1.2	0.7	1.0	265°	0.9	078°
	do.	39d	37° 14.80'	76° 23.28'	+0 32	+1 03	+1 55	+1 02	1.1	0.5	0.9	247°	0.6	070°
	do.	49d	37° 14.80'	76° 23.28'	-2 51	-1 32	-0 31	-1 41	0.6	0.2	0.5	249°	0.3	068°
5336	Tue Marshes Light, 0.9 n.mi. WNW of	14d	37° 14.28'	76° 24.13'	-0 16	+0 09	+0 10	-0 25	1.0	0.5	0.6	249°	0.7	069°
	do.	28d	37° 14.28'	76° 24.13'	-1 15	+0 36	-0 06	-1 34	0.8	0.5	0.6	262°	0.6	064°
	Tue Marshes Light, 2.7 miles west of													
5341	Midchannel		37° 14.0'	76° 26.6'	-0 13	+0 22	+0 18	-0 23	0.7	0.5	0.6	258°	0.6	072°
5346	North edge of channel		37° 14.2'	76° 26.6'	-0 48	-0 17	-0 36	-1 01	0.6	0.6	0.5	251°	0.7	074°
5351	South edge of channel		37° 13.6'	76° 26.5'	-0 26	-0 10	-0 22	-0 24	0.5	0.4	0.4	257°	0.5	095°
5356	Yorktown		37° 14.5'	76° 30.5'	-0 30	-0 28	-0 19	-0 17	1.5	1.3	1.2	302°	1.6	124°
5361	Gloucester Point, 150 yds. southeast of		37° 14.55'	76° 30.10'	-0 35	-0 01	-0 27	-1 21	1.1	0.9	0.9	267°	1.1	090°
5366	Gloucester Point, 0.4 mile southwest of		37° 14.42'	76° 30.65'	-0 25	0 00	+0 16	-0 44	1.4	0.8	1.1	294°	1.0	108°
5371	Pages Rock, 1 mile SSE of		37° 17.6'	76° 34.8'	-0 10	+0 24	+0 13	-0 22	1.2	0.8	1.0	303°	1.0	125°
5376	Blundering Point, 0.9 mile SSW of		37° 18.13'	76° 35.08'	-0 22	+0 13	+0 37	-0 16	1.3	0.8	1.1	293°	1.1	138°
5381	Clay Bank Pier, 100 yds. southwest of		37° 20.78'	76° 36.80'	-0 02	+0 14	+1 17	-0 05	1.4	0.9	1.1	311°	1.1	123°
5386	Allmondsville		37° 24'	76° 40'	+0 48	+0 44	+0 39	+0 20	1.5	0.9	1.2	310°	1.1	105°
5391	Puritan Island, 0.2 mile southwest of		37° 24.88'	76° 41.22'	+0 49	+1 05	+0 58	+0 53	1.6	0.8	1.3	310°	1.1	104°
5396	Goff Point, 0.8 mile SSW of		37° 29.97'	76° 47.03'	+1 37	+1 36	+1 54	+1 54	1.1	0.8	1.0	320°	1.0	123°
5401	West Point, 0.8 mile below		37° 30.9'	76° 47.5'	+1 23	+1 20	+1 14	+1 06	1.4	1.2	1.1	340°	1.5	150°
5406	Lord Delaware Bridge, 100 yds. S of		37° 32.22'	76° 47.45'	+1 37	+3 00	+1 48	+1 46	1.0	0.4	0.8	350°	0.5	210°
5411	Wakema, Mattaponi River		37° 39.2'	76° 54.0'	+2 08	+2 05	+1 59	+1 41	1.7	1.4	1.4	260°	1.7	280°
5416	Walkerton, Mattaponi River		37° 43.4'	77° 01.5'	+3 29	+3 04	+2 50	+3 25	1.1	0.7	0.9	275°	0.9	095°
5421	Etham Bridge, 100 yds. north of		37° 32.10'	76° 48.42'	+2 06	+2 33	+2 17	+2 14	0.7	0.8	0.6	327°	0.9	124°
5426	Lester Manor, Pamunkey River		37° 34.9'	76° 59.4'	+3 18	+3 30	+3 19	+3 06	1.5	0.8	1.2	235°	1.0	055°
5431	Northbury, Pamunkey River		37° 37.5'	77° 07.3'	+4 33	+4 50	+4 24	+4 26	0.6	1.0	0.5	290°	1.3	100°
	MOBJACK BAY and PIANKATANK RIVER													
5436	New Point Comfort, 2.0 n.mi. WSW of	16d	37° 17.70'	76° 19.25'	+1 03	+2 18	+1 52	+2 03	0.7	0.3	0.6	315°	0.4	129°
5441	Bland Point, Piankatank River		37° 31.8'	76° 21.9'	+0 08	+0 25	-0 01	+0 01	0.5	0.2	0.4	300°	0.2	125°
5446	Doctor Point, 0.4 mile west of		37° 31.1'	76° 27.0'	+0 10	-0 03	-0 48	-0 06	0.5	0.3	0.4	311°	0.4	142°
	RAPPAHANNOCK RIVER													
5451	Stingray Point, 1.2 n.mi. NE of	28d	37° 34.53'	76° 17.08'	+1 06	+0 35	-0 11	+1 01	0.5	0.4	0.4	293°	0.5	121°
5456	Windmill Point, 1.0 n.mi. SSW of	15d 38d	37° 36.00'	76° 17.50'	+1 13	+1 53	+2 29	+1 31	0.8	0.4	0.1	188°	0.5	103°
	do.		37° 36.00'	76° 17.50'	+0 38	+1 57	+2 30	+0 53	0.7	0.2	0.6	269°	0.3	090°
5461	Mosquito Point, 0.9 mile SSE of		37° 35.72'	76° 21.08'	+1 34	+2 26	+2 07	+1 12	0.8	0.7	0.7	265°	0.8	090°
5466	Mosquito Point		37° 35.8'	76° 21.5'	+1 23	+1 40	+1 14	+1 16	0.7	0.5	0.6	290°	0.6	115°
5471	Orchard Point, 1.0 mile south of		37° 37.97'	76° 27.45'	+1 27	+2 30	+2 19	+1 23	0.6	0.5	0.5	270°	0.6	085°
5476	Towles Point		37° 37.8'	76° 30.4'	+1 44	+2 02	+2 39	+1 56	0.7	0.4	0.6	274°	0.5	103°
5481	Rogue Point, 0.8 mile WNW of		37° 40.28'	76° 33.20'	--	+2 39	--	+1 58	0.7	0.5	0.6	000°	0.6	195°
5486	Waterview, 1.3 miles NNE of		37° 44.95'	76° 35.92'	+2 19	+3 32	+3 15	+2 41	0.9	0.4	0.7	340°	0.6	155°
5491	Tarpley Point, 1.5 miles south of		37° 46.15'	76° 39.12'	+2 54	+3 32	+3 49	+3 10	0.8	0.6	0.7	300°	0.7	105°
5496	Jones Point, 1.4 miles NNW of		37° 48.03'	76° 41.58'	+2 42	+3 18	+3 48	+2 58	1.4	0.7	1.1	315°	0.9	105°
5501	Sharps, 1.2 miles south of		37° 48.18'	76° 41.92'	+2 57	+3 41	+3 41	+3 32	1.1	0.6	0.9	290°	0.8	095°
5506	Bowlers Rock, 0.2 mile north of		37° 49.58'	76° 44.00'	+3 05	+3 36	+4 06	+3 21	1.3	0.9	1.0	315°	1.1	135°
5511	Accaceek Point, 0.3 mile southwest of		37° 52.52'	76° 46.40'	+3 18	+3 43	+3 56	+3 44	1.4	0.8	1.2	335°	1.0	150°
5516	Tappahannock Bridge, 1.8 miles SE of		37° 55.10'	76° 49.27'	+3 56	+4 02	+4 25	+3 59	1.7	1.1	1.4	315°	1.3	105°
5521	Tappahannock Bridge		37° 56.0'	76° 51.2'	+4 18	+4 35	+4 09	+4 11	1.6	1.0	1.3	315°	1.2	135°
5526	Port Royal		38° 10.5'	77° 11.4'	+6 48	+7 05	+6 39	+6 41	0.9	0.6	0.7	310°	0.7	130°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS				
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb	
		ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.	
	POCOMOKE SOUND Time meridian, 75° W				on Chesapeake Bay Entrance, p. 80										
5531	Pocomoke Sound Approach	13d	37° 38.00'	75° 57.90'	+1 14	+2 07	+2 40	+2 02	0.9	0.6	0.7	009°	0.7	196°	
5536	Milby Point, 5.3 n.mi. WNW of	38d	37° 39.85'	76° 00.52'	+2 13	+2 30	+2 28	+2 32	0.7	0.5	0.2	297°	0.7	210°	
5541	do.	7	37° 39.85'	76° 00.52'	+0 33	+0 12	+1 12	+0 40	0.6	0.3	0.1	120°	0.5	043°	
5546	Watts Island, 4 miles south of	13d	37° 43.2'	75° 54.0'	+0 55	+0 56	+0 56	+0 27	0.7	0.9	0.6	027°	0.6	207°	
5546	Watts Island, 2.3 n.mi. east of	48d	37° 47.62'	75° 50.83'	+1 58	+2 03	+2 00	+1 57	1.2	0.9	0.0	032°	1.1	208°	
5551	do.	48d	37° 47.62'	75° 50.83'	+1 58	+2 03	+2 00	+1 57	1.2	0.9	0.0	032°	1.1	208°	
5551	Long Point, 2.0 n.mi. northeast of	9d	37° 47.90'	75° 47.90'	+1 29	+1 52	+1 40	+1 30	0.5	0.3	0.4	024°	0.9	209°	
5556	Pocomoke R., 0.5 mile below Shelltown		37° 58.3'	75° 38.7'	+4 08	+3 55	+3 59	+3 31	1.4	0.7	1.1	045°	0.3	211°	
	TANGIER SOUND														
5561	Tangier Sound Light, 0.5 n.mi. east of	16d	37° 47.25'	75° 57.83'	+2 26	+2 38	+2 47	+2 35	1.2	0.7	0.1	115°	0.9	019°	
5566	do.	41d	37° 47.25'	75° 57.83'	+2 25	+2 36	+2 54	+2 24	1.2	0.7	0.1	115°	0.9	189°	
5571	Tangier Sound Light, 1.5 miles NE of	15d	37° 48.5'	75° 57.4'	+2 08	+2 57	+2 44	+2 10	1.5	0.9	0.2	014°	1.1	220°	
5571	Clump Island, 2.5 n.mi. west of	40d	37° 54.50'	75° 57.42'	+3 10	+3 43	+3 46	+3 23	0.9	0.5	0.8	348°	0.6	168°	
5576	do.	14d	37° 54.50'	75° 57.42'	+3 10	+3 24	+3 33	+3 16	1.0	0.5	0.8	342°	0.6	168°	
5576	Janes Island Light, 2.3 n.mi. NNE OF	14d	38° 00.05'	75° 54.52'	+3 22	+3 53	+4 03	+3 16	0.9	0.6	0.7	001°	0.7	188°	
5576	do.	39d	38° 00.05'	75° 54.52'	+3 33	+4 12	+4 20	+3 09	0.9	0.6	0.7	008°	0.7	174°	
5581	do.	92d	38° 00.05'	75° 54.52'	+3 33	+4 18	+4 13	+3 35	0.7	0.3	0.6	348°	0.6	181°	
5581	Big Annessex River Entrance	12d	38° 02.93'	75° 51.45'	+2 12	+2 14	+2 16	+1 43	0.4	0.2	0.3	074°	0.2	258°	
5586	Kedges Strait Buoy 4'	12d	38° 03.45'	76° 01.93'	+0 51	+1 28	+1 27	+1 04	0.9	0.6	0.8	091°	0.7	276°	
5591	Manokin R. Ent., 1.1 n.mi. E of Drum Pt.	20d	38° 05.82'	75° 53.48'	+2 23	+2 55	+3 12	+2 39	0.4	0.3	0.4	008°	0.3	197°	
5596	Manokin R. Ent., 1.1 n.mi. E of Drum Pt.	14d	38° 08.45'	75° 58.33'	+3 23	+3 52	+3 54	+3 10	0.9	0.5	0.7	000°	0.6	181°	
5596	Deal Is., 0.6 n.mi. W. of at Buoy 14'	41d	38° 08.45'	75° 58.33'	+2 56	+3 00	+4 04	+3 36	0.7	0.3	0.6	355°	0.4	175°	
5596	do.	41d	38° 08.45'	75° 58.33'	+2 56	+3 00	+4 04	+3 36	0.7	0.3	0.6	355°	0.4	175°	
5601	Frog Point, 1.6 miles south of		38° 12.6'	75° 57.3'	+3 57	+3 55	+4 10	+4 02	1.2	0.8	1.0	048°	1.1	240°	
	Wicomico River														
5606	Long Point and Nanticoke Point, between	9d	38° 12.80'	75° 54.00'	+3 29	+3 32	+3 36	+3 43	0.6	0.6	0.5	063°	0.7	263°	
5611	Victor Point, 0.8 mile southwest of		38° 14.3'	75° 51.8'	+3 48	+3 49	+4 18	+4 05	0.7	0.7	0.6	034°	0.9	242°	
5616	Whitehaven	4	38° 15.9'	75° 47.5'	+3 34	+4 40	+4 31	+3 32	1.4	0.9	1.1	089°	1.1	284°	
5621	Whitehaven, 2.5 miles above	4	38° 17.8'	75° 45.5'	+4 01	+4 08	+4 14	+3 26	1.2	0.9	1.0	006°	1.1	188°	
5626	Salisbury, 2 miles below	4	38° 20.4'	75° 38.3'	+4 01	+4 26	+4 32	+3 59	0.7	0.6	0.6	085°	0.8	258°	
5631	Sandy Point, Nanticoke River		38° 14.8'	75° 55.7'	+3 52	+4 31	+4 50	+4 10	1.5	0.9	1.2	000°	1.1	182°	
5636	Roaring Point, WSW of Nanticoke River	18d	38° 15.80'	75° 55.40'	+3 55	+3 56	+4 46	+3 41	1.1	0.7	0.9	356°	0.9	181°	
5636	do.	37d	38° 15.80'	75° 55.40'	+3 43	+3 54	+5 14	+3 43	0.8	0.4	0.6	350°	0.5	150°	
5641	Chapter Point, Nanticoke River	15d	38° 22.6'	75° 52.07'	+5 15	+4 38	+5 21	+5 49	1.8	1.0	1.5	014°	1.2	204°	
5646	Fishing Bay Entrance, at Buoy 2'	14d	38° 13.48'	75° 59.37'	+3 52	+4 55	+4 42	+4 52	0.7	0.2	0.1	050°	0.3	139°	
5651	Hooper Strait, at Buoy 4'	15d	38° 13.05'	76° 03.83'	+0 56	+1 27	+1 56	+1 14	1.0	0.6	0.8	097°	0.7	287°	
5656	Hooper Strait (west), at Buoy 2'	15d	38° 13.25'	76° 06.20'	+2 05	+2 28	+2 33	+1 40	0.7	0.4	0.2	304°	0.6	233°	
5661	Honga River Entrance, at Buoy 1A'	26d	38° 14.80'	76° 07.00'	+2 57	+3 01	+3 57	+3 10	0.6	0.3	0.5	331°	0.4	152°	
	GREAT WICOMICO RIVER														
5666	Sandy Point, east of		37° 49.30'	76° 18.00'	+1 03	+1 20	+0 54	+0 56	0.4	0.2	0.3	320°	0.3	140°	
	POTOMAC RIVER														
5671	Point Lookout, 5.2 n.mi. SW of	13d	37° 58.12'	76° 23.50'	+2 39	+2 16	+2 18	+1 23	0.1	0.1	0.1	294°	0.1	113°	
5676	Point Lookout, 3.1 n.mi. SW of	15d	37° 59.87'	76° 21.75'	+3 39	+4 02	+4 00	+3 26	0.4	0.3	0.3	295°	0.4	116°	
5681	do.	34d	37° 59.87'	76° 21.75'	+2 49	+2 59	+3 30	+2 47	0.3	0.2	0.1	214°	0.2	126°	
5681	Point Lookout, 1.8 n.mi. SW of	14d	38° 00.80'	76° 20.62'	+3 06	+3 40	+4 28	+3 38	0.6	0.3	0.1	216°	0.5	297°	
5686	do.	47d	38° 00.80'	76° 20.62'	+2 13	+3 10	+3 56	+3 20	0.4	0.1	0.3	309°	0.1	102°	
5686	Point Lookout, 1.0 n.mi. south of	15d	38° 01.25'	76° 19.45'	+2 30	+3 27	+3 54	+2 55	0.9	0.4	0.2	211°	0.7	270°	
5686	do.	43d	38° 01.25'	76° 19.45'	+2 05	+3 10	+4 38	+3 11	0.7	0.2	0.6	271°	0.3	086°	

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS							
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb				
															h	m	h	m	knots	Dir.	knots	Dir.
	POTOMAC RIVER-cont. Time meridian, 75° W	ft	North	West														
	Cornfield Point				on Chesapeake Bay Entrance, p.80													
5691	1 mile south of midchannel		38° 02'	76° 21'	+4.38	+4.55	+4.29	+4.31	0.6	0.5	--	--	0.5	310°	--	--	0.5	130°
5696	3.8 miles south of Fort Point, St. Marys River		38° 01.1'	76° 21.3'	+4.23	+4.40	+4.14	+4.16	0.9	0.5	--	--	0.5	280°	--	--	0.6	110°
5706	Yeocomico River entrance		38° 07.8'	76° 26.9'									0.7	315°			0.6	100°
5711	Pinney Point		38° 02.1'	76° 31.2'														
5716	0.2 mile south of 1.06 n.mi. south of 2.2 miles south of	15d	38° 07.8'	76° 32.0'	+3.38	+3.55	+3.29	+3.31	1.6	0.5	--	--	1.3	280°	--	--	0.6	145°
5721	Lower Machodoc Creek entrance	31d	38° 06.95'	76° 31.84'	+4.22	+4.37	+4.14	+4.32	0.6	0.4	--	--	0.5	315°	--	--	0.5	128°
5731	White Point, Nomini Creek entrance		38° 06.95'	76° 31.84'	+3.50	+4.35	+5.00	+4.13	0.7	0.3	--	--	0.6	315°	0.1	044°	0.4	130°
5741	Breton Bay entrance		38° 05.9'	76° 33.1'	+3.38	+3.55	+3.29	+3.31	0.6	0.4	--	--	0.5	280°	--	--	0.5	130°
5746	St. Clements Bay entrance		38° 08.1'	76° 43.3'	+4.13	+4.30	+4.04	+4.06	1.5	1.0	--	--	1.2	155°	--	--	1.2	335°
5751	St. Clements I., 1.8 miles southeast of St. Clements I., 1.1 miles southwest of Rock Point, Wicomico River entrance		38° 14.5'	76° 43.7'	+2.58	+3.15	+2.49	+2.51	0.7	0.3	--	--	0.6	030°	--	--	0.4	200°
5756			38° 11.7'	76° 42.5'	+5.23	+5.40	+5.14	+5.16	0.5	0.7	--	--	0.4	250°	--	--	0.9	085°
5761			38° 11.57'	76° 45.67'	+5.09	+5.49	+5.13	+5.05	0.7	0.6	--	--	0.6	281°	--	--	0.8	099°
			38° 16.4'	76° 49.3'	+3.47	+4.36	+4.22	+3.53	0.6	0.5	--	--	0.5	019°	--	--	0.6	174°
					on Baltimore Harbor Approach, p.84													
5766	Swan Point		38° 16.4'	76° 56.7'	-1.54	-2.04	-2.32	-2.09	0.4	1.0	--	--	0.3	350°	--	--	0.8	140°
5771	Dahlgren Harbor Channel		38° 18.90'	77° 01.93'														
5776	Upper Machodoc Creek entrance		38° 19.1'	76° 59.4'	-1.09	-1.19	-1.47	-1.24	1.5	1.8	--	--	0.2	270°	--	--	0.3	090°
5781	Persimmon Point		38° 22.1'	76° 59.20'	-1.25	-1.28	-1.38	-1.17	1.1	1.8	--	--	1.2	325°	--	--	1.4	175°
5786	Potomac River Bridge, 0.4 mile south of Chapel Point, Port Tobacco River		38° 21.38'	76° 59.20'									0.9	000°			1.4	165°
5791	Maryland Point		38° 27.9'	77° 02.2'														
5801	Quantico Creek entrance		38° 20.8'	77° 11.8'	-1.04	-1.14	-1.42	-1.19	1.4	1.8	--	--	1.1	270°	--	--	1.4	080°
5811	Freestone Point, 2.3 miles east of Hallowing Point		38° 31.3'	77° 16.6'	-0.54	-1.04	-1.32	-1.09	0.9	1.1	--	--	0.7	020°	--	--	0.9	200°
5816	Jones Point, Alexandria		38° 31.7'	77° 17.3'	-1.19	-1.29	-1.57	-1.34	0.6	0.6	--	--	0.5	305°	--	--	0.5	115°
5821	Hains Point		38° 35.78'	77° 11.88'	+0.03	-0.01	-0.28	-0.06	0.9	0.9	--	--	0.7	030°	--	--	0.7	229°
5826	Anacostia River entrance		38° 38.70'	77° 07.65'	+0.12	-0.05	-0.24	-0.15	1.4	1.4	--	--	1.1	345°	--	--	1.1	149°
5831	South Capitol Street Bridge		38° 47.62'	77° 02.23'	+0.36	+0.01	+0.09	+0.07	1.2	1.1	--	--	1.0	352°	--	--	0.9	171°
5836	Washington Channel, Washington, D.C.		38° 51.08'	77° 00.6'	+0.20	+0.31	+0.04	-0.18	0.8	0.4	--	--	0.6	359°	--	--	0.3	176°
5841	Virginia Channel, Washington, D.C. <13>		38° 52.07'	77° 01.2'														
5846			38° 51.8'	77° 01.2'														
			38° 52'	77° 02'														
	PATUXENT RIVER																	
5851	Hog Point, 0.6 n.mi. north of	13d	38° 19.08'	76° 24.07'	-4.45	-5.29	-5.59	-6.00	0.5	0.6	--	--	0.4	258°	0.1	358°	0.5	070°
5856	Drum Point, 0.3 mile SSE of	41d	38° 19.08'	76° 24.07'	-6.24	-5.38	-5.36	-6.38	0.5	0.3	--	--	0.4	263°	--	--	0.2	061°
5861	Sandy Point, 0.5 mile south of Point Patience, 0.1 mile southwest of Broomes Island, 0.4 mile south of <62>	15	38° 18.93'	76° 25.15'	-5.19	-5.20	-5.25	-5.16	0.5	0.5	--	--	0.4	245°	--	--	0.4	065°
5866	Sheridan Point, 0.1 mile southwest of Benedict, highway bridge		38° 19.70'	76° 27.30'	-5.08	-5.49	-5.53	-4.55	0.6	0.6	--	--	0.5	300°	--	--	0.5	125°
5871	Lyons Creek Wharf		38° 19.70'	76° 29.20'	-5.07	-6.12	-6.46	-6.01	0.6	1.0	--	--	0.5	315°	--	--	0.8	145°
5876			38° 23.70'	76° 33.25'	-5.01	-5.16	-5.02	-5.02	0.5	0.6	--	--	0.4	290°	--	--	0.5	110°
5881			38° 27.97'	76° 38.88'	-4.33	-4.54	-4.49	-4.16	0.8	0.8	--	--	0.6	320°	--	--	0.6	135°
5886			38° 30.70'	76° 40.33'	-4.45	-4.38	-4.09	-4.35	1.0	0.6	--	--	0.8	025°	--	--	0.5	190°
			38° 44.8'	76° 41.1'	-3.14	-3.24	-3.52	-3.29	1.4	1.1	--	--	1.1	315°	--	--	0.9	140°
	LITTLE CHOPTANK RIVER																	
5891	Hills Point, 1.0 mile south of		38° 33.0'	76° 18.7'														
5896	Ragged Point, 1.5 miles east of		38° 31.80'	76° 14.65'	-4.53	-5.15	-4.29	-4.57	0.5	0.2	--	--	0.4	045°	--	--	0.2	235°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	h m	Min. before Ebb	Ebb	h m	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	CHOPTANK RIVER Time meridian, 75° W	ft	North	West	h m	h m	h m	h m	h m	knots	Dir.	knots	Dir.	
5901	Cook Point, 1.4 n.mi. NNW of	15d	38° 38.83'	76° 18.40'	-3.52	-4.06	-4.06	-4.24	0.8	0.7	0.6	049°	0.5	241°
	do	45d	38° 38.83'	76° 18.40'	-4.09	-4.05	-4.03	-4.12	0.6	0.6	0.5	068°	0.5	232°
5906	Holland Point, 2.0 n.mi. SSW of	14d	38° 40.43'	76° 15.45'	-3.54	-4.21	-3.26	-4.00	0.3	0.2	0.2	089°	0.2	262°
5911	Chloria Point, 0.5 n.mi. SSW of	17d	38° 37.70'	76° 09.10'	-3.48	-3.32	-3.22	-3.58	0.6	0.5	0.4	139°	0.4	332°
	do	24d	38° 37.70'	76° 09.10'	-3.48	-3.33	-3.13	-3.42	0.4	0.4	0.4	143°	0.3	323°
5916	Martin Point, 0.6 n.mi. west of	18d	38° 36.23'	76° 08.15'	-3.18	-3.42	-3.22	-3.34	0.3	0.2	0.2	155°	0.2	341°
5921	Howell Point, 0.5 n.mi. south of	7d	38° 34.78'	76° 03.67'	-2.48	-3.05	-1.07	-3.42	0.4	0.5	0.3	122°	0.4	274°
5926	Cambridge hwy. bridge, W. of Swing Span	18d	38° 36.58'	76° 06.87'	-2.13	-2.32	-2.44	-2.26	0.6	0.8	0.5	000°	0.6	205°
5931	Off Jamaica Point		38° 40.52'	76° 57.98'	-1.52	-2.05	-1.56	-2.15	1.0	1.0	0.8	305°	0.8	100°
5936	Poplar Point, south of		38° 45.40'	76° 59.92'	-1.19	-1.50	-1.25	-1.47	1.1	1.0	0.9	050°	0.8	235°
5941	Dover Bridge		38° 41.72'	76° 10.67'	---	-4.05	---	-4.03	---	---	---	---	---	---
5946	Oxford, Tred Avon River		38° 45.8'	76° 06.2'	---	Current weak and variable	---	---	---	---	---	---	---	---
5951	Easton Pt., 0.5 mi. below, Tred Avon River		38° 44.33'	76° 14.95'	---	-4.10	---	-4.18	0.4	0.2	0.3	350°	0.2	170°
5956	Mulberry Pt., 0.6 mi. S of Broad Creek		38° 43.75'	76° 18.30'	-4.07	-4.27	-4.07	-4.14	0.5	0.5	0.4	010°	0.4	175°
5961	Bald Eagle Pt., east of, Harris Creek													
	EASTERN BAY													
5966	Poplar Island, east of south end		38° 44.9'	76° 21.2'	-2.20	-2.20	-2.20	-2.20	1.2	0.8	1.0	000°	0.6	170°
5971	Kent Point, 1.4 n.mi. east of		38° 50.33'	76° 20.25'	-3.04	-3.18	-3.49	-3.12	0.5	0.4	0.4	043°	0.3	233°
5976	Long Point, 1 mile southeast of	15d	38° 50.6'	76° 19.6'	-3.40	-3.40	-3.40	-3.40	0.6	0.5	0.5	040°	0.4	235°
5981	Turkey Point, 1.3 miles WSW of		38° 53.68'	76° 19.55'	---	Current weak and variable	---	---	---	---	---	---	---	---
5986	Parson Island, 1.4 miles west of		38° 54.83'	76° 16.77'	---	Current weak and variable	---	---	---	---	---	---	---	---
5991	Parson Island, 0.7 mile NNE of		38° 55.48'	76° 14.33'	---	-2.45	---	-2.50	0.2	0.2	0.2	305°	0.2	150°
5996	Thighman Point, 1 mile north of		38° 52.78'	76° 15.18'	---	-3.15	---	-3.55	0.4	0.4	0.3	060°	0.3	265°
6001	Wye River, west of Bruffs Island	9	38° 51.28'	76° 11.88'	-2.33	-3.18	-3.17	-3.00	0.8	0.9	0.6	030°	0.7	190°
6006	Deepwater Point, Miles River		38° 48.33'	76° 12.55'	-3.48	-3.52	-3.43	-4.14	0.6	0.6	0.5	215°	0.5	025°
6011	Long Point, 0.8 mi. east of, Miles River		38° 46.43'	76° 09.32'	---	-3.24	---	-3.45	0.4	0.2	0.3	055°	0.2	245°
	WEST and SOUTH RIVERS													
6016	Cheston Point, south of, West River		38° 51.33'	76° 31.43'	---	Current weak and variable	---	---	---	---	---	---	---	---
6021	South River entrance		38° 54.77'	76° 29.43'	---	Current weak and variable	---	---	---	---	---	---	---	---
	SEVERN and MAGOTHY RIVERS													
6026	Greenbury Point, 1.8 miles east of	8	38° 58.40'	76° 25.00'	-0.57	-1.05	-0.51	-0.47	0.8	0.8	0.6	070°	0.6	245°
6031	Annapolis		38° 58.95'	76° 28.50'	---	-3.35	---	-2.26	0.5	0.4	0.4	320°	0.3	110°
6036	Brewer Point, Severn River		39° 01.83'	76° 31.73'	---	-1.22	---	-1.50	0.4	0.4	0.3	275°	0.3	155°
6041	Mountain Point, Magothy River entrance		39° 03.47'	76° 26.23'	-2.20	-2.00	-1.29	-2.04	0.8	0.4	0.6	315°	0.3	125°
	CHESTER RIVER													
6046	Love Point, 1.6 n.mi. east of	16d	39° 02.05'	76° 16.07'	-1.42	-1.15	-0.47	-1.15	0.6	0.4	0.1	278°	0.4	341°
6051	Kent Island Narrows (highway bridge)	4	38° 58.23'	76° 14.83'	-2.07	-2.25	-2.11	-2.56	1.2	1.1	---	---	0.9	190°
6056	Hail Point, 0.7 n.mi. east of	16d	39° 00.63'	76° 10.95'	-0.51	-1.08	-1.12	-0.37	0.5	0.6	---	---	0.5	168°
6061	Deep Point		39° 06.38'	76° 07.23'	-0.31	-0.33	-0.32	-0.18	0.6	0.9	---	---	0.7	260°
6066	Chester town		39° 12.43'	76° 03.67'	-0.21	+0.05	-0.02	-0.17	0.8	0.6	---	---	0.5	220°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	PATAPSCO RIVER Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
6071	North Point, Brewerton Channel	15d	39° 10.70'	76° 26.65'	0.00	-0 10	0 00	-0 10	0.7	0.5	0.6	310°	0.4	130°
6076	Brewerton Angle		39° 12.08'	76° 30.78'	-0.24	-0 41	+0 25	+0 05	0.5	0.4	0.4	040°	0.3	205°
6081	Fort McHenry Angle		39° 15.45'	76° 34.55'	+0.07	-0 24	+0 21	+0 20	0.8	0.6	0.6	325°	0.5	165°
6086	Bear Creek entrance		39° 13.8'	76° 29.9'										
6091	Curtis Creek entrance		39° 13.1'	76° 34.6'										
6096	Fort McHenry, NW Harbor entrance		39° 15.8'	76° 34.5'										
6101	Middle Branch entrance		39° 15.4'	76° 37.0'										
	BACK, GUNPOWDER and BUSH RIVERS													
6106	Lynch Point, Back River		39° 15.0'	76° 26.3'	+0.46	+0 46	+0 51	+0 44	0.5	0.4	0.4	095°	0.3	288°
6111	Gunpowder River entrance		39° 18.7'	76° 18.5'	+0.50	+0 37	+1 17	+0 58	0.6	0.5	0.5	165°	0.4	345°
6116	Bush River, 0.4 mi. SW of Bush Point		39° 21.4'	76° 15.4'	+1.00	+0 25	+0 56	+1 25	0.4	0.5	0.3	090°	0.4	200°
	SASSAFRAS RIVER													
6121	Grove Point		39° 22.7'	76° 02.6'										
6126	Ordinary Point, 0.4 mile west of Georgetown		39° 22.45'	75° 59.25'	+1.39	+1 45	+1 24	+1 32	1.0	1.0	0.8	040°	0.8	215°
6131			39° 21.67'	75° 53.17'	+2.00	+1 53	+1 49	+1 45	1.3	1.6	1.1	054°	1.3	242°
6136	Arnold Point, 0.4 mile west of Old Town Point Wharf, northwest of Hendersons Point	17d	39° 30.23'	75° 55.12'	+2.07	+2 04	+1 47	+1 45	1.2	1.4	0.9	055°	1.1	237°
6141		29d	39° 30.23'	75° 55.12'	+2.05	+2 05	+2 05	+2 05	0.6	0.9	0.5	030°	0.7	210°
6146			39° 33.2'	75° 51.6'										
	CHESAPEAKE and DELAWARE CANAL													
6151	Back Creek, 0.3 n.mi. W of Sandy Pt	14d	39° 31.67'	75° 51.97'	-0.03	-0 10	-0 07	-0 02	0.6	0.7	1.2	057°	1.4	244°
6156	do	31d	39° 31.67'	75° 51.97'	-0.01	-0 23	+0.03	+0 00	0.6	0.6	1.2	052°	1.2	240°
6161	C&D CANAL, Chesapeake City	6d	39° 31.80'	75° 49.65'							2.1	097°	1.9	278°
6166	Chesapeake City Bridge, 0.45 n.mi. E of do	26d	39° 31.67'	75° 48.43'	-0.24	-0 09	+0 11	-0 08	1.0	0.7	2.0	092°	1.4	273°
6171	Contrail Bridge, east of do	37d	39° 31.67'	75° 48.43'	-0.28	-0 14	+0 14	-0 15	0.7	0.5	1.5	083°	0.9	275°
6176	St. George Bridge, 0.1 n.mi. ENE of Reedy Point Radio Tower, south of VIRGINIA, outer coast	17d	39° 32.55'	75° 42.15'	-0.32	-0 23	+0 05	-0 09	0.9	0.7	1.9	099°	1.3	278°
		34d	39° 32.55'	75° 42.15'	-0.37	-0 21	+0 02	-0 32	0.7	0.5	1.4	096°	1.0	281°
		18d	39° 33.17'	75° 39.00'	-0.54	-1 06	-0 45	-1 09	0.8	0.7	1.7	064°	1.3	247°
		19d	39° 33.62'	75° 34.20'	-1.02	-0 53	-0 07	-0 17	0.9	0.7	1.9	078°	1.3	263°
6181	Cape Henry Light, 0.7 mile east of Virginia Beach, south end		36° 55.70'	75° 59.60'	-0.01	+0 16	-0 27	+0 01	1.2	1.5	1.0	320°	1.9	105°
6186			36° 33.00'	75° 52.10'	-0.48	+0 19	+0 19	-0 02	0.6	0.3	0.5	350°	0.4	170°
	PAMLICO SOUND													
6191	Oregon Inlet	6	35° 46.6'	75° 32.1'	+2.38	+2 20	+2 03	+1 52	1.2	0.6	2.1	202°	1.2	028°
6196	Bodie Island-Pea Island, between do	12	35° 46.6'	75° 32.1'	+2.49	+2 36	+2 02	+1 48	1.2	0.6	2.0	204°	1.2	036°
6201	Coast Guard Tower, southwest of do	6	35° 45.7'	75° 31.9'	+3.04	+2 30	+1 53	+2 18	0.8	0.8	1.4	205°	1.5	028°
6206	Herbert C. Bonner Bridge, WSW of Hatteras Inlet	12	35° 45.7'	75° 31.9'	+3.01	+2 33	+1 57	+1 33	0.8	0.7	1.3	212°	1.4	033°
6211	Diamond Shoal Light, 3.9 miles SSW of do	6	35° 46.2'	75° 32.8'	+3.32	+2 55	+1 30	+1 46	0.6	0.9	1.0	280°	1.8	087°
			35° 09'	75° 18'	+2.42	+2 42	+2 18	+1 38	1.2	1.0	2.1	307°	2.0	148°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	PAMLICO SOUND—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
6216	Ocracoke Inlet channel entrance	10	35° 03.92'	76° 01.13'	+2.48	+2.24	+1.43	+1.40	1.0	1.2	1.7	000°	2.4	145°
6221	Teaches Hole Channel	10	35° 04.75'	76° 00.28'	+2.49	+2.27	+1.42	+1.47	0.6	0.8	1.1	050°	1.6	195°
6226	Blair Channel	9	35° 04.88'	76° 02.03'	+2.52	+2.33	+1.48	+2.03	0.6	0.9	1.0	305°	1.7	140°
6231	Wallace Channel		35° 04.78'	76° 03.12'	+2.51	+2.57	+2.03	+2.13	0.9	0.9	1.6	305°	1.8	140°
6236	Sheep Island Slue		35° 04'	76° 06'	+2.33	+3.18	+1.35	+1.56	0.1	0.2	0.2	310°	0.3	095°
6241	Ocracoke Inlet, 3.5 miles SSE of		35° 01'	76° 00'	See table 5.									
	NORTH CAROLINA COAST													
6246	Beaufort Inlet	6	34° 39.98'	76° 39.33'	+1.19	+1.16	+0.30	+0.31	0.8	0.7	1.4	314°	1.5	145°
6251	Shackleford Banks, 0.8 mile S of		34° 40.3'	76° 40.2'	+2.03	+1.19	+0.37	+0.57	0.2	0.7	0.3	358°	1.4	161°
6256	Approach		34° 41.15'	76° 40.10'	+1.42	+1.47	+0.36	+0.38	0.7	0.9	1.2	332°	1.7	154°
6261	Fort Macon, 0.6 mile SE of	10	34° 41.98'	76° 40.52'	+1.12	+1.20	+0.36	+0.21	1.1	1.1	2.0	307°	1.8	151°
	do.	20	34° 41.98'	76° 40.52'	+1.12	+1.18	+0.36	+0.39	1.1	0.9	0.2	242°	2.0	320°
6266	Tombstone Point, 0.1 mile E of	15	34° 42.23'	76° 41.17'	+1.13	+1.25	+0.34	+0.27	0.9	0.8	1.6	305°	1.7	153°
6271	Turning Basin	6	34° 42.78'	76° 41.65'	+1.11	+1.34	+0.50	+0.32	0.8	0.5	1.3	327°	1.0	144°
	do.	15	34° 42.78'	76° 41.65'	+1.09	+1.34	+0.59	+0.32	0.4	0.4	0.4	048°	1.0	138°
6276	Sugarloaf Island, 0.2 mile S of	6	34° 42.75'	76° 42.83'	+1.58	+1.39	+1.22	+1.14	0.7	0.8	1.1	266°	1.6	094°
6281	Morehead City, S of	6	34° 43.00'	76° 43.97'	+2.12	+1.47	+1.29	+1.42	0.8	0.7	1.4	293°	1.4	110°
6286	Morehead City, R.R. bridge, N of	6	34° 43.37'	76° 41.63'	+0.44	+1.01	+0.09	-1.03	0.6	0.5	0.2	127°	0.1	185°
6291	Newport Marshes, SE of	6	34° 43.88'	76° 41.00'	+0.57	+1.02	+0.18	-0.08	0.8	0.6	1.0	044°	1.2	215°
	do.	15	34° 43.88'	76° 41.00'	+0.53	+1.15	+0.21	-0.08	0.8	0.6	1.3	044°	1.2	226°
6296	Newport Marshes, E of	6	34° 44.27'	76° 40.83'	+0.07	+0.11	-0.37	-0.09	0.6	0.5	1.0	040°	1.0	224°
6301	Radio Island, E of	6	34° 42.70'	76° 40.78'	+0.55	+0.55	+0.20	+0.16	0.7	0.6	1.0	022°	1.2	202°
6306	Beaufort, off docks		34° 43'	76° 40'	Current irregular									
6311	Bird Shoal, SE of	6	34° 42.03'	76° 39.23'	+1.40	+1.34	+1.10	+0.16	0.5	0.4	0.5	310°	0.8	130°
6316	Shackleford Point, NE of	6	34° 41.53'	76° 39.13'	+1.32	+1.28	+1.10	+0.46	0.8	0.6	0.8	126°	0.5	304°
6321	Carrot Island	6	34° 42.13'	76° 37.05'	+1.49	+1.34	+1.15	+1.49	0.5	0.7	1.3	135°	1.1	305°
6326	Middle Marshes, S of	6	34° 40.70'	76° 36.83'	+0.59	+1.04	+1.03	+0.18	0.8	0.5	0.1	359°	1.3	262°
6331	Cape Lookout Shoals Ltd. Whistle Buoy 14		34° 18'	76° 24'	See table 5.									
	CAPE FEAR RIVER													
6336	Bald Head	6	33° 52.43'	78° 00.45'	+1.15	+0.22	+0.09	+0.59	1.3	1.5	2.2	034°	2.9	190°
6341	Intracoastal Waterway, Southport	6	33° 55.07'	78° 02.53'	+0.27	+1.28	+0.05	-1.15	0.5	0.4	0.8	280°	0.8	095°
6346	Southport	6	33° 54.87'	78° 00.70'	+1.49	+1.05	+0.54	+1.15	0.9	1.4	1.6	059°	2.6	225°
6351	Southport	16	33° 55.03'	78° 00.53'	+1.34	+1.12	+1.03	+1.15	1.0	1.2	1.6	062°	2.4	244°
	do.	26	33° 55.03'	78° 00.53'	+1.22	+1.23	+1.03	+1.13	1.0	1.1	1.7	082°	2.1	247°
6356	Sunny Point	6	33° 59.18'	77° 57.28'	+2.10	+0.96	+0.45	+1.24	0.5	0.6	0.9	003°	1.2	176°
	do.	16	33° 59.18'	77° 57.28'	+2.07	+1.49	+1.11	+1.55	0.5	0.6	0.9	347°	1.1	160°
	do.	26	33° 59.18'	77° 57.28'	+1.57	+1.49	+1.40	+1.52	0.6	1.0	1.0	350°	1.0	167°
6361	Horseshoe Shoal	6	33° 58.17'	77° 56.87'	+2.16	+1.34	+1.24	+1.52	0.9	1.0	1.5	019°	1.8	198°
	do.	16	33° 58.17'	77° 56.87'	+2.04	+1.35	+1.32	+1.51	0.9	0.9	1.5	025°	1.8	199°
	do.	26	33° 58.17'	77° 56.87'	+1.54	+1.41	+1.32	+1.30	0.8	0.7	1.3	012°	1.4	193°
6366	Reaves Point, 0.3 mile east of	6	33° 59.92'	77° 56.97'	+1.09	+0.03	+1.02	-0.49	0.2	0.2	0.3	35°	0.3	181°
	do.	16	33° 59.92'	77° 56.97'	+1.24	+1.41	+1.39	+0.13	0.4	0.2	0.7	332°	0.4	159°
	do.	26	33° 59.92'	77° 56.97'	+0.52	+1.44	+2.44	+1.37	0.6	0.1	1.0	331°	0.2	160°
6371	Reaves Point Channel	6	33° 59.08'	77° 55.85'	+2.27	+1.31	+1.41	+2.19	0.8	0.8	1.3	009°	1.6	195°
	do.	16	33° 59.08'	77° 55.85'	+2.04	+1.08	+1.35	+2.19	0.9	0.9	1.5	013°	1.7	192°
	do.	26	33° 59.08'	77° 55.85'	+1.50	+2.06	+1.41	+1.52	0.7	0.6	1.1	017°	1.1	194°
6376	Reaves Point, 0.8 mile northeast of	6	34° 00.43'	77° 56.47'	+2.27	+1.47	+1.39	+2.25	0.8	0.8	1.4	020°	1.5	197°
	do.	16	34° 00.43'	77° 56.47'	+2.14	+1.42	+1.53	+2.28	0.8	0.7	1.4	021°	1.4	196°
	do.	26	34° 00.43'	77° 56.47'	+2.09	+1.33	+2.01	+2.10	0.7	0.5	1.2	017°	1.0	167°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	CAPE FEAR RIVER—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
6381	Reaves Point, 0.4 mile north of	6	34° 00.37'	77° 57.15'	+2.41	+1.46	+1.44	+2.19	0.5	0.4	0.8	027°	0.9	198°
	do.	16	34° 00.37'	77° 57.15'	+2.21	+2.48	+1.57	+2.07	0.5	0.4	0.9	011°	0.7	191°
	do.	26	34° 00.37'	77° 57.15'	+1.25	+2.04	+2.16	+1.26	0.5	0.4	0.9	050°	0.8	183°
6386	Snows Cut, Intracoastal Waterway	6	34° 03.38'	77° 53.93'	+6.27	+5.13	+6.59	+5.27	0.7	0.5	1.2	080°	1.0	264°
6391	Myrtle Sound, Intracoastal Waterway	6	34° 04.68'	77° 53.40'	+6.44	+5.58	+6.59	+5.45	0.7	0.6	1.2	017°	1.1	195°
6396	Upper Midnight channel	6	34° 01.72'	77° 56.43'	+2.06	+1.32	+1.47	+1.32	1.0	1.0	1.7	028°	2.0	174°
6401	Doctor Point, 0.6 mile NNW of	6	34° 04.72'	77° 55.95'	+2.42	+2.10	+1.46	+2.31	0.9	1.0	1.6	015°	2.0	192°
	do.	16	34° 04.72'	77° 55.95'	+2.30	+2.03	+1.59	+2.22	0.9	0.8	1.5	006°	1.6	177°
	do.	26	34° 04.72'	77° 55.95'	+2.12	+2.18	+2.04	+2.22	0.9	0.7	1.5	327°	1.4	177°
6406	Campbell Island, east side	6	34° 07.22'	77° 56.18'	+2.56	+2.33	+2.02	+2.39	0.9	0.7	1.5	020°	1.4	193°
	do.	16	34° 07.22'	77° 56.18'	+2.28	+2.15	+2.13	+2.32	0.8	0.7	1.4	003°	1.4	182°
	do.	26	34° 07.22'	77° 56.18'	+2.21	+2.34	+2.18	+2.34	0.7	0.5	1.2	004°	1.0	185°
6411	Dram Tree Point, 0.5 mile SSE of		34° 11.53'	77° 57.45'	+3.26	+3.35	+2.22	+3.31	0.8	0.7	1.4	006°	1.3	181°
6416	Brunswick River	6	34° 10.87'	77° 57.95'	+3.12	+1.40	+1.51	+1.22	0.5	0.6	0.8	290°	1.2	118°
	do.	16	34° 10.87'	77° 57.95'	+3.04	+1.52	+1.53	+1.22	0.5	0.5	0.8	301°	1.2	127°
6421	1.8 miles north of mouth	6	34° 12.33'	77° 58.47'	+3.18	+2.34	+1.59	+2.52	0.3	0.4	0.5	354°	0.8	170°
6426	Wilmington	6	34° 14.20'	77° 57.17'	+3.52	+4.07	+2.48	+3.07	0.8	0.7	1.4	337°	1.4	153°
	do.	20	34° 14.20'	77° 57.17'	+3.40	+3.34	+2.37	+3.37	0.8	0.7	1.3	341°	1.4	164°
6431	Point Peter	6	34° 14.53'	77° 57.50'	+5.15	+5.19	+3.11	+5.07	0.4	0.4	0.6	307°	0.7	124°
6436	Turning Basin, Northeast River	6	34° 14.85'	77° 57.23'	+4.08	+4.13	+3.11	+3.52	0.4	0.4	0.6	021°	0.7	207°
	do.	20	34° 14.85'	77° 57.23'	+4.03	+4.18	+3.13	+3.52	0.4	0.3	0.7	026°	0.7	200°
	NORTH CAROLINA COAST													
6441	Frying Pan Shoals, off Cape Fear		33° 34'	77° 49'										
6446	Frying Pan Shoals Light, 14.3 mi. NW of		33° 28'	77° 34'										
	WINYAH BAY													
6451	Winyah Bay entrance		33° 12.43'	79° 11.07'	+1.47	+1.35	+1.05	+1.20	1.1	1.0	1.9	320°	2.0	140°
6456	Range D, off Mosquito Creek		33° 14.65'	79° 12.35'	+2.00	+1.57	+1.13	+1.42	1.2	1.1	2.1	330°	2.2	130°
6461	Frazier Point, south of		33° 17.70'	79° 16.37'	+1.52	+1.52	+2.20	+1.59	1.1	0.5	1.8	320°	0.9	115°
6466	Rabbit Island, west of		33° 18.58'	79° 17.20'	+2.23	+2.19	+2.01	+1.41	0.9	1.0	1.6	000°	2.0	170°
6471	Rabbit Island, northwest of		33° 20.37'	79° 16.88'	+2.39	+2.46	+2.14	+2.25	1.2	0.9	2.1	015°	1.8	215°
6476	Sampit River entrance		33° 21.08'	79° 16.82'	+1.33	+1.20	+1.39	+0.53	0.6	0.7	1.1	345°	1.3	135°
6481	Georgetown, Sampit River		33° 21.55'	79° 17.25'	+2.00	+1.18	+0.56	+0.52	0.5	0.6	0.8	275°	1.1	080°
6486	Pee Dee River, swing bridge		33° 22.23'	79° 15.83'	+3.03	+3.13	+1.57	+2.43	0.4	0.5	0.7	000°	0.9	210°
6491	Lafayette swing bridge, Waccamaw River		33° 22.12'	79° 15.12'	+3.23	+3.04	+1.56	+2.31	0.4	0.6	0.7	005°	1.2	200°
6496	Butler Island, 0.3 mile south of		33° 25.00'	79° 12.72'	+3.36	+3.34	+2.11	+2.55	0.4	0.5	0.6	030°	0.9	205°
	SOUTH CAROLINA COAST													
6501	North Santee River entrance	6	33° 08.15'	79° 14.45'	+1.00	+0.33	+0.03	-0.01	0.9	0.9	1.5	010°	1.8	165°
6506	South Santee River entrance	5	33° 07.2'	79° 16.5'	+0.20	+0.38	+0.27	+0.15	0.9	0.8	1.5	045°	1.6	240°
6511	Cape Romain		—	—										
6516	Capers Inlet		—	—										
6521	Charleston Entrance, 37 miles east of		32° 42'	79° 06'										
6526	Charleston Lighted Whistle Buoy 2C		32° 41'	79° 43'										

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS					
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb		
	CHARLESTON HARBOR Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.		
6531	Fort Sumter Range, Buoy '2'		32° 40.98'	79° 43.56'	-1 05	-0 51	+1 11	-1 03	0.2	0.2	0.3	280°	0.2	023°	0.4	104°
6536	Fort Sumter Range, Buoy '4'		32° 41.86'	79° 45.34'	-0 49	-0 59	+1 10	-0 38	0.3	0.2	0.5	289°	0.1	026°	0.4	117°
6541	Fort Sumter Range, Buoy '8'		32° 42.90'	79° 47.54'	-0 15	-0 16	+0 17	+0 24	0.4	0.5	0.6	299°	0.1	038°	0.9	128°
6546	Fort Sumter Range, Buoy '14'		32° 43.46'	79° 48.00'	-0 10	-0 04	+0 16	+0 01	0.6	0.6	1.1	287°	0.2	019°	1.5	116°
6551	North Jetty, 0.8 mile southeast of <30>		32° 43.05'	79° 48.00'	-0 06	-0 48	+1 09	-0 16	0.2	0.6	0.4	295°	0.1	287°	1.1	110°
6556	Charleston Hbr. ent. (between jetties)		32° 44.00'	79° 50.00'	-0 01	+0 04	+0 05	+0 09	1.1	0.9	1.8	320°	0.1	358°	1.8	121°
6561	Fort Sumter Range, Buoy '20'		32° 44.43'	79° 50.67'	-0 33	-0 15	+0 33	-0 51	0.9	0.9	1.6	305°	0.1	040°	1.8	128°
6566	South Jetty, break in		32° 43.87'	79° 51.02'	+0 38	+0 31	+0 06	+0 22	0.7	1.4	1.7	002°	--	--	2.8	204°
6571	CHARLESTON HARBOR (off Fort Sumter)		32° 45.36'	79° 52.22'												
6576	Ft. Sumter, 0.6 n.mi. NW of		32° 45.67'	79° 52.03'	-0 05	-0 03	+0 01	-0 24	0.9	0.9	1.6	322°	0.1	233°	1.7	138°
6581	South Chan., 0.8 mi. ENE of Ft. Johnson		32° 45.52'	79° 53.08'	+0 43	+0 11	-0 12	+0 13	0.5	1.3	0.8	275°	--	--	2.6	115°
6586	South Chan., 0.4 mi. NW of Ft. Johnson		32° 45.48'	79° 54.38'	+1 10	+0 58	+0 16	+0 43	0.4	1.0	0.7	282°	--	--	1.9	104°
6591	Sullivan's I., 0.7 mi. NE of Ft. Sumter		32° 45.72'	79° 52.05'	+0 17	+0 37	+0 01	-0 03	0.8	0.8	1.4	342°	--	--	1.5	132°
6596	Castle Pinckney, 0.4 mile south of		32° 46.02'	79° 54.70'	+0 40	+1 00	+0 14	+0 58	0.5	0.9	0.8	304°	--	--	1.7	098°
6601	South Channel, Buoy '32'		32° 45.73'	79° 54.66'	-0 01	-0 04	+0 18	-0 02	0.5	0.5	0.1	219°	0.1	026°	1.0	125°
6606	Castle Pinckney, 0.6 mile southwest of		32° 45.98'	79° 55.17'	+1 21	+1 20	+0 24	+0 40	0.4	0.7	0.7	318°	--	--	1.3	156°
6611	Shutes Folly Island, 0.4 mile west of		32° 46.58'	79° 55.25'	+0 53	+0 59	+0 20	+0 08	0.5	1.1	0.8	028°	--	--	2.2	164°
6616	Customhouse Reach, off Customhouse		32° 46.77'	79° 55.35'	+0 49	+1 03	+0 59	+0 23	0.6	0.7	1.0	009°	0.1	098°	1.3	190°
6621	Customhouse Reach		32° 46.95'	79° 55.20'	+0 46	+0 37	+0 37	+0 15	0.6	0.9	1.0	005°	--	--	1.8	153°
6626	Town Creek Lower Reach		32° 47.55'	79° 55.47'	+1 06	+0 24	+0 02	+0 07	0.6	1.1	1.1	335°	--	--	2.2	172°
6631	Town Creek, 0.2 mile above bridge		32° 48.32'	79° 55.90'	+1 06	+0 54	+0 03	+0 03	0.5	1.3	0.8	002°	--	--	2.5	166°
6636	Rebellion Reach, 0.8 n.mi. N. of Ft. Sumter		32° 45.98'	79° 52.40'	-0 06	+0 27	-0 25	-0 48	0.4	0.4	0.1	240°	0.1	240°	0.8	143°
6641	The Cove, entrance on the Cove Range		32° 46.05'	79° 52.32'	+0 28	+1 14	+0 06	+0 10	0.7	0.5	1.2	346°	--	--	0.9	151°
6646	Hog Island Channel		32° 46.87'	79° 52.58'	-0 39	+0 03	-0 29	-0 20	0.5	0.4	0.8	325°	--	--	0.8	125°
6651	Folly I. Channel, N of Ft. Johnson		32° 46.18'	79° 54.07'	-1 09	-0 03	-0 04	-0 59	0.7	0.6	1.2	30°	--	--	1.1	104°
6656	Folly Reach, Buoy '5'		32° 46.58'	79° 53.95'	+0 02	+0 35	+0 18	+0 13	0.7	0.8	1.2	292°	0.1	205°	1.6	110°
6661	Shutes Reach, Buoy '8'		32° 46.93'	79° 54.65'	+0 18	+0 22	+0 15	-0 25	0.7	0.8	1.3	315°	0.1	037°	1.5	136°
6666	Horse Reach		32° 47.17'	79° 54.90'	+0 36	+0 23	-0 12	+0 09	0.8	1.0	1.4	350°	--	--	1.9	146°
6671	Hog Island Reach, Buoy '12'		32° 47.67'	79° 54.90'	+0 13	+0 28	+0 14	-0 12	0.7	0.7	1.3	012°	0.1	103°	1.8	193°
6676	Drum Island, 0.4 mile SSE of		32° 47.67'	79° 55.25'	+0 34	+0 53	+0 11	-0 02	0.8	0.9	1.2	011°	--	--	1.8	155°
6681	Drum Island, east of (bridge)		32° 48.27'	79° 54.92'	+0 30	+0 42	+0 43	+0 06	0.7	1.0	1.2	020°	--	--	2.0	183°
6686	Hog Island Reach, SW of Remley Point		32° 48.71'	79° 54.72'	+0 30	+0 44	+0 43	+0 51	0.7	0.7	1.1	030°	--	--	1.4	210°
6691	Drum Island Reach, off Drum I., Buoy '45'		32° 48.97'	79° 55.37'	+0 26	+1 00	+1 06	+1 00	0.4	0.5	0.6	312°	--	--	1.0	133°
	Cooper River															
6696	Drum Island, 0.2 mile above		32° 49.18'	79° 55.75'	+1 12	+1 09	+0 01	+0 37	0.6	1.2	1.1	332°	--	--	2.4	152°
6701	Daniel Island Reach, Buoy '48'		32° 49.63'	79° 55.73'	+1 01	+1 29	+0 53	+0 55	0.7	0.7	1.2	006°	0.1	278°	1.3	182°
6706	Shipyard Creek entrance <31>		32° 49.80'	79° 56.10'	+0 41	+1 06	-0 29	+0 09	0.3	0.8	0.5	--	--	--	1.5	197°
6711	Daniel Island Reach		32° 49.97'	79° 55.80'	+1 29	+1 49	+0 42	+0 51	0.8	1.2	1.3	352°	--	--	2.3	190°
6716	Daniel Island Bend		32° 50.90'	79° 55.75'	+0 55	+1 29	+0 55	+0 39	0.7	1.1	1.2	335°	0.1	260°	2.1	153°
6721	Daniel Island Bend, west side of <47>		32° 50.85'	79° 56.00'	--	--	--	-0 01	--	0.5	--	--	--	--	1.0	144°
6726	North Charleston		32° 51.82'	79° 57.53'	+1 26	+2 28	+1 04	+0 17	0.6	0.9	1.1	335°	--	--	1.7	142°
6731	Filbin Creek Reach		32° 53.32'	79° 57.92'	+1 31	+2 06	+1 08	+1 27	0.7	0.9	1.2	006°	--	--	1.8	180°
6736	Filbin Creek Reach, 0.2 mile east of		32° 53.28'	79° 57.63'	+1 16	+1 47	+0 32	+1 09	0.4	0.7	0.6	002°	--	--	1.4	197°
6741	Filbin Creek Reach, Buoy '58'		32° 53.78'	79° 57.67'	+1 18	+2 04	+1 24	+1 29	0.6	0.7	1.1	031°	--	--	1.3	214°
6746	Ordnance Reach		32° 54.38'	79° 57.17'	+1 35	+2 34	+1 05	+1 07	0.6	0.6	1.0	062°	--	--	1.2	242°
6751	Yellow House Creek		32° 54.53'	79° 56.18'	+2 06	+2 41	+0 57	+1 12	0.4	0.7	0.7	088°	--	--	1.4	270°
6756	Yellow House Landing, 1 mile NW of		32° 55.18'	79° 55.83'	+2 26	+2 43	+0 58	+1 06	0.4	0.9	0.7	334°	--	--	1.8	170°
6761	Woods Point, SE of		32° 55.55'	79° 55.97'	+1 48	+1 55	+1 55	+2 09	0.5	0.5	0.8	334°	0.1	067°	1.0	157°
6766	Woods Point		32° 55.90'	79° 56.30'	+2 14	+3 02	+1 11	+1 43	0.5	0.7	0.9	002°	--	--	1.4	201°
6771	Snow Point, 0.5 mile north of		32° 57.1'	79° 55.8'	+2 15	+2 36	+1 48	+1 33	0.6	0.6	1.1	010°	--	--	1.4	210°
6776	Back River entrance		32° 58.1'	79° 56.0'	+0 46	+0 45	+0 48	+0 34	0.6	0.6	1.0	252°	--	--	1.2	067°
6781	Amoco Pier, off		32° 57.55'	79° 55.08'	+2 09	+2 49	+2 10	+1 48	0.4	0.5	0.1	292°	0.1	297°	0.9	191°
6786	Moreland, 0.5 n.mi. below		33° 00.03'	79° 54.28'	+2 39	+2 58	+2 28	+2 19	1.1	1.0	1.9	024°	--	--	2.0	216°
6791	Hagan Island, 1 n.mi. below		33° 02.00'	79° 54.80'	+2 39	+3 52	+2 27	+1 37	0.8	0.7	1.3	308°	--	--	1.4	134°
6796	The Tee, 0.4 mile southwest of		33° 03.80'	79° 55.78'	+4 22	+4 20	+2 29	+3 20	0.6	0.9	1.0	280°	--	--	1.7	098°
6801	The Tee		33° 03.95'	79° 55.38'	+3 00	+3 09	+2 36	+1 43	0.6	0.5	0.9	339°	0.1	075°	1.0	161°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS					
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	h	m	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	CHARLESTON HARBOR—cont. Time meridian, 75° W	ft	North	West	h	m	h	m	h	m	knots	Dir.	knots	Dir.	knots	Dir.
6806	Cooper River—cont.															
6811	Childsbury, S.A.L. RR. bridge		33° 05.63'	79° 56.55'	+4.43	+4.27	+2.15	+3.34	0.4	0.9	0.7	309°	1.7	141°	1.7	141°
6816	East Branch, 0.2 mile above entrance		33° 04.1'	79° 55.2'	+3.01	+3.07	+2.59	+3.06	1.1	0.9	1.8	084°	0.8	262°	1.7	262°
	Bonneau Ferry, east of		33° 04.3'	79° 53.0'	+3.27	+3.10	+2.44	+3.36	0.4	0.4	0.7	022°	0.8	197°	0.8	197°
	Wando River															
6821	Remley Point, 0.2 mile northwest of		32° 48.97'	79° 54.57'	-0.14	+0.36	+0.20	-0.04	0.8	0.9	1.3	028°	1.8	191°	1.8	191°
6826	Wando River, Upper Reach, Turning Basin		32° 50.00'	79° 53.80'	-0.14	-0.12	-0.09	-0.09	0.6	0.6	1.0	012°	1.2	192°	1.2	192°
6831	Rathall Creek entrance		32° 51.57'	79° 53.77'	+0.25	+0.35	+0.18	-0.18	0.8	0.9	1.3	030°	1.7	216°	1.7	216°
6836	Horbek Creek, 0.2 mile above entrance		32° 53.1'	79° 50.7'	+0.28	+0.29	+0.31	+0.24	0.6	0.5	1.0	026°	0.9	218°	0.9	218°
6841	Nowell Creek entrance		32° 52.7'	79° 52.5'	-0.02	+0.42	-0.12	-0.39	0.4	0.6	0.7	350°	1.1	171°	1.1	171°
6846	Buoy 19, off Nowell Creek		32° 52.32'	79° 51.93'	-0.08	-0.06	+0.04	-0.19	0.5	0.5	0.8	080°	1.0	201°	1.0	201°
6851	Horbek Creek, 2.5 miles north of		32° 55.1'	79° 50.3'	+0.30	+0.41	+0.26	+0.28	0.5	0.7	0.8	015°	1.3	267°	1.3	267°
	Ashley River															
6856	Battery, southwest of		32° 46.03'	79° 56.03'	+0.16	+0.09	-0.24	+0.03	0.7	0.9	1.2	303°	1.8	114°	1.8	114°
6861	Wappoo Creek, off of		32° 46.38'	79° 57.00'	+0.07	-0.05	-0.06	-0.11	0.7	0.6	1.1	315°	1.2	136°	1.2	136°
6866	Highway Bridge		32° 46.92'	79° 57.60'	-0.09	+0.30	-0.03	-0.48	0.7	0.6	1.2	321°	1.1	138°	1.1	138°
6871	S.C.L. RR. bridge, 0.1 mile below		32° 47.73'	79° 58.40'	-0.06	+0.44	-0.12	-0.28	0.6	0.6	1.0	353°	1.1	150°	1.1	150°
6876	S.C.L. RR. bridge, 1.5 miles above		32° 49.2'	79° 57.9'	+0.22	+0.19	+0.17	+0.09	0.7	0.8	1.2	351°	1.5	178°	1.5	178°
6881	State Hwy. 7 bridge		32° 50.23'	79° 58.92'	+0.06	-0.04	+0.05	-0.05	0.6	0.5	1.0	293°	1.0	114°	1.0	114°
6886	West Marsh Island, 0.1 mile east of		32° 49.7'	80° 00.5'	+0.23	+0.30	+0.14	+0.25	0.4	0.5	0.7	250°	1.0	086°	1.0	086°
6891	Bees Ferry Bridge		32° 50.8'	80° 03.0'	+1.13	+0.44	+0.37	+0.22	1.1	1.2	1.9	310°	2.3	130°	2.3	130°
	STONO RIVER															
6896	Stono Inlet	12	32° 37.6'	79° 59.6'	-0.14	+0.44	-0.09	-0.45	1.1	1.4	1.9	315°	2.7	136°	2.7	136°
6901	Snake Island		32° 38.4'	80° 01.2'	-0.44	-0.42	-0.30	-0.38	0.7	0.5	1.1	347°	1.0	179°	1.0	179°
6906	Johns Island Airport, south of	14	32° 41.0'	80° 00.2'	-0.15	-0.46	-0.13	-0.34	0.9	0.8	1.5	007°	1.6	192°	1.6	192°
6911	Johns Island Bridge	12	32° 45.2'	80° 00.6'	+0.40	+0.21	+0.33	+0.10	0.5	0.5	0.8	358°	1.0	182°	1.0	182°
6916	Elliott Cut, west end	12	32° 46.0'	80° 00.0'	+0.10	-1.00	+0.40	+0.18	0.9	1.0	1.6	260°	1.9	080°	1.9	080°
6921	Johns Island	12	32° 47.2'	80° 06.4'	-0.24	+1.48	+0.29	-0.32	0.4	0.4	0.6	249°	0.8	068°	0.8	068°
6926	Pleasant Point	12	32° 45.0'	80° 08.0'	+2.04	0.34	+3.54	+3.37	0.3	0.4	0.4	008°	0.7	196°	0.7	196°
	SOUTH CAROLINA COAST—cont.															
6931	Folly Island, 3.5 miles east of		32° 38.4'	79° 50.5'												
6936	Folly Island, 2.0 miles east of		32° 39.4'	80° 09.4'												
6941	Deveaux Banks, off North Edisto River entrance	12	32° 32.7'	80° 11.2'	-0.16	-0.01	-0.04	-0.26	0.8	1.0	1.4	306°	2.0	126°	3.7	142°
6946	North Edisto River entrance		32° 33.7'	80° 11.2'	+0.56	+1.10	+1.11	+0.43	1.7	1.9	2.9	332°	3.7	142°	3.7	142°
6951	Wadmalaw Island, Wadmalaw River entrance	12	32° 39.9'	80° 14.1'	-1.02	+0.11	+0.06	-1.29	0.7	0.4	1.1	355°	0.7	165°	0.7	165°
6956	Goshen Point, SE of, Wadmalaw River	12	32° 42.6'	80° 10.3'	+0.51	+0.18	+1.47	+1.48	0.5	0.4	0.8	059°	0.7	249°	0.7	249°
6961	Goshen Point, south of, Wadmalaw River	12	32° 42.8'	80° 11.2'	+1.24	+0.03	+1.35	+1.53	0.4	0.5	0.6	048°	0.6	235°	1.0	235°
6966	White Point, south of, Dawho River	12	32° 37.5'	80° 16.9'	+0.31	+0.02	+0.29	+0.15	0.4	0.4	0.8	234°	0.8	044°	0.8	044°
6971	Whooping Island, Dawho River	12	32° 38.2'	80° 20.4'	+1.36	+0.36	+1.35	+1.37	0.5	0.3	0.8	246°	0.6	070°	0.6	070°
6976	South Edisto River entrance		32° 29.3'	80° 20.9'	+0.19	-0.14	-0.09	+0.24	1.1	1.1	1.8	350°	2.2	148°	2.2	148°
6981	Pine Island, South Edisto River	15	32° 30.4'	80° 21.7'	0.00	-0.09	+0.12	+0.37	0.7	0.5	1.2	345°	1.0	163°	1.0	163°
6986	Fenwick Island Cut, South Edisto River	15	32° 32.1'	80° 24.8'	-2.43	-0.55	-3.20	-1.26	0.4	0.4	0.8	220°	0.8	023°	0.8	023°
6991	Sampson Island, S end, South Edisto River	15	32° 33.8'	80° 23.5'	+0.59	0.34	+0.59	+0.52	0.8	0.8	1.4	037°	1.5	244°	1.5	244°
6996	Sampson Island, NE end, South Edisto River	15	32° 37.0'	80° 23.2'	+1.35	+1.15	+1.02	+0.52	0.8	0.8	1.4	334°	1.5	156°	1.5	156°
7001	Jehossee Island, S tip, South Edisto River	15	32° 36.2'	80° 25.2'	+1.44	+0.48	+0.53	+0.05	0.7	0.7	1.2	275°	0.1	352°	0.1	352°
7006	Smugglers Swamp, South Edisto River	6	32° 39.6'	80° 24.7'	+2.26	+1.14	+1.01	+2.25	0.5	0.7	1.1	349°	1.4	166°	1.4	166°
7011	Hutchinson Island, Ashepoo River	10	32° 31.9'	80° 26.1'	+1.21	+1.14	+0.54	+0.56	0.6	0.7	1.1	278°	1.3	068°	1.3	068°
7016	Ashepoo Coosaw Cut-off	6	32° 31.5'	80° 27.2'	+1.22	+0.36	+0.56	+1.12	0.5	0.6	0.8	065°	1.2	268°	1.2	268°
7021	Pelican Bank, St. Helena Sound	15	32° 27.3'	80° 25.7'	+0.05	-0.33	+0.17	-0.35	0.9	0.8	1.5	300°	1.6	118°	1.6	118°
7026	Ashepoo River, off Jefford Creek entrance		32° 30.4'	80° 24.6'	+1.04	+0.46	+1.00	+0.43	0.9	0.8	1.5	016°	1.6	197°	1.6	197°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS					
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb		
	SOUTH CAROLINA COAST—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.		
7031	Egg Bank, St. Helena Sound	10	32° 26.1'	80° 26.6'	-0.12	-1.24	+0.06	-0.20	0.8	0.8	1.3	329°	0.1	053°	1.5	128°
7036	Morgan Island, NE of Coosaw River	15	32° 29.3'	80° 28.4'	+0.32	-0.27	+0.36	+0.19	0.8	1.0	1.4	303°	0.1	205°	1.8	125°
7041	Ashe Island Cut, SW of Coosaw River	15	32° 30.6'	80° 30.3'	+0.32	-0.09	+0.43	+0.31	0.6	0.6	1.0	325°	—	—	1.2	134°
7046	Ashe Island Cut, St. Helena Sound	8	32° 31.2'	80° 29.3'	+0.31	+1.41	+1.01	+0.53	0.5	0.4	0.8	332°	—	—	0.8	034°
7051	Combahnee River	6	32° 31.6'	80° 32.2'	+0.55	+0.59	+1.04	+0.53	0.6	0.8	1.0	335°	—	—	1.5	147°
7056	Combahnee River	15	32° 33.8'	80° 33.8'	+1.36	+1.35	+1.33	+1.03	0.8	1.0	1.3	280°	—	—	2.0	073°
7061	Parrot Creek, Coosaw Island	15	32° 28.4'	80° 32.7'	+0.12	-0.48	+0.24	-0.54	0.7	0.6	1.2	355°	—	—	1.1	175°
7066	Morgan Island, North end, Coosaw River	15	32° 30.2'	80° 32.2'	+0.34	+0.41	+0.27	-0.30	0.8	0.9	1.1	343°	—	—	1.7	085°
7071	Willman Creek	10	32° 33.7'	80° 35.5'	+0.40	+1.27	+1.02	+0.04	0.6	0.8	1.4	271°	—	—	1.6	160°
7076	Coosaw Island, South of, Morgan River	10	32° 27.1'	80° 35.0'	+0.09	+0.55	+0.15	+0.03	0.7	0.7	1.2	252°	—	—	1.4	058°
7081	Sannis Point, Northwest of, Coosaw River	10	32° 29.6'	80° 35.6'	+0.34	+0.36	+0.31	+0.24	0.5	0.6	0.8	295°	—	—	1.1	117°
7086	Whale Branch River	10	32° 31.6'	80° 41.5'	+1.12	-0.09	+0.51	-0.09	0.5	0.7	0.8	292°	—	—	1.3	111°
7091	Fripps Inlet, Fripps Island	15	32° 20.4'	80° 27.9'	-0.29	+1.12	-0.22	-1.29	0.7	0.6	1.2	299°	—	—	1.2	104°
7096	Martins Industry, 5 miles east of		32° 06'	80° 28'												
	PORT ROYAL SOUND															
7101	Southeast Channel entrance	15	32° 08.1'	80° 35.1'	-0.30	-0.38	-0.09	-0.12	0.8	0.8	1.3	310°	—	—	1.6	150°
7106	Port Royal Plantation Tower, east of	15	32° 13.4'	80° 39.4'	+0.33	-0.16	+0.19	+0.16	0.9	1.0	1.5	347°	0.2	071°	1.9	147°
7111	Bay Point Island, S of Broad River entrance	15	32° 14.0'	80° 37.8'	+0.39	-0.09	+0.06	+0.46	0.7	0.9	1.2	320°	—	—	1.7	128°
7116	Broad River Entrance, Point Royal Sound	15	32° 13.9'	80° 38.4'	+0.36	+0.21	+0.32	-0.25	1.0	0.9	1.7	324°	0.2	041°	1.7	138°
7121	Hilton Head	8	32° 15.1'	80° 40.1'	+0.16	+0.49	+0.32	+0.01	1.1	0.9	1.8	324°	—	—	1.8	146°
7126	Beaufort River Entrance	15	32° 17.3'	80° 39.1'	+0.19	+1.11	+0.20	-0.03	0.7	0.7	1.3	010°	—	—	1.4	195°
7131	Parris Island, Beaufort River	10	32° 19.6'	80° 39.4'	+0.29	+1.12	+0.11	0.00	0.7	0.8	1.2	358°	—	—	1.5	175°
7136	Chowan Creek	15	32° 22.2'	80° 38.3'	+0.24	+1.53	+0.23	-0.34	0.6	0.6	0.9	039°	—	—	1.1	246°
7141	Parris Island, Beaufort River	15	32° 21.6'	80° 40.5'	+0.56	+1.19	+0.51	+0.22	0.7	0.7	1.2	341°	—	—	1.4	149°
7146	Beaufort River	15	32° 24.2'	80° 40.3'	+1.04	+1.19	+1.01	+0.33	0.5	0.5	0.1	286°	0.1	207°	1.0	200°
7151	Beaufort, Beaufort River	12	32° 25.8'	80° 40.6'	+0.55	+1.18	+1.08	+0.17	0.7	0.6	1.1	013°	—	—	1.1	257°
7156	Beaufort Airport, Beaufort River	15	32° 27.0'	80° 39.8'	+1.25	+0.39	+1.21	+1.08	0.5	0.5	0.9	333°	—	—	0.9	152°
7161	Brickyard Creek	10	32° 28.4'	80° 41.5'	+1.48	+0.30	+2.50	+2.58	0.4	0.4	0.8	351°	—	—	0.8	171°
7166	Skull Creek, north entrance	15	32° 15.8'	80° 44.5'	-1.50	-1.20	-1.58	-2.14	0.4	0.6	0.7	222°	—	—	1.2	035°
7171	Daws Island, SE of, Broad River	15	32° 18.1'	80° 43.5'	+0.46	+0.05	+0.39	+0.31	0.8	0.8	1.4	330°	0.1	048°	1.5	150°
7176	Parris Island Lookout Tower, Broad River	15	32° 18.7'	80° 42.4'	+0.39	-0.07	+0.34	+0.16	0.7	0.7	1.1	339°	—	—	1.4	152°
7181	Lemon Island, south of, Chechessee River	15	32° 17.2'	80° 44.6'	+0.31	-0.22	+0.34	+0.31	0.6	0.7	1.0	317°	0.1	048°	1.3	142°
7186	Broad River Bridge, S of, Broad River	10	32° 21.0'	80° 48.4'	+0.33	+1.19	+0.39	-0.02	0.6	0.7	0.9	359°	—	—	1.3	175°
7191	Byrd Creek Entrance, SE of, Broad River	15	32° 22.9'	80° 46.6'	+0.52	-0.15	+0.49	+0.07	0.6	0.8	1.1	341°	—	—	1.5	156°
7196	Little Barnwell I., E of, Whale Branch River	12	32° 27.4'	80° 49.1'	+1.27	+0.51	+1.32	+0.52	0.6	0.5	0.9	354°	—	—	1.0	174°
7201	Little Barnwell I., E of, Whale Branch River	6	32° 30.1'	80° 47.2'	+1.41	+3.03	+1.54	+0.40	0.6	0.4	1.0	354°	—	—	0.8	175°
	CALIBOGUE SOUND															
7206	Braddock Point, SW of, Calibogue Sound	10	32° 06.3'	80° 50.2'	-0.15	+0.16	-0.04	-1.04	0.8	1.0	1.6	006°	0.1	095°	2.0	183°
7211	Haig Point Light, NW of, Cooper River	6	32° 08.9'	80° 50.5'	-0.51	-0.05	-0.40	-1.12	0.4	0.7	0.8	278°	—	—	1.4	094°
7216	Ramshorn Creek Light, E of, Cooper River	30	32° 07.8'	80° 52.9'	+0.06	-0.53	+0.15	-1.17	0.5	0.7	1.0	280°	—	—	1.3	098°
7221	Spanish Wells, Calibogue Sound	10	32° 11.2'	80° 47.1'	-0.14	+0.51	+0.12	-1.10	0.7	0.7	1.4	028°	—	—	1.5	204°
7226	Skull Creek, south entrance	10	32° 13.4'	80° 47.1'	+0.38	+2.57	+1.23	+0.55	0.4	0.4	0.7	053°	0.1	309°	0.9	231°
7231	MacKay Creek, south entrance	10	32° 13.2'	80° 47.4'	+0.06	+0.03	+0.12	-0.26	0.3	0.6	0.7	033°	—	—	1.2	212°
	NEW and WRIGHT RIVERS															
7236	Bloody Pt., 0.5 mile north of, New River		32° 05.3'	80° 52.8'	-1.03	0.00	-0.53	-2.13	0.6	0.6	1.2	332°	—	—	1.3	147°
7241	Bloody Pt., 0.5 mile west of, New River		32° 04.9'	80° 53.0'	-0.47	-0.21	-0.36	-1.26	0.9	0.9	1.7	267°	—	—	1.6	142°
7246	Wright R., 0.2 mile above Walls Cut		32° 05.1'	80° 55.3'	-0.38	-0.16	-0.38	-1.16	0.6	0.8	1.2	332°	—	—	1.8	042°
7251	Fields Cut <32>		32° 05.1'	80° 57.1'	-2.09	-	-2.00	-1.51	—	—	—	—	—	—	1.9	042°
7256	Walls Cut, Turtle Island	6	32° 04.9'	80° 55.0'	-2.29	-0.57	-1.12	-3.05	0.5	0.5	1.0	294°	0.1	060°	0.9	100°
7261	Daufuskie Landing Light, south of	10	32° 06.1'	80° 53.9'	+0.07	+1.04	+0.02	-1.45	0.7	0.8	1.5	043°	—	—	1.7	226°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	SAVANNAH RIVER Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
7266	Savannah Light, 1.2 miles southeast of SAVANNAH RIVER ENT. (between jetties)	11	31° 57'	80° 40'	+0.42	+0.51	+0.15	+0.09	0.9	1.5	2.0	286°	2.0	110°
7271	Fort Pulaski		32° 02.2'	80° 54.1'	+0.25	+0.18	-0.01	+0.12	1.1	1.4	1.8	283°	3.1	098°
7276	Fort Pulaski, 1.8 miles above		32° 02.7'	80° 55.6'	+0.36	+0.31	+0.06	-0.16	1.1	1.5	2.2	316°	2.8	140°
7286	Fort Pulaski, 4.8 miles above		32° 03.9'	80° 58.6'	-2.39	-2.45	-1.04	-2.44	0.3	0.6	2.1	296°	3.0	116°
7291	McQueen Island Cut	10	32° 04.4'	80° 59.2'	+0.26	+0.15	-0.37	-0.14	0.7	1.3	0.1	202°	1.2	069°
7296	Elba Island, NE of Savannah River	10	32° 05.4'	80° 59.6'	+1.01	+0.40	-0.35	-0.27	0.6	1.2	0.1	183°	2.6	104°
7301	Elba Island, west of Savannah River	10	32° 05.7'	81° 01.2'	+0.37	+0.52	-0.30	-0.53	0.5	0.8	0.9	219°	2.5	149°
7306	Fig Island, north of Back River		32° 05.1'	81° 03.0'	+0.14	+1.06	-0.25	-1.00	0.5	0.7	1.0	280°	1.6	040°
7311	South Channel, western end		32° 05.3'	81° 01.0'	+0.42	+0.18	-0.33	-0.35	0.5	0.7	1.0	300°	1.5	122°
7316	Wilmington R., ent., south channel		32° 04.6'	81° 00.1'	+0.42	+0.36	+1.28	+1.25	0.5	0.8	1.0	032°	1.6	206°
7321	Savannah, southeast of highway bridge	10	32° 05.2'	81° 05.8'	+1.36	+0.41	-0.24	+0.05	0.6	1.3	1.1	319°	2.6	146°
7331	Savannah		32° 05'	81° 05'	+1.12	+0.45	+0.01	+0.18	0.8	1.1	1.6	279°	2.2	106°
7336	Kings Island Channel, Savannah River <58>	10	32° 07.6'	81° 08.2'	+1.21	+0.45	+0.06	-0.21	0.8	1.0	1.5	339°	2.1	152°
7341	Seaboard Coast Line Railroad		32° 06.2'	81° 07.1'	+1.06	+0.45	+0.29	+0.59	1.2	1.7	2.4	320°	3.5	150°
7346	King Island, west of		32° 08.1'	81° 08.1'	+1.21	+0.54	+0.33	+0.48	0.7	1.0	1.4	337°	2.0	160°
7351	Port Wentworth, 0.2 mile above		32° 08.8'	81° 08.4'	+2.00	+1.36	+0.24	+1.19	0.5	0.7	0.9	022°	1.5	210°
7356	Seaboard Coast Line Railroad	10	32° 13.9'	81° 08.7'	--	--	--	--	--	--	--	--	--	--
7361	Wassaw Island, N of E end, Wassaw Sound		31° 54.9'	80° 56.3'	-0.48	-0.50	-0.45	-1.33	0.7	1.0	0.1	015°	1.4	292°
	WASSAW SOUND													
7366	Entrance, off Beach Hammock		31° 56.5'	80° 55.9'	-0.41	-1.00	-0.54	-1.44	0.9	1.1	1.7	352°	2.2	156°
7371	Wilmington Island, SSE of, Bull River	10	31° 58.0'	80° 55.9'	-0.35	+0.38	-0.40	-2.00	0.4	0.7	0.7	035°	1.5	219°
7376	Lazarreto Creek Entrance, N of, Bull River	10	32° 00.0'	80° 55.7'	-0.37	0.00	-0.33	-2.04	0.5	0.8	1.0	015°	1.4	207°
7381	Bull River, 2 miles below hwy. bridge		32° 01.1'	80° 56.4'	-0.18	-0.18	-0.25	-1.57	0.6	0.8	1.1	327°	1.6	151°
7386	Entrance, off Wassaw Island		31° 55.0'	80° 56.8'	-0.46	-1.11	-0.42	-1.27	0.7	0.9	1.4	277°	1.8	105°
7391	Wilmington River ent. off Cabbage Island		31° 56.3'	80° 56.8'	-0.44	-0.36	-0.45	-1.51	0.6	0.8	1.2	323°	1.7	138°
7396	Joe's Cut, Wilmington River	10	31° 56.6'	80° 59.1'	-0.54	-0.48	-0.34	-1.44	0.6	1.0	0.1	208°	2.1	123°
7401	Wilmington R., 0.5 mi. S of Turners Creek		32° 00.3'	81° 00.2'	-0.31	-0.10	-0.37	-1.51	0.5	0.7	--	--	1.4	154°
7406	Thunderbolt, SE of, Wilmington River	10	32° 01.4'	81° 02.7'	-0.20	-1.04	+0.12	+0.25	0.4	0.5	0.8	298°	1.0	121°
7411	Oatland Island, north tip	10	32° 04.4'	81° 00.6'	-3.20	-2.14	-0.43	-2.32	0.3	0.5	0.6	317°	1.0	138°
7416	Skidaway River, north entrance		32° 00.5'	81° 01.0'	-0.46	-0.02	-0.49	-2.11	0.6	0.7	1.1	204°	1.4	016°
7421	Skidaway Island, N End, Wilmington River	10	32° 00.6'	81° 00.5'	-0.33	+0.16	-0.23	-1.49	0.5	0.6	0.1	225°	1.9	119°
7426	Dutch Island, SE of, Skidaway River	10	31° 59.5'	81° 01.2'	-0.40	+0.16	-0.33	-2.02	0.2	0.3	1.0	245°	1.2	061°
7431	Isle of Hope City, SE of, Skidaway River	10	31° 58.6'	81° 02.8'	-0.17	-0.30	-0.32	-1.40	0.2	0.3	0.5	268°	0.5	072°
7436	Isle of Hope City, Skidaway River	10	31° 58.8'	81° 03.3'	-0.34	0.00	-0.19	-1.25	0.4	0.3	0.8	212°	0.6	028°
7441	Burntport Island, west of, Skidaway River	6	31° 58.1'	81° 03.2'	-0.27	-0.41	-0.13	-1.03	0.5	0.5	1.0	194°	1.0	018°
7446	Skidaway Narrows		31° 57.2'	81° 03.9'	+0.03	-0.24	+0.26	-0.24	0.5	0.5	0.9	218°	1.1	042°
7451	Long Island, NNE of, Skidaway River	6	31° 57.4'	81° 03.6'	-0.13	-1.09	+1.02	+0.17	0.4	0.4	0.8	047°	0.5	047°
7456	Long Island, south of, Skidaway River	10	31° 56.6'	81° 04.4'	-4.25	-4.43	-6.07	-8.05	0.2	0.3	0.5	075°	0.8	258°
7461	Pigeon Island, SSE of, Skidaway River	10	31° 56.2'	81° 04.6'	-2.37	-2.43	-0.56	-2.16	0.2	0.5	0.4	331°	1.0	150°
7466	Burnside Island, SE of, Burnside River	10	31° 55.3'	81° 04.8'	-0.40	+0.53	-0.20	-2.05	0.4	0.6	0.9	114°	1.2	295°
7471	Little Don Island, east of, Vernon River	10	31° 52.2'	81° 04.9'	-0.17	-1.16	-0.03	-1.38	0.7	1.0	0.2	232°	1.5	153°
7476	Little Ogeechee River Entrance		31° 53.3'	81° 05.9'	-0.15	-0.59	-0.03	-1.06	0.7	0.7	0.1	234°	1.5	071°
	... do. ...	20	31° 53.3'	81° 05.9'	-0.30	-0.50	+0.05	-0.57	0.6	0.9	1.1	244°	1.9	073°
7481	Montgomery, Vernon River	6	31° 56.1'	81° 07.7'	-0.32	0.00	-0.24	-1.30	0.3	0.6	1.3	032°	1.1	089°
7486	Odingsall River Entrance	10	31° 52.1'	81° 00.0'	-0.54	+0.44	-0.48	-2.14	0.7	0.9	0.1	127°	1.8	212°
	... do. ...	20	31° 52.1'	81° 00.0'	-1.19	+0.42	-0.42	-2.12	0.6	0.8	1.3	030°	1.6	210°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	OSSABAW SOUND Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
7491	Wassaw Island, SSW of	10	31° 51.4'	81° 00.5'	-0.26	-1 04	-0.27	-1 01	0.8	1.1	0.1	034°	1.6	316°
7496	do	20	31° 51.4'	81° 00.5'	-0.46	-0 58	-0.33	-1 01	0.7	0.9	--	--	1.4	312°
7501	Bradley Point, NNE of	10	31° 49.9'	81° 02.3'	-0.48	-0 58	-0.48	-1 12	0.6	0.8	0.1	209°	1.3	302°
7506	Raccoon Key	10	31° 51.7'	81° 03.3'	-0.45	-1 23	-0.36	-1 35	0.8	0.9	0.1	198°	1.6	285°
7511	Little Wassaw Island, SW of	10	31° 52.2'	81° 03.0'	-1.05	-0 17	-0.21	-1 51	0.9	0.7	0.1	209°	1.7	117°
7516	Vernon R., 1.2 miles S of Possum Point	6	31° 53.9'	81° 05.9'	-0.24	+0 22	-0.12	-1 33	0.6	0.8	--	--	1.1	324°
7521	Little Ogeechee River Entrance, north of	10d	31° 53.8'	81° 05.7'	-0.41	+0 29	-0.30	-2 03	0.6	0.8	0.1	239°	1.6	166°
7526	Raccoon Key & Egg Island Shoal, between	10	31° 50.57'	81° 04.05'	+0.20	+0 17	-0.23	-0 57	0.8	1.0	0.2	274°	1.2	254°
7531	Florida Passage, N of Ogeechee River	10	31° 51.4'	81° 08.6'	+0.10	+0 01	-0.01	-0 05	0.7	1.0	--	--	1.4	302°
	Florida Passage (south)	6d	31° 49.78'	81° 09.47'	-1.48	-1 13	-0.23	-1 10	0.5	0.7	--	--	0.9	187°
	ST. CATHERINES SOUND													
	Bear River													
7536	610 Statute Mile Mark	6d	31° 48.63'	81° 10.60'	+0.20	+0 48	-0.05	-0 39	0.5	0.7	0.2	338°	1.0	357°
7541	North of Big Tom Creek Entrance	10d	31° 47.00'	81° 09.62'	-0.24	-0 13	-0.19	-1 25	0.6	0.7	--	--	1.2	011°
7546	South of Kilkenny Creek Entrance	10d	31° 45.50'	81° 10.40'	+0.26	+1 25	-0.02	-1 12	0.6	1.0	--	--	1.2	348°
7551	Northwest of Newell Creek Entrance	10d	31° 44.93'	81° 09.93'	+0.11	+0 12	-0.16	-1 12	0.6	0.9	0.1	086°	1.1	349°
7556	Medway River at Marsh Island	10d	31° 44.60'	81° 13.20'	+0.20	-0 18	-0.15	-0 56	0.3	0.8	0.3	306°	0.6	313°
7561	St. Catherines Sound Entrance	10d	31° 42.90'	81° 08.43'	-0.39	-0 31	+0.13	-1 27	0.9	0.8	0.1	020°	1.8	291°
7566	Medway River, northwest of Cedar Point	10d	31° 42.87'	81° 11.45'	-0.40	-0 43	-0.23	-0 21	0.7	0.8	0.5	139°	1.5	304°
7571	N. Newport River, NE of Vanduyke Creek	10d	31° 41.47'	81° 11.22'	-0.27	+0 12	0.00	-1 21	0.7	0.8	--	--	1.3	233°
7576	N. Newport River, above Walburg Creek	6d	31° 40.43'	81° 10.72'	+0.34	+0 30	-0.39	-0 40	0.6	0.8	0.2	011°	1.0	195°
7581	N. Newport River, NW of Johnson Creek	10d	31° 39.78'	81° 15.63'	+0.20	-0 11	-0.37	-0 27	0.5	0.9	0.2	308°	0.9	312°
7586	N. Newport River, ESE of S. Newport Cut	6d	31° 39.92'	81° 15.87'	+0.32	-0 13	+0.27	+0 15	0.5	0.7	0.1	210°	1.0	319°
7591	S. Newport River, below S. Newport Cut	10d	31° 39.02'	81° 18.12'	+1.20	+1 30	+2.41	+2 15	0.5	0.5	0.2	128°	0.9	306°
7596	S. Newport River, above Swain River Ent	10d	31° 37.47'	81° 13.00'	-0.22	-1 13	0.00	-0 43	0.6	0.6	0.1	156°	1.1	335°
	SAPELO SOUND													
7601	Entrance	19d	31° 32.4'	81° 10.8'	-0.30	+0 28	-0.06	-0 59	0.9	1.1	0.1	212°	1.7	290°
7606	do	29d	31° 32.4'	81° 10.8'	-0.48	-0 36	-0.17	-1 02	0.7	0.9	--	--	1.3	289°
7611	Johnson Creek, midway between ends	12d	31° 37.6'	81° 11.3'	-1.50	-1 08	-0.35	-1 59	0.4	0.4	--	--	0.8	015°
7616	Cedar Hammock, south of	11d	31° 32.7'	81° 14.8'	-0.26	-1 00	-0.12	-1 38	0.7	0.6	--	--	1.4	277°
7621	Sapelo River Entrance	10d	31° 32.1'	81° 16.3'	-0.23	-1 05	-0.13	-0 43	0.6	0.6	--	--	1.1	234°
7626	Sutherland Bluff, Sapelo River	13d	31° 32.9'	81° 20.0'	-0.30	+0 10	-0.12	-1 16	0.5	0.6	--	--	1.0	281°
	Front River		31° 30.8'	81° 17.9'	-0.33	+1 16	-0.25	-2 05	0.4	0.5	--	--	0.8	227°
	Mud River													
7631	New Teakettle Cr., 0.8 mi. N of <35>	11d	31° 29.8'	81° 17.4'	-0.54	-0 29	-1.08	-2 11	0.4	0.5	--	--	0.8	236°
7636	Crescent River	13d	31° 29.2'	81° 18.4'	-1.27	+1 07	-0.34	-1 21	0.2	0.5	--	--	0.5	293°
7641	Old Teakettle Creek (north)	13d	31° 28.7'	81° 19.7'	-0.35	+0 01	+0.14	-0 37	0.5	0.6	--	--	0.9	078°
	DOBOY SOUND													
7646	Bar	14d	31° 20.7'	81° 15.1'	-0.29	-0 29	-0.09	-0 53	0.7	0.7	--	--	1.3	312°
7651	Entrance	22d	31° 20.5'	81° 15.8'	-0.32	-0 10	-0.24	-1 49	0.8	0.9	--	--	1.6	289°
7656	do	15d	31° 20.5'	81° 15.8'	-0.56	-0 05	-0.20	-1 26	0.8	0.8	--	--	1.6	276°
7661	Old Teakettle Creek Entrance, south of	13d	31° 23.2'	81° 18.9'	-3.42	-0 59	0.00	-1 27	0.5	0.4	--	--	0.9	021°
7666	Old Teakettle Creek (south)	10d	31° 26.2'	81° 18.5'	-3.12	-1 45	-0.16	-2 44	0.3	0.3	--	--	1.1	335°
7671	Folly River and Cardigan River, between	10d	31° 26.5'	81° 20.2'	-0.55	-0 56	-0.16	-1 00	0.6	0.7	--	--	0.7	207°
	South River		31° 22.0'	81° 18.7'	-0.22	-0 25	-0.32	-0 24	0.6	0.7	--	--	1.1	282°
	do		31° 22.0'	81° 18.7'	-0.41	-0 33	-0.29	-0 24	0.5	0.4	--	--	1.0	286°
7676	North River at Darien River	9d	31° 23.0'	81° 20.1'	-0.10	-0 33	+0.08	+0 22	0.2	0.2	0.1	317°	0.5	247°
7681	Doboy Island (North River)	12d	31° 24.2'	81° 19.7'	-0.14	-0 06	+0.47	+0 13	0.6	0.5	--	--	1.1	224°
	do		31° 24.2'	81° 19.7'	-0.20	+0 36	+0.46	+0 22	0.5	0.3	--	--	0.9	225°
7686	Buzzard Roost Creek	13d	31° 24.9'	81° 22.5'	+0.22	+0 12	+0.56	+0 28	0.3	0.2	--	--	0.7	177°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS					
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	h m	h m	h m	Dir.	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	ALTAMAHA SOUND Time meridian, 75° W	ft	North	West	h m	h m	h m	h m	Flood	Ebb	knots	Dir.	knots	Dir.	knots	Dir.
7691	Little Egg Island, northwest of	12d	31° 19.1'	81° 18.3'	-0.33	-0.53	-0.25	-1 10	0.6	0.6	1.1	296°	1.2	110°	0.9	116°
7696	Little Mud River Range	9d	31° 19.6'	81° 19.1'	-0.38	-1 05	-0.23	-0 06	0.3	0.5	0.6	304°	0.9	116°	1.6	089°
7701	Little St. Simon Island (north)	11d	31° 18.7'	81° 21.2'	+0.10	+0.06	-0.15	-1 29	0.6	0.8	1.2	267°	1.6	089°	1.9	092°
7706	Onemile Cut, 1 mile southeast of Buttermilk Sound		31° 18.8'	81° 21.1'	+0.46	+0.03	-1 09	-0 32	0.5	0.9	1.0	272°	1.9	092°	0.8	030°
7711	Broughton Island (south)	9d	31° 18.6'	81° 24.8'	-2 06	+0 12	-0 01	-1 51	0.4	0.4	0.1	292°	0.9	222°	0.8	030°
	ST. SIMONS SOUND															
7716	Bar Channel	12d	31° 06.3'	81° 20.3'	-0.13	-0.44	+0.09	-0 02	0.4	0.8	0.1	033°	0.8	308°	1.7	119°
7721	Entrance, north of channel	13d	31° 08.01'	81° 24.24'	-0.32	+0 18	+0 07	-1 11	0.9	0.6	1.7	290°	1.2	107°	2.2	080°
7726	Entrance, south of channel	11d	31° 07.6'	81° 24.2'	-0.27	-0.32	-0.21	-0 59	0.8	1.1	1.6	262°	2.2	080°	1.7	092°
7731	Back River entrance	29d	31° 07.6'	81° 24.2'	-0.18	-0.03	+0.06	-0 21	0.6	0.8	1.88°	188°	0.1	188°	1.1	111°
7736	do	10d	31° 08.9'	81° 26.5'	-0.37	+1 34	+0 08	-1 16	0.5	0.5	1.0	257°	1.2	257°	0.8	109°
7741	do	18d	31° 08.9'	81° 26.5'	-1 29	+1 36	+0 08	-1 15	0.5	0.4	0.9	280°	0.8	109°	1.5	166°
7741	Mackay R., 0.5 mi. N of Troup Creek entrance		31° 13.5'	81° 26.0'	+0.56	+0.09	+0.35	+0 24	0.5	0.7	1.3	300°	2.1	125°	2.1	125°
7741	Brunswick River, off Quarantine Dock		31° 06.7'	81° 28.4'	+0.10	-0.03	+0.11	-0 39	0.7	1.0	1.0	308°	1.4	129°	1.5	129°
7746	Brunswick River Bridge, southeast of	13d	31° 06.9'	81° 28.6'	+0.15	+0 13	+0 26	-1 02	0.5	0.7	0.1	223°	1.0	306°	1.3	166°
7751	Brunswick, off Prince Street Dock	21d	31° 06.9'	81° 28.6'	+0.19	+0 42	+0 56	-0 20	0.5	0.7	0.1	226°	1.0	306°	1.7	165°
7756	Turtle River, off Allied Chemical Corp		31° 08.3'	81° 29.8'	-0.01	+0 55	+0 06	-1 08	0.5	0.6	1.3	342°	1.3	348°	1.7	165°
7761	Turtle River, off Andrews Island	20d	31° 10.6'	81° 31.5'	+0.16	+0 18	+0 36	-0 33	0.7	0.8	1.3	348°	1.3	348°	1.4	153°
	ST. ANDREWS SOUND															
7766	Entrance		30° 59.2'	81° 24.3'	-0.18	+0 13	+0 02	-1 00	1.1	1.1	2.1	268°	2.2	103°	1.5	232°
7771	Jekyll Creek, south entrance		31° 02.1'	81° 26.0'	-0.21	-0.21	-0.25	-1 20	0.5	0.7	1.3	191°	1.4	018°	1.3	355°
7776	Cumberland River, north entrance		30° 57.5'	81° 25.9'	-0.29	+0 32	-0 17	-0 45	0.7	0.6	1.3	171°	1.3	355°	1.3	355°
7781	Cabin Bluff, Cumberland River		30° 52.9'	81° 30.8'	+0.21	+1 29	+0 51	-0 45	0.7	0.6	1.3	171°	1.3	355°	1.3	355°
	CUMBERLAND SOUND															
	St. Marys River															
7786	Fort Clinch, 0.6 n.mi. NE of	11d	30° 42.6'	81° 26.8'	-0.40	-0 21	-0 17	-1 10	1.2	1.7	2.2	22°	2.7	87°	1.6	087°
7791	Fort Clinch, 0.3 n.mi. N of	50d	30° 42.6'	81° 27.2'	-1 10	-0 36	-0 37	-1 39	0.8	1.0	1.4	275°	2.6	26°	2.6	26°
7796	Fort Clinch, 0.1 n.mi. N of	12d	30° 42.4'	81° 27.3'	-0.40	-0 15	-0 21	-1 09	1.2	1.6	2.2	22°	2.6	26°	2.6	26°
	do	47d	30° 42.4'	81° 27.3'	-0.57	-0 17	-0 19	-1 09	0.8	1.0	1.4	265°	1.6	093°	1.6	093°
7801	do	14d	30° 42.9'	81° 28.6'	-0.33	-0 23	-0 04	-0 48	0.7	1.2	1.3	309°	1.9	133°	1.9	133°
	Fort Clinch, 1.1 n.mi. NW of	29d	30° 42.9'	81° 28.6'	-0.47	-0 20	-0 12	-0 58	0.6	0.8	1.1	315°	1.3	122°	1.3	122°
	do	22d	30° 43.9'	81° 29.1'	-0.52	-1 00	-0 20	-1 00	0.7	1.2	1.2	22°	1.8	170°	1.8	170°
7806	Cumberland Island, Range B Channel	12d	30° 45.9'	81° 29.2'	-0.39	-0 33	-0 12	-1 09	0.6	1.0	1.1	350°	1.5	170°	1.5	170°
7811	Drum Point Island, Range D Channel	22d	30° 45.9'	81° 29.2'	-0.44	-0 56	-0 22	-1 15	0.5	0.8	0.2	160°	1.3	170°	1.3	170°
	do	22d	30° 47.9'	81° 30.8'	-0.37	+0 16	-0 32	-2 10	0.2	0.2	0.1	282°	0.3	127°	0.3	127°
7816	Kings Bay, Lower Turning Basin	14d	30° 48.6'	81° 29.5'	-0.59	-0 50	-0 41	-2 07	0.7	0.8	1.3	000°	1.3	180°	1.3	180°
7821	Stafford Island, west of		30° 41.2'	81° 27.6'	-1 18	-0 12	-0 34	-1 36	0.8	1.1	1.4	188°	1.8	358°	1.8	358°
7826	Old Fernandina, Amelia River		30° 40.2'	81° 28.1'	-0.25	-0 33	-0 17	-0 57	0.5	0.5	0.9	208°	0.8	034°	0.8	034°
7831	Fernandina Beach, Amelia River	7d	30° 40.2'	81° 28.1'	-0.25	-0 33	-0 17	-0 57	0.5	0.5	1.1	150°	1.6	330°	1.6	330°
7836	Kingsley Creek, highway bridge		30° 37.7'	81° 29.1'	+1.11	+0 55	+0 39	+0 19	0.6	1.0	1.1	150°	1.6	330°	1.6	330°
	NASSAU SOUND															
7841	Midsound, 1 mi. N of Sawpit Creek entrance		30° 31.4'	81° 27.1'	+0.01	-0 24	-0 14	-0 30	0.9	1.1	1.7	312°	1.7	135°	1.7	135°
7846	South Amelia River, off Walker Creek		30° 32.2'	81° 27.9'	-1 09	-0 21	-0 39	-2 06	0.8	0.9	1.4	341°	1.4	162°	1.4	162°
7851	Nassau River, SW of Mesa Marsh		30° 32.0'	81° 28.8'	+0.08	-0 21	0 00	-0 22	0.8	1.1	1.5	294°	1.5	294°	1.7	129°
7856	Fl. George River		30° 27.4'	81° 27.1'	-1 36	-1 20	-1 25	-2 29	0.2	0.6	0.3	334°	0.3	334°	0.9	162°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS					
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb		
	ST. JOHNS RIVER Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.		
7861	St. Johns Point, 5 miles east of	5d	30° 23.5'	81° 18.0'	+0.33	-1.19	-0.41	+1.04	0.3	0.8	0.6	356°	0.2	045°	1.6	091°
7866	St. Johns Bar Cut, 0.7 n.mi. east of jetties <64>	14d	30° 23.88'	81° 21.83'	-1.19	-2.43	-1.04	+0.13	0.3	0.6	0.7	007°	---	---	1.2	095°
	do.	31d	30° 23.88'	81° 21.83'	-2.04	-2.04	-1.17	-0.54	0.2	0.3	0.4	318°	0.2	227°	0.6	122°
7871	St. Johns Bar Cut 0.13 n.mi. ENE of south jetty	14d	30° 23.85'	81° 22.45'	+0.20	+0.02	+0.10	+1.35	0.4	1.1	0.9	017°	0.2	173°	2.2	094°
	do.	33d	30° 23.85'	81° 22.45'	-1.03	+0.04	+0.21	-0.11	0.5	0.7	1.0	298°	0.2	158°	1.4	095°
	do.	46d	30° 23.85'	81° 22.45'	-2.05	-0.03	+0.22	-0.25	0.5	0.5	1.1	275°	0.1	144°	1.0	100°
7876	ST. JOHNS RIVER ENT. (between jetties)	16d	30° 24.02'	81° 23.15'	+0.06	+0.13	-0.04	+0.07	1.0	1.2	2.0	262°	---	---	2.0	081°
	do.	10d	30° 24.02'	81° 23.15'	-0.19	+0.01	-0.02	+0.07	0.9	0.9	1.9	262°	---	---	2.1	081°
7881	Mayport Basin Entrance	30d	30° 23.82'	81° 23.93'	-0.02	-0.08	+0.01	+0.33	0.6	0.7	1.2	255°	0.1	179°	1.9	080°
	do.	9d	30° 23.82'	81° 23.93'	-0.12	+0.17	+0.11	+0.07	0.7	0.6	1.3	251°	---	---	1.4	093°
	do.	15d	30° 23.82'	81° 23.93'	+0.24	+0.48	+0.17	+0.34	0.6	0.3	1.2	247°	0.1	164°	1.2	087°
7886	Mayport	32d	30° 23.6'	81° 26.0'	+0.06	+0.02	+0.15	-0.04	1.1	1.6	2.2	211°	---	---	3.3	026°
	do.	7d	30° 23.6'	81° 26.0'	-0.03	+0.38	+0.12	+0.05	1.1	1.3	---	---	---	---	2.6	026°
	do.	27d	30° 23.6'	81° 26.0'	-0.27	+0.26	+0.15	+0.14	0.9	0.9	1.7	211°	---	---	1.8	026°
7891	Mill Point, southeast of	7d	30° 22.9'	81° 26.7'	+0.06	+0.38	+0.48	+0.44	1.5	1.6	3.0	241°	---	---	3.2	073°
	do.	18d	30° 22.9'	81° 26.7'	-0.12	+0.38	+0.54	+0.56	1.2	1.2	2.5	241°	---	---	2.5	073°
	do.	29d	30° 22.9'	81° 26.7'	-0.42	+0.38	+1.00	+0.38	1.1	0.9	2.3	241°	---	---	1.8	073°
7896	ICW Intersection	10d	30° 23.02'	81° 27.52'	+0.27	+0.29	+0.08	+0.58	0.8	1.3	1.6	293°	0.4	003°	2.6	125°
	do.	16d	30° 23.02'	81° 27.52'	+0.22	+0.31	+0.10	+0.49	0.8	1.2	0.2	213°	0.3	007°	2.4	113°
	do.	29d	30° 23.02'	81° 27.52'	+0.09	+0.35	+0.10	+0.21	0.8	1.0	0.1	200°	0.2	020°	2.1	099°
7901	Pablo Creek bascule bridge <33>	3	30° 19.4'	81° 26.3'	-3.30	-3.14	-2.13	-2.34	0.7	2.5	3.4	180°	---	---	5.2	000°
7906	Sisters Creek entrance (bridge)	4d	30° 23.4'	81° 27.7'	-3.36	-3.04	-2.07	-2.34	0.8	0.6	1.6	000°	---	---	1.6	180°
	do.	10d	30° 23.4'	81° 27.7'	+0.30	+1.21	-0.18	+1.02	0.8	1.2	1.6	244°	---	---	2.4	059°
7911	St. Johns Bluff	7d	30° 23.4'	81° 29.5'	+0.18	+0.03	+0.30	+1.02	0.9	1.0	1.7	244°	---	---	2.0	059°
	do.	17d	30° 23.4'	81° 29.5'	-0.12	+0.33	+0.24	+1.14	0.8	0.8	1.6	244°	---	---	1.6	059°
	do.	26d	30° 23.4'	81° 29.5'	-0.18	+0.33	+0.24	+1.14	0.8	0.8	1.6	244°	---	---	1.6	059°
7916	Blount Island, East of	7d	30° 23.52'	81° 30.51'	+1.21	+1.08	+0.49	+1.54	0.7	1.1	1.5	275°	0.2	183°	2.3	079°
	do.	16d	30° 23.52'	81° 30.51'	+0.54	+0.58	+1.04	+1.43	0.7	0.8	1.4	270°	0.1	168°	1.7	090°
	do.	30d	30° 23.52'	81° 30.51'	+0.33	+1.08	+1.12	+1.32	0.5	0.6	1.1	264°	---	---	1.3	099°
7921	Dames Point, 0.23 n.mi. ESE of	5d	30° 23.19'	81° 33.23'	+1.58	+1.51	+1.40	+1.59	0.5	0.9	1.0	248°	0.4	136°	1.7	068°
	do.	14d	30° 23.19'	81° 33.23'	+1.26	+1.51	+1.19	+1.57	0.6	0.9	1.1	256°	0.2	158°	1.9	068°
	do.	31d	30° 23.19'	81° 33.23'	+0.33	+2.24	+2.04	+1.58	0.6	0.4	1.1	270°	0.1	000°	0.7	069°
7926	Dames Point, 0.25 n.mi. SE of	5d	30° 23.08'	81° 33.28'	+1.52	+1.39	+1.28	+2.14	0.6	0.9	1.2	254°	0.2	155°	1.9	080°
	do.	14d	30° 23.08'	81° 33.28'	+1.30	+1.29	+1.32	+2.07	0.7	0.9	1.4	257°	---	---	1.8	073°
	do.	28d	30° 23.08'	81° 33.28'	+1.15	+2.00	+2.01	+2.14	0.6	0.7	1.2	254°	---	---	1.4	073°
7931	Drummond Point, channel south of	7d	30° 24.55'	81° 36.17'	+1.34	+2.32	+2.44	+3.00	0.7	0.8	1.4	241°	---	---	1.7	060°
	do.	17d	30° 24.55'	81° 36.17'	+1.51	+2.35	+2.51	+3.01	0.7	0.7	1.3	222°	---	---	1.4	061°
	do.	27d	30° 24.55'	81° 36.17'	+1.21	+2.20	+2.46	+2.51	0.6	0.5	1.2	243°	---	---	1.1	057°
7936	Trout River Cut	6d	30° 23.03'	81° 37.69'	+2.31	+2.48	+2.42	+2.52	0.7	0.7	1.3	193°	0.1	280°	1.5	005°
	do.	15d	30° 23.03'	81° 37.69'	+2.19	+2.53	+2.42	+2.52	0.6	0.6	1.3	193°	0.1	107°	1.3	025°
	do.	32d	30° 23.03'	81° 37.69'	+1.49	+2.31	+3.02	+2.58	0.6	0.6	1.2	205°	---	---	1.1	023°
7941	Chaseville Turn	4d	30° 22.71'	81° 37.77'	+2.16	+2.39	+2.28	+2.27	0.7	0.5	1.4	165°	---	---	1.0	339°
	do.	14d	30° 22.71'	81° 37.77'	+1.48	+2.29	+2.25	+2.28	0.7	0.5	1.3	166°	0.1	089°	1.0	003°
	do.	30d	30° 22.71'	81° 37.77'	+1.48	+2.25	+2.55	+2.43	0.6	0.5	1.2	186°	0.1	082°	1.0	017°
7946	Terminal Channel (north end)	30d	30° 21.42'	81° 37.08'	+2.39	+3.16	+3.02	+3.38	0.5	0.6	1.0	225°	---	---	1.3	001°
	do.	7d	30° 21.42'	81° 37.08'	+2.16	+3.06	+3.20	+3.33	0.6	0.5	1.2	185°	---	---	1.0	001°
	do.	17d	30° 21.42'	81° 37.08'	+1.51	+3.28	+3.16	+3.23	0.5	0.3	1.0	185°	---	---	0.7	001°
7951	Commodore Point, terminal channel	7d	30° 19.05'	81° 37.58'	+2.39	+3.28	+3.10	+3.37	0.5	0.5	0.9	197°	---	---	1.0	072°
	do.	17d	30° 19.05'	81° 37.58'	+2.12	+3.13	+3.23	+3.25	0.5	0.4	1.0	221°	---	---	0.9	051°
	do.	27d	30° 19.05'	81° 37.58'	+1.43	+2.30	+3.38	+3.08	0.6	0.4	1.1	221°	---	---	0.8	035°
7956	Jacksonville, off Washington St		30° 19.3'	81° 39.2'	+2.59	+3.10	+2.54	+3.23	0.9	0.9	1.8	281°	---	---	1.9	118°
7961	Jacksonville, F.E.C. RR. bridge		30° 19.3'	81° 39.9'	+2.59	+3.24	+2.59	+3.39	0.8	0.8	1.8	240°	---	---	1.7	060°
7966	Winter Point		30° 18.5'	81° 40.5'	+2.59	+3.22	+4.04	+3.59	0.6	0.5	1.1	200°	---	---	1.1	015°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS				
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb	
	ST. JOHNS RIVER—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.	
7971	Mandarin Point	6d	30° 09.3'	81° 41.1'	+3.07	+3.39	+3.24	+3.38	0.3	0.4	0.6	179°	0.8	013°	
	do.	15d	30° 09.3'	81° 41.1'	+3.13	+3.33	+3.24	+3.38	0.3	0.3	0.6	179°	0.7	013°	
	do.	24d	30° 09.3'	81° 41.1'	+2.48	+3.33	+3.24	+3.32	0.3	0.3	0.5	179°	0.5	013°	
7976	Red Bay Point, draw bridge	4d	29° 59.1'	81° 37.8'	+2.48	+3.57	+5.24	+4.02	0.5	0.3	0.9	115°	0.6	300°	
	do.	6d	29° 59.1'	81° 37.8'	+2.42	+3.57	+5.18	+4.08	0.5	0.3	0.9	115°	0.5	300°	
	do.	14d	29° 59.1'	81° 37.8'	+2.48	+3.57	+5.30	+4.08	0.4	0.2	0.8	115°	0.4	300°	
7981	Toccoi to Lake George				Current weak and variable										
	FLORIDA COAST				on Miami Harbor Entrance, p.104										
7986	Fort Pierce Inlet <63>		27° 28.3'	80° 17.5'	+1.19	+0.39	+0.48	+0.35	1.5	2.0	2.6	250°	3.1	072°	
7991	Lake Worth Inlet (between jetties) <63>		26° 46.33'	80° 02.13'	+0.13	-0.07	-0.01	0.00	1.3	2.3	2.4	273°	3.6	094°	
7996	Fort Lauderdale, New River		26° 06.73'	80° 07.18'	-0.43	-0.39	-0.06	-0.16	0.4	0.3	0.8	005°	0.5	130°	
	PORT EVERGLADES														
8001	Pier 2, 1.3 miles east of <34>		26° 05.63'	80° 05.78'							0.2	--	0.4	--	
8006	Entrance (between jetties)		26° 05.58'	80° 06.32'	-0.08	-0.49	-0.43	-0.34	0.3	0.4	1.3	275°	0.7	095°	
8011	Entrance from southward (canal)		26° 05.2'	80° 06.9'	+0.40	+0.07	+0.31	-0.09	0.7	1.1	1.6	167°	1.7	358°	
8016	Turning Basin		26° 05.70'	80° 07.05'	-1.01	-1.07	-1.02	-1.11	0.1	0.3	0.2	320°	0.5	155°	
8021	Turning Basin, 300 yards north of		26° 05.8'	80° 07.1'	-0.20	-1.09	-0.27	-0.14	0.5	1.1	0.9	349°	1.8	160°	
8026	17th Street Bridge		26° 06.02'	80° 07.13'	-0.38	-0.53	-0.28	-0.55	1.1	1.2	1.9	350°	1.9	170°	
	MIAMI HARBOR														
8031	Bakers Haulover Cut		25° 54.0'	80° 07.4'	-0.01	+0.07	+0.14	-0.17	1.6	1.6	2.9	270°	2.5	090°	
	Government Cut														
8036	East entrance, off north jetty	13d	25° 45.59'	80° 07.35'	-0.02	-0.19	-0.08	-0.26	0.4	0.9	0.6	236°	1.5	092°	
8041	East entrance, inside south jetty	13d	25° 45.61'	80° 07.66'	-0.07	-0.06	-0.04	0.00	1.2	1.1	2.1	343°	1.8	116°	
8046	Midway, north side	13d	25° 45.84'	80° 07.96'	-0.12	-0.03	-0.07	-0.08	0.7	0.5	1.2	292°	0.7	108°	
	do.	28d	25° 45.84'	80° 07.96'	-0.11	-0.05	-0.10	-0.06	0.4	0.3	0.7	288°	0.4	104°	
8051	MIAMI HARBOR ENTRANCE	16d	25° 45.90'	80° 08.17'	+0.01	-0.02	-0.02	+0.02	0.8	1.0	1.8	293°	1.6	112°	
	do.	31d	25° 45.90'	80° 08.17'	+0.01	-0.02	-0.02	+0.02	0.8	1.0	1.4	298°	1.6	104°	
8056	West entrance, south side	15d	25° 45.85'	80° 08.25'	+0.09	+0.10	-0.04	+0.01	0.9	1.6	1.6	288°	2.5	100°	
	Main Channel														
8061	Causeway Is., 0.2 mi. SE of <56>	13d	25° 46.06'	80° 08.58'	+0.01	+0.23	-0.01	-0.14	0.8	0.4	1.4	306°	0.7	131°	
8066	Lummus Is., northeast corner <57>	13d	25° 46.02'	80° 08.70'	-0.07	-0.02	+0.06	-0.04	0.1	0.4	0.2	265°	0.7	104°	
8071	Dodge Is., 0.1 mi. off NW corner	12d	25° 46.89'	80° 10.90'	+0.17	-0.14	+0.01	+0.04	0.2	0.3	0.4	277°	0.4	093°	
	do.	26d	25° 46.89'	80° 10.90'	+0.12	-0.32	+0.14	+0.20	0.2	0.2	0.3	276°	0.3	091°	
	Fishermans Channel														
8076	Fisher Is., 0.2 mi. NW of	15d	25° 45.87'	80° 09.08'	+0.14	+0.38	+0.17	+0.39	0.6	0.7	1.0	280°	1.1	090°	
8081	Lummus Is., 0.15 mi. off SW corner	15d	25° 45.89'	80° 09.69'	+0.20	-0.20	+0.10	+0.22	0.3	0.6	0.6	271°	0.9	095°	
8086	West end, SW of Dodge Island	11d	25° 46.36'	80° 10.74'	-0.05	-0.32	-0.01	-0.21	0.1	0.2	0.2	277°	0.3	089°	
8091	Miami River entrance	10d	25° 46.21'	80° 11.23'	+0.15	-0.02	-0.05	+0.46	0.1	0.4	0.2	261°	0.6	071°	
8096	Fowey Rocks Light, 1.5 miles SW of		25° 35'	80° 07'	See table 5.										
	FLORIDA REEFES to MIDNIGHT PASS														
8101	Caesar Creek, Biscayne Bay		25° 23.2'	80° 13.6'	+0.07	-0.08	-0.14	-0.05	1.2	1.0	1.2	316°	1.8	123°	
8106	Long Key, drawbridge east of		24° 50.4'	80° 46.2'	+0.58	+1.27	+2.21	+1.33	1.1	0.7	1.1	000°	1.2	202°	
8111	Long Key Viaduct		24° 48.1'	80° 51.9'	+1.34	+1.28	+2.02	+1.57	0.9	0.7	0.9	349°	1.2	170°	
8116	Moser Channel, swingbridge		24° 42.0'	81° 10.2'	+1.07	+1.30	+1.50	+1.47	1.4	1.0	1.4	339°	1.8	166°	
8121	Bahia Honda Harbor, bridge		24° 39.4'	81° 17.3'	+1.01	+0.39	+1.53	+1.05	1.4	1.2	1.4	004°	2.1	182°	
8126	No Name Key, northeast of		24° 42.3'	81° 18.8'	+0.55	+1.24	+1.20	+0.53	0.7	0.5	0.7	312°	0.9	142°	

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	FLORIDA REEFES to MIDNIGHT PASS—cont. Time meridian, 75° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
8131	Key West													
8136	Main Ship Channel entrance		24° 28.4'	81° 48.1'	-0.44	-0.12	+0.10	+0.10	0.2	0.3	0.2	040°	0.4	178°
8141	Main Ship Channel <35>		24° 30.5'	81° 48.3'	---	---	---	+0.30	---	---	---	064°	0.4	133°
8146	KEY WEST, 0.3 mi. W of Ft. Taylor		24° 32.9'	81° 49.0'	---	---	---	---	---	---	---	022°	1.7	194°
8151	Ft. Taylor, 0.6 mile N of		24° 33.5'	81° 48.6'	+0.20	+0.13	-0.11	+0.13	0.6	0.7	0.6	042°	1.2	202°
8156	Turning Basin		24° 34.0'	81° 48.25'	+0.43	+0.44	+0.29	+1.06	0.8	0.6	0.8	048°	1.1	216°
8161	Northwest Channel		24° 35.0'	81° 50.9'	-0.08	-0.03	-0.09	-0.07	1.2	0.8	1.2	353°	1.4	162°
8166	Northwest Channel		24° 37.3'	81° 52.8'	-0.28	-0.19	-0.20	-0.20	0.6	0.4	0.6	346°	0.6	168°
8171	Boca Grande Channel		24° 34.4'	82° 04.1'	-0.40	-0.45	-0.01	-0.06	1.1	0.8	1.1	353°	1.2	194°
8176	New Ground <36>		24° 39.0'	82° 25.0'	+1.36	+1.55	+1.28	+1.18	0.7	0.4	0.2	356°	0.7	244°
8181	Isaac Shoal		24° 33.5'	82° 32.2'	+1.00	+0.94	+1.52	+1.55	1.0	0.5	1.0	002°	0.8	181°
8186	Southeast Channel		24° 37.62'	82° 51.07'	-0.27	-0.06	+0.37	+0.36	0.6	0.4	0.6	004°	0.6	172°
	Southwest Channel		24° 36.92'	82° 54.70'	+0.45	+0.59	+1.25	+2.04	0.4	0.4	0.4	001°	0.6	209°
	on Tampa Bay Entrance, p.112													
8191	Point Ybel, 0.4 mile northwest of		26° 27.40'	82° 01.12'	-0.25	-0.52	+0.17	+0.35	0.8	0.7	0.8	255°	0.9	080°
8196	Capiva Pass <37>		26° 36.56'	82° 13.34'	-0.53	-1.29	-1.14	-0.23	1.4	0.9	1.8	067°	1.9	251°
8201	Boca Grande Pass, Charlotte Harbor		26° 42.86'	82° 15.40'	-0.15	-0.37	-0.15	+0.05	1.7	1.3	2.2	057°	1.8	251°
8206	Pine Island Sound		26° 40.90'	82° 11.87'	---	---	---	---	---	---	---	011°	0.5	191°
8211	Little Pine I. bridge, Matlacha Pass		26° 37.9'	82° 04.1'	---	-0.19	---	---	0.4	---	0.5	132°	---	---
8216	Cape Haze, 2.3 mi. S of Charlotte Hbr		26° 44.7'	82° 09.1'	+0.30	+0.41	-0.20	+1.18	0.4	0.4	0.5	080°	0.5	268°
8221	Punta Gorda, Peace River Bridge		26° 56.7'	82° 03.4'	---	---	---	---	0.3	0.2	0.4	047°	0.3	230°
8226	Myakka River bridge <45>		26° 57.5'	82° 12.8'	+1.48	+1.18	+1.47	---	0.4	---	0.5	304°	---	---
8231	Gasparilla Pass		26° 48.74'	82° 16.86'	-1.15	-1.13	-0.35	-0.41	0.8	0.8	1.1	066°	1.1	236°
8236	Venice inlet		27° 06.8'	82° 28.0'	-2.05	-2.08	-1.57	-1.59	0.8	0.7	1.1	087°	0.9	262°
8241	Blackburn Bay, south end, bridge		27° 07.4'	82° 28.2'	-0.55	-1.20	-1.20	-1.10	0.7	0.5	0.9	357°	0.7	180°
8246	Little Sarasota Bay, south end, bridge		27° 10.8'	82° 29.7'	-1.19	-0.66	-0.57	-0.06	1.1	0.5	1.4	167°	0.7	357°
8251	Midnight Pass entrance		27° 12.4'	82° 30.6'	-1.43	-1.59	-1.49	-1.13	1.4	1.1	1.8	061°	1.4	242°
	SARASOTA BAY													
8256	Big Sarasota Pass		27° 18.0'	82° 33.8'	-1.54	-1.49	-1.34	-2.03	1.2	0.8	1.5	006°	1.0	183°
8261	Sarasota Bay, south end, bridge		27° 18.1'	82° 32.8'	-1.25	-1.39	-1.13	-0.32	0.2	0.2	0.3	196°	0.3	013°
8266	New Pass		27° 19.9'	82° 34.9'	-2.06	-2.48	-1.18	-1.25	1.2	0.8	1.6	046°	1.0	231°
8271	Golden Gate Point, off		27° 19.7'	82° 33.4'	-1.38	-1.57	-1.25	-1.19	0.3	0.2	0.4	344°	0.3	159°
8276	Longboat Pass		27° 26.5'	82° 41.4'	-2.32	-2.42	-1.51	-1.56	1.4	1.2	1.8	088°	1.6	267°
8281	Cortez, north of bridge		27° 28.2'	82° 41.6'	-1.47	-1.10	-0.25	-1.11	0.5	0.1	0.6	346°	0.1	162°
	TAMPA BAY													
8286	Egmont Channel, marker '10'	15d	27° 36.03'	82° 52.06'	-2.04	-3.17	-2.22	-1.31	0.2	0.2	0.2	018°	0.3	259°
8291	Egmont Channel (3 mi. W of Egmont Key Lt.)	15d	27° 36.5'	82° 49.1'	-0.30	-0.28	-0.30	-0.29	0.4	0.5	0.5	065°	0.7	260°
8296	TAMPA BAY ENTRANCE (Egmont Channel)	15d	27° 36.26'	82° 45.62'	-0.46	-0.53	-0.40	-0.30	0.6	0.9	1.3	120°	1.3	298°
8301	Southwest Channel (S of Egmont Key)	15d	27° 33.70'	82° 46.04'	-0.03	-0.01	-0.23	+0.08	0.8	0.8	1.1	087°	1.2	269°
8306	Mullet Key Channel entrance	15d	27° 36.27'	82° 43.43'	-1.29	-1.50	-1.13	-1.08	0.6	0.7	0.8	081°	0.9	247°
8311	Passage Key inlet (off Bean Pt.)	15d	27° 32.36'	82° 44.86'	+0.20	-0.05	-0.51	+0.04	0.3	0.4	0.4	065°	0.6	250°
8316	Rattlesnake Key, 3.1 miles west of	15d	27° 33.20'	82° 41.30'	-0.28	-0.34	-0.34	-0.09	0.2	0.1	0.3	035°	0.2	210°
8321	Mullet Key Channel, marker '24'	15d	27° 34.25'	82° 38.63'	-0.14	-0.07	-0.06	-0.06	0.7	0.7	0.9	073°	1.0	255°
8326	Buncoes Pass (West of Bayway bridge)	15d	27° 36.50'	82° 41.64'	-0.47	-0.46	-1.07	-1.02	0.8	0.7	1.0	125°	1.0	315°
8331	Pine Key (Pinellas Bayway bridge)	15d	27° 38.82'	82° 44.37'	-0.32	-0.49	-1.07	-1.00	0.3	0.6	0.4	100°	0.8	280°
8336	Pine Key (Pinellas Bayway bridge)	15d	27° 41.55'	82° 43.03'	-1.27	-2.41	-2.12	-1.23	0.5	0.5	0.6	015°	0.7	150°
8341	Cats Point (bridge west of)	15d	27° 42.50'	82° 43.48'	+0.25	+0.07	+0.23	+0.46	0.8	0.7	1.3	060°	1.1	235°
8346	SUNSHINE SKYWAY BRIDGE	15d	27° 37.22'	82° 39.32'	+0.03	-0.07	-0.24	-0.02	0.5	0.7	1.0	045°	0.9	225°
8351	Cut A & B, Channel Junction		27° 36.33'	82° 37.53'										
8356	Joe Island, 1.8 miles northwest of		27° 36.75'	82° 37.50'										

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS				
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb	
															h	m	h	m	knots	Dir.	knots	Dir.
	TAMPA BAY—cont. Time meridian, 75° W			West											
8361	Harbor Key, 1.3 miles west of <i>Pine/Is Pass</i>	ft	27° 36.67'	82° 35.67'	on Tampa Bay Entrance, p.112	-0.50	-0.56	-1.06	-0.38	0.2	0.3	0.3	020°	0.4	160°
8366	2 miles southwest of		27° 40.55'	82° 39.53'	Current weak and variable	-0.46	-0.23	-0.16	-0.34	0.6	0.7	0.7	030°	0.9	210°
8371	0.5 mile south of		27° 39.63'	82° 38.50'		-1.28	-1.19	-1.53	-0.57	0.2	0.2	0.2	045°	0.3	220°
8376	1.9 miles SE of		27° 41.82'	82° 37.95'		+0.29	+0.32	+0.06	+0.20	0.5	0.6	0.6	020°	0.8	180°
8381	3 miles southeast of		27° 40.08'	82° 36.58'		+0.29	+0.23	+0.20	+0.47	0.6	0.6	0.6	025°	0.8	200°
8386	Port Manatee Channel entrance	15d	27° 39.72'	82° 35.95'		-0.01	+0.08	+0.24	+0.23	0.6	0.6	0.6	033°	0.8	216°
8391	Port Manatee Channel, marker '4'	15d	27° 39.21'	82° 35.39'		-0.34	-0.11	-0.22	+0.01	0.2	0.3	0.3	056°	0.4	242°
8401	Piney Point, 0.6 mile NNW of		27° 39.22'	82° 33.73'		+0.12	-0.29	-0.45	+0.01	0.3	0.4	0.4	355°	0.5	215°
	on Old Tampa Bay ent., p.120														
8406	Lewis Island, 0.9 mile east of		27° 43.47'	82° 36.58'		+0.04	-0.19	-1.05	-0.19	0.8	0.9	0.9	005°	0.8	160°
8411	Camp Key, 1.9 miles northwest of		27° 42.47'	82° 33.00'		+0.11	-0.01	-0.43	-0.21	0.7	0.8	0.8	030°	0.7	220°
8416	Shell Point, 1.1 miles west of		27° 43.28'	82° 30.22'	Current weak and variable	-0.44	+0.07	-0.26	-0.22	0.7	0.7	0.7	065°	0.3	235°
8421	Cut E Channel, marker '2E'	15d	27° 43.52'	82° 32.14'		+0.38	+0.22	-0.49	0.00	0.3	0.4	0.4	044°	0.7	226°
8426	Port of St. Petersburg approach, marker 'S'	12d	27° 45.55'	82° 36.61'	Current weak and variable	+0.01	+0.19	+0.04	-0.22	0.6	0.5	0.5	344°	0.3	203°
8431	Snell Isle, 1.8 miles east of		27° 47.62'	82° 34.33'	Daily predictions	+0.17	+0.37	+0.03	-0.23	0.1	274°	277°	025°	0.1	276°
8436	Ross Island, 1 mile east of, marker '4'	15d	27° 50.22'	82° 33.22'		+0.09	+0.20	+0.09	+0.07	0.6	0.6	0.6	350°	0.5	175°
8441	OLD TAMPA BAY ENTRANCE (Port Tampa)	15d	27° 51.90'	82° 33.22'		+0.19	+0.50	-0.12	+0.16	0.3	0.2	0.2	025°	0.1	276°
8446	Weedon I., powerplant channel, marker '10'	23d	27° 51.72'	82° 35.12'		+0.19	+0.26	-0.55	-0.33	0.7	0.5	0.5	359°	0.9	204°
8451	Gandy Bridge, west channel	6d	27° 52.75'	82° 34.83'		+0.10	+0.20	+0.09	+0.07	0.6	0.6	0.6	000°	0.9	000°
8456	Gandy Bridge, east channel		27° 55.99'	82° 33.14'		+0.19	+0.50	-0.12	+0.16	0.3	0.2	0.2	359°	0.6	155°
8461	W Howard Frankland Bridge		27° 55.55'	82° 35.17'		+0.37	+0.26	-0.35	+0.16	0.5	0.6	0.6	285°	0.5	179°
8466	Courtesy Campbell Parkway		27° 58.08'	82° 37.45'		-1.33	+0.06	-0.54	-0.53	0.3	0.2	0.2	340°	0.6	140°
8471	Gadsden Pt. Cut-Cut G Channel Junction	15d	27° 47.16'	82° 31.32'	Current weak and variable	-1.14	+0.31	-0.20	-0.23	0.4	0.2	0.2	030°	0.1	312°
8476	Cut A Channel, marker '10', Hillsborough Bay	15d	27° 48.71'	82° 26.84'						0.3	0.2	0.2	040°	0.2	213°
8481	Cut C Channel, marker '21', Hillsborough Bay	15d	27° 50.76'	82° 26.62'						0.4	0.2	0.2	007°	0.2	183°
8486	Alafia River ent., 1.2 miles west of		27° 50.97'	82° 25.28'	Current weak and variable					0.2	0.6	0.2	060°	0.2	215°
	BOCA CIEGA BAY and ST. JOSEPH SOUND														
8491	Pass-a-Grille Channel		27° 41.1'	82° 44.1'		-0.30	-0.43	-0.30	-0.17	0.9	1.0	1.0	357°	1.4	186°
8496	Bridge, 0.8 mi. south of Maximo Pt. <39>		27° 41.6'	82° 40.8'		-1.05	-1.22	-1.05	-0.50	0.9	1.0	1.0	078°	1.4	255°
8501	Gulfport, south of		27° 43.7'	82° 42.4'	Current weak and variable	-1.20	-1.25	-1.20	-1.12	0.5	0.3	0.3	000°	0.6	180°
8506	Blind Pass (north end)		27° 45.4'	82° 45.7'	Current weak and variable	-1.30	-1.28	-1.30	-1.29	0.5	0.1	0.1	000°	1.5	214°
8511	Treasure Island Causeway		27° 46.2'	82° 45.3'						0.5	0.1	0.1	000°	0.6	180°
8516	Johns Pass <38>		27° 47.0'	82° 46.9'	Current weak and variable	-0.23	-0.25	-1.17	-0.54	1.0	0.8	0.8	179°	1.1	348°
8521	Treasure Island, 3.5 miles southwest of		27° 45.0'	82° 50.0'		-2.24	-2.49	-2.18	-1.50	0.6	0.6	0.6	018°	0.4	018°
8526	The Narrows (Indian Rocks Beach Bridge)		27° 52.6'	82° 51.0'						0.6	0.6	0.6	180°	0.2	000°
8531	Clearwater Pass, 0.2 mi. NE of Sand Key		27° 57.4'	82° 49.4'						1.3	1.3	1.3	179°	1.1	348°
8536	St. Joseph Sound, off		28° 05.0'	82° 55.0'						0.4	0.4	0.4	018°	0.6	195°
	on Miami Harbor Entrance, p.104														
8541	Anclote Key, off		28° 10.0'	82° 49.8'		+2.58	+2.43	+2.42	+2.23	0.3	0.5	0.5	006°	0.6	006°
	APALACHEE BAY														
8546	St. Marks River approach		30° 02.8'	84° 10.8'		-0.57	-0.46	-0.10	-0.08	0.5	0.4	0.4	339°	0.5	170°
8551	Four Mile Point, St. Marks River		30° 06.7'	84° 12.2'		-0.13	-0.14	+0.24	-0.26	0.3	0.3	0.3	358°	0.4	187°
8556	St. Marks, St. Marks River		30° 09.3'	84° 12.1'		+1.38	+1.10	-0.23	+0.23	0.2	0.3	0.3	067°	0.3	067°

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS					
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb		
															h	m	h	m	knots	Dir.	knots	Dir.
	ST. ANDREW BAY Time meridian, 90° W	ft	North	West												
8561	ST. ANDREW BAY ENTRANCE	18d	30° 07.31'	85° 43.78'	+0.45	+0.07	-0.14	-0.16	1.0	1.4	--	--	1.3	045°	1.6	225°
	do.	5d	30° 07.31'	85° 43.78'	-0.32	-0.09	+0.02	+0.00	0.8	0.8	--	--	1.2	044°	1.8	230°
	do.	31d	30° 07.31'	85° 43.78'	+2.10	+0.32	+0.03	+0.29	0.2	0.4	--	--	1.1	047°	1.3	221°
8566	Courney Point, 0.75mi. SE of	7d	30° 08.32'	85° 41.95'	-0.47	+1.49	+1.31	+0.23	0.4	0.2	--	--	0.3	069°	0.6	210°
	do.	20d	30° 08.32'	85° 41.95'	-0.49	+2.07	+1.39	+0.20	0.3	0.2	--	--	0.4	065°	0.3	256°
8571	Courney Point, 0.4mi. ESE of	30d	30° 08.65'	85° 42.20'	--	--	--	-0.04	--	--	--	--	0.4	068°	0.3	273°
	do.	4d	30° 08.65'	85° 42.20'	--	--	--	-1.05	--	--	--	--	--	--	0.7	174°
	do.	11d	30° 08.65'	85° 42.20'	--	--	--	--	--	--	--	--	--	--	0.4	190°
8576	Redfish Point	17d	30° 08.64'	85° 40.01'	+1.20	-0.02	-0.49	-0.17	0.2	0.4	--	--	0.2	101°	0.6	319°
	do.	5d	30° 08.64'	85° 40.01'	-1.03	-0.05	+0.36	-0.14	0.3	0.3	--	--	0.4	118°	0.4	310°
	do.	19d	30° 08.64'	85° 40.01'	-1.11	+0.26	+1.04	-0.50	0.4	0.2	--	--	0.4	129°	0.3	303°
8581	Paper Mill	32d	30° 07.83'	85° 37.90'	--	--	-0.41	+0.58	--	--	--	--	0.7	249°	0.7	249°
	do.	3d	30° 07.83'	85° 37.90'	+0.44	+0.28	+0.19	+1.08	0.3	0.3	--	--	0.3	086°	0.5	245°
8586	Bear Point, 0.6nm E of	16d	30° 07.83'	85° 37.90'	-0.46	--	+0.40	+0.05	0.2	0.2	--	--	0.2	297°	0.3	238°
	do.	27d	30° 09.86'	85° 42.81'	+2.59	+0.41	-0.20	+0.41	0.2	0.4	--	--	0.5	312°	0.6	120°
	do.	4d	30° 09.86'	85° 42.81'	-0.05	+0.44	+1.13	-0.38	0.4	0.2	--	--	0.5	312°	0.3	137°
	do.	14d	30° 09.86'	85° 42.81'	-2.13	+0.32	+2.40	--	0.5	--	--	--	0.6	334°	--	--
8591	Long Point, West Bay	27d	30° 14.35'	85° 44.99'	+0.52	+0.04	+0.11	+0.31	0.2	0.2	--	--	0.2	005°	--	--
	do.	4d														
	PENSACOLA BAY															
8596	Pensacola Bay entrance, midchannel		30° 20.1'	87° 18.0'	-0.48	-0.31	+0.18	-1.15	1.1	1.2	--	--	1.6	074°	1.8	256°
	MOBILE BAY															
8601	Main Ship Channel entrance		30° 09.2'	88° 03.2'	--	+0.50	--	+0.50	0.5	0.7	--	--	0.7	344°	1.0	182°
8606	MOBILE BAY ENTRANCE (off Mobile Point)		30° 13.6'	88° 02.1'	+0.15	+1.16	+1.26	+0.43	0.4	0.3	--	--	1.4	027°	1.5	190°
8611	Channel, 6 miles N of Mobile Point		30° 19.8'	88° 01.1'	--	--	--	--	--	--	--	--	0.6	032°	0.5	208°
8616	Great Point Clear, channel west of		30° 29.4'	88° 02.0'	+5.36	+4.54	+2.44	+2.45	0.2	0.5	--	--	0.3	333°	0.7	151°
8621	Mobile River entrance		30° 40.2'	88° 00.7'	+2.04	+1.35	-1.00	-0.21	0.3	0.7	--	--	0.4	029°	1.0	222°
8626	Tensaw River entrance (bridge)		30° 40.9'	88° 00.7'												
8631	Pass Aux Herons Entrance to Mississippi Sound <40>		30° 17.3'	88° 07.8'	+0.09	+0.15	+0.22	+0.02	0.9	0.9	--	--	1.3	068°	1.3	245°
	MISSISSIPPI SOUND															
8636	Pascagoula River highway bridge <24>		30° 22.3'	88° 33.8'	--	+0.48	--	-1.02	0.9	0.8	--	--	1.2	016°	1.2	201°
	LOUISIANA COAST															
8641	Quatre Bayoux Pass, Barataria Bay		29° 18.6'	89° 51.1'	+1.37	+1.04	+0.43	+0.06	0.9	0.9	--	--	1.2	288°	1.3	103°
8646	Pass Abel, Barataria Bay		29° 17.7'	89° 54.2'	+0.53	+1.00	+0.13	-0.03	0.6	1.1	--	--	0.9	317°	1.6	143°
8651	Barataria Pass, Barataria Bay		29° 16.3'	89° 56.9'	+2.29	+1.23	+1.01	+0.19	1.1	0.9	--	--	1.5	315°	1.3	120°
8656	Barataria Bay, 1.1 mi. NE of Manilla		29° 26.2'	89° 57.6'	+4.41	+3.35	+3.10	+4.12	0.3	0.3	--	--	0.4	356°	0.5	160°
8661	Camina Pass, Barataria Bay		29° 11.9'	90° 02.8'	+1.44	+0.03	+0.56	+0.38	1.1	1.0	--	--	1.5	297°	1.5	118°
8666	Seabrook Bridge, New Orleans <1>		30° 01.9'	90° 02.1'	--	+7.37	--	+7.57	0.9	0.6	--	--	1.2	350°	0.9	170°
	Terrebonne Bay															
8671	Cat Island Pass, Terrebonne Bay	6	29° 04.8'	90° 34.4'	-2.32	-1.57	-1.05	-2.59	0.8	1.2	--	--	1.1	013°	1.5	195°
8676	Wine Island Pass		29° 04.2'	90° 38.0'	-4.33	-5.03	-3.38	-4.17	1.2	1.5	--	--	1.7	325°	1.9	160°
8681	Caillou Boca, Caillou Bay	4	29° 03.5'	90° 48.5'	-0.33	-0.41	+2.59	-0.05	0.9	0.6	--	--	1.3	095°	0.7	264°
8686	Calcaisou Pass		29° 46.4'	93° 20.7'	-0.02	-0.42	+1.16	-0.55	1.2	1.8	--	--	1.7	020°	2.3	205°
8691	Calcaisou Pass, 35 miles south of		29° 10.15'	93° 19.23'												
8696	Calcaisou Pass, 67 miles south of <41>		28° 39.80'	93° 19.95'												

Endnotes can be found at the end of table 2.

TABLE 2 – CURRENT DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	Meter Depth	POSITION		TIME DIFFERENCES				SPEED RATIOS		AVERAGE SPEEDS AND DIRECTIONS			
			Latitude	Longitude	Min. before Flood	Flood	Min. before Ebb	Ebb	Flood	Ebb	Minimum before Flood	Maximum Flood	Minimum before Ebb	Maximum Ebb
	TEXAS Time meridian, 90° W	ft	North	West	h m	h m	h m	h m			knots	Dir.	knots	Dir.
8701	Sabine Pass		29° 39.0'	93° 49.6'	+0.02	-0.33	-1.11	-0.32	0.8	1.3	1.1	335°	1.6	145°
8706	Texas Point, 1.7 miles SSE of		29° 43.3'	93° 51.7'	+0.01	-0.01	-1.11	-0.07	1.1	1.4	1.6	335°	1.7	140°
8711	Sabine, channel east of		29° 45.6'	93° 54.1'	+1.09	+1.35	-0.11	+1.01	0.6	1.1	0.9	310°	1.3	110°
8716	Port Arthur Canal entrance		29° 45.95'	93° 53.70'	-0.05	+0.21	-1.16	-0.46	1.1	1.8	1.6	330°	2.2	150°
8721	Mesquite Pt., La. Causeway bridge	15d	29° 20.92'	94° 42.85'	<i>Daily predictions</i>				0.1	0.04°	0.1	004°	1.2	088°
	GALVESTON BAY ENT. (between jetties)	5d	29° 20.92'	94° 42.85'	+0.17	+0.15	+0.02	+0.05	1.0	1.1	1.4	272°	1.3	091°
		34d	29° 20.92'	94° 42.85'	-0.18	-0.01	-0.03	-0.13	0.8	0.9	1.1	274°	1.1	094°
	GALVESTON BAY				on Bolivar Roads, p. 136									
8726	BOLIVAR ROADS	14d	29° 20.60'	94° 46.88'	+0.09	+0.07	-0.16	-0.01	1.0	1.1	1.6	296°	1.3	123°
		8d	29° 20.60'	94° 46.88'	-0.32	-0.11	+0.17	-0.08	0.8	0.6	1.6	295°	1.5	125°
		31d	29° 18.6'	94° 46.7'	-0.30	+2.16	-0.54	-1.53	0.7	0.6	1.2	306°	1.0	115°
8731	Quarantine Station, 0.3 mile S of <24>		29° 19.8'	94° 49.2'	-0.30	-0.54	-2.30	-1.11	1.0	1.2	1.1	196°	0.8	009°
8736	Galveston Channel, west end <24>		29° 17.85'	94° 53.15'	-0.12	-0.22	-3.49	-1.21	0.4	0.8	1.6	272°	1.6	103°
8741	Galveston Causeway RR bridge	16d	29° 21.88'	94° 47.80'	-0.05	-0.18	-2.14	-1.41	1.1	1.0	0.7	266°	1.1	099°
8746	Houston Channel, W of Port Bolivar	3d	29° 21.88'	94° 47.80'	-0.03	-0.11	-2.15	-1.55	1.0	0.9	1.7	313°	1.3	135°
		14d	29° 21.88'	94° 47.80'	-0.06	-0.14	-2.12	-1.41	0.9	0.8	1.5	312°	1.2	133°
		26d	29° 21.88'	94° 47.80'	+0.41	+1.13	+1.13	+0.50	0.5	0.5	1.4	312°	1.0	134°
8751	Houston Ship Channel (Red Fish Bar)	7d	29° 30.44'	94° 52.48'	+0.45	+1.28	+1.17	+1.10	0.7	0.7	1.0	331°	0.7	154°
		14d	29° 30.44'	94° 52.48'	+0.48	+1.15	+1.20	+1.42	0.5	0.5	1.0	323°	0.9	144°
		24d	29° 30.44'	94° 52.48'	+2.15	+1.43	-1.05	+1.16	0.3	0.5	0.5	336°	0.7	163°
8756	Morgans Point	6d	29° 40.79'	94° 58.90'	+1.44	+1.23	-0.50	+1.11	0.3	0.4	0.5	341°	0.5	159°
		15d	29° 40.79'	94° 58.90'	+0.47	+0.58	-1.02	+1.20	0.2	0.3	0.4	340°	0.4	160°
		25d	29° 40.79'	94° 58.90'										
	TEXAS COAST													
8761	Matagorda Channel (entrance jetty)	15	28° 25.3'	96° 19.4'	-0.40	-0.27	-1.14	-1.25	1.4	1.5	2.0	317°	1.9	142°
					on Arkansas Pass, p. 140									
8766	Aransas Pass	15d	27° 50.03'	97° 02.65'	0.00	0.00	0.00	0.00	1.1	1.5	1.9	300°	2.0	118°
		35d	27° 50.03'	97° 02.65'	0.00	0.00	0.00	0.00	0.9	0.8	1.6	300°	1.5	118°
		50d	27° 50.03'	97° 02.65'	+0.24	+1.48	+2.11	+1.09	0.7	0.5	1.0	300°	0.7	118°
8771	Port Ingleside		27° 48.90'	97° 13.80'							0.7	286°	0.5	102°
8776	Sabine Bank <46>	5d	29° 18.20'	94° 00.20'										
8781	Head Bank, 28 miles SSE of <46>		28° 40.17'	93° 59.60'										
	PUERTO RICO Time meridian, 60° W													
8786	Las Mareas		17° 55.41'	66° 09.70'							0.3	256°	0.4	095°
8791	Punta Ostiones, 1.5 miles west of		18° 05.2'	67° 13.6'	-0.26	-0.52	-0.04	-0.35	1.7	1.3	0.6	187°	0.9	001°
8796	VIEQUES PASSAGE		18° 11.3'	65° 37.1'							1.0	250°	0.7	057°
8801	Vieques Sound		18° 15.87'	65° 34.20'	-0.44	-1.16	-1.28	-1.05	0.7	0.9	0.4	180°	0.6	355°
8806	Largo Shoals, west of		18° 19'	65° 35'	-0.52	-0.42	-1.33	-0.44	0.7	1.0	0.4	186°	0.7	330°
8811	Ramos Cay, 0.3 mile SE of <1>		18° 18.6'	65° 36.4'					0.3	0.1	0.2	120°	0.1	284°
8816	Palominos Island, 0.9 mile SW of <13>		18° 20.1'	65° 34.8'	-1.13	-1.52	-2.27	-1.45	0.5	1.6	0.3	162°	0.5	307°
8821	Fajardo Harbor (channel)		18° 20.1'	65° 37.1'										
8826	Isla Marina, 0.2 mile west of <1>		18° 20.50'	65° 37.38'										
8831	Coronata Laja, 0.4 mile NW of <1>		18° 21.6'	65° 37.3'										
8836	Pasaje de San Juan <1>		18° 23.9'	65° 36.9'										
8841	Bahía de San Juan <1>		18° 27.23'	66° 06.6'										
8846	Bahía de San Juan entrance <42>		18° 28.3'	66° 07.6'										

Endnotes can be found at the end of table 2.

ENDNOTES

- < 1> The times of minimum before flood and minimum before ebb are indefinite.
- < 2> Current speeds up to 9.0 knots have been observed in the vicinity of the Boilers.
- < 3> Current turns westward, just before the end of the flood.
- < 4> Current tends to rotate counterclockwise, flood direction swings from westward to southward.
- < 5> Observations indicate that current floods about 11 hours and ebbs about 1 1/2 hours. Minimum before flood occurs about 4 1/2 hours earlier, maximum flood about 1 hour later, minimum before ebb about 1/2 hour later, and maximum ebb about 1 1/2 hours earlier than corresponding predictions at Portsmouth Harbor Entrance. Average ebb speed is less than 0.5 knot.
- < 6> Current is variable; current speeds are usually less than 1 knot. Currents are strong in the entrance to Menemsha Pond.
- < 7> In the open waters of Buzzards Bay, except in the entrance and off Penikese Island and West Island, the current is too weak and variable to be predicted.
- < 8> The currents in Narragansett Bay have a pronounced irregularity which is evidenced at times during the month by a long period of approximate slack water preceding the flood, and at other times by a double flood of two distinct maximums of speed separated by a period of lesser speed. These peculiarities appear to be somewhat unstable, consequently, flood currents differing from those predicted should be expected. The ebb current is fairly regular and the predictions for maximum ebb will usually agree closely with the current encountered.
- < 9> At minimum flood, current sometimes ebbs for a short period.
- <10> At minimum flood, current frequently ebbs for a short period.
- <11> Flood is too weak to be predicted. Time difference gives mid-point of 4 hour stand of weak and variable current and time of maximum ebb.
- <12> Inside breakwaters, in channel, the current is only 0.4 knot.
- <13> Current seldom floods.
- <14> Near Tongue Point, Bridgeport Harbor, the current is weak and irregular.
- <15> Tidal current is weak, averaging about 0.1 knot at maximum.
- <16> For maximum southward current only, the gates of the lock being closed to prevent northward flow. Apply difference and ratio to maximum ebb at The Narrows.
- <17> Spring freshwater flow tends to decrease flood speeds and increase ebb speeds by approximately 0.25knots. This also has the effect of delaying the slack before flood and advancing the slack before ebb by 15 to 45 minutes.
- <18> In Roundout Creek entrance (between lights), eddies on the flood make navigation difficult. Little difficulty should be experienced on the ebb.
- <19> Current always ebbs. Ebb speeds vary depending on freshwater flow and average 1.5 knots in the spring and 0.5 knots in the fall.
- <20> Current is rotary, turning clockwise. It flows northwest at times of "minimum before flood" at The Narrows; northeast 1 hour after maximum flood; southeast 1 1/2 hours after "minimum before ebb"; and southwest 2 hours after maximum ebb.
- <21> Current is rotary, turning clockwise. Minimum current of 0.2 knot sets west about the time of "minimum before flood" at The Narrows. Minimum current of 0.2 knot sets ENE about the time of "minimum before ebb" at The Narrows.
- <22> In Sandy Hook Bay (except in southern extremity) the current is weak.
- <23> Tidal current is weak and rotary, averaging about 0.1 knot at maximum.
- <24> The times of minimum before flood and ebb are variable.
- <25> Current usually ebbs during the period 3 hours before to 3 hours after maximum ebb. Flood is weak and variable.
- <26> To obtain speeds in midchannel use speed ratio 0.8.

- <27> Flood is usually weak and of short duration. A weak ebb or flood current occurs about 6 hours after maximum flood at Delaware Bay Entrance.
- <28> Tidal current is weak and rotary, averaging less than 0.1 knot.
- <29> Current tends to rotate clockwise. At times of "minimum before flood" there may be a weak current flowing WSW while at times of "minimum before ebb" there may be a weak current flowing ENE.
- <30> Current tends to rotate clockwise. At times of "minimum before flood" there may be a weak current flowing southwest, while at times of "minimum before ebb" there may be a weak current flowing north.
- <31> Flood usually flows northward, however, direction is variable.
- <32> Flood is variable, current sometimes changes to ebb for a short time during the flood period.
- <33> Due to changes in the waterway, average speed values given are probably too large.
- <34> Flood usually occurs in a southerly direction and the ebb in a northeastwardly direction.
- <35> Flood is weak and variable.
- <36> Current tends to rotate clockwise. At times of "minimum before flood" there may be a weak current flowing northward while at times of "minimum before ebb" there may be a weak current flowing southeastward.
- <37> For greater ebb only.
- <38> The strength of flood is usually about 2 knots. The speed ratio for strength of ebb is 0.8, except for an ebb speed at Tampa Bay entrance less than 1 knot or marked with an asterisk. In this case take the ebb speed at Johns Pass to be about 1 knot.
- <39> For greater ebb. Lesser ebb is almost equal to greater ebb.
- <40> Currents are materially affected by winds.
- <41> Current is weak and variable. Current is somewhat rotary turning clockwise.
- <42> Current is normally weak and variable, but winds may cause heavy swells.
- <43> Minimum ebb is extremely weak, possibly flooding for a short period.
- <44> Every other ebb phase exhibits a double ebb pattern. For single ebb phases use time differences and speed ratios of the first ebb.
- <45> Ebb is weak and variable.
- <46> Current is somewhat rotary, speed seldom exceeds 0.3 knot.
- <47> Flood is weak and variable with speeds less than or equal to 0.2 knot. Minimums are indefinite.
- <48> Diamond Island Pass - Ebb current is very weak, averaging less than 0.1 knot.
- <49> During period observed, the current flow was nearly continuous in a southwesterly direction with an average speed of about 0.4 knot.
- <50> Observations during the spring showed an increase of about 0.4 knots in both the flood and ebb directions.
- <51> Observations were made in the summer months when the freshwater discharge was at a minimum. Periods of heavier discharge will increase ebb current speeds and decrease flood current speeds.
- <52> Observations were made in the spring during period of heavy freshwater discharge. Periods of lesser discharge will decrease ebb current speeds and increase flood current speeds.
- <53> Observations at this location showed long periods of minimum currents and short durations of flood and ebb currents.
- <54> Turbulence with hazardous current speeds of 6 to 7 knots have been reported near the bridges in the canal. Extreme caution should be exercised.
- <55> The time of minimum before flood is indefinite.
- <56> Maximum ebb time difference is for middle of phase. Speed near 0.7 knots throughout most of ebb phase. Speeds a short distance away may vary significantly.

- <57> Maximum flood time difference is for middle of phase. Speed is very low throughout most of flood phase.
- <58> It has been reported that under conditions of extreme river discharge, the currents can reach 7 or 8 knots. Caution should be exercised when docking and undocking vessels
- <59> In the narrow part of Woods Hole Passage (Woods Hole, 0.1 mile SW of Devils Footh Island) the current velocity at times exceeds 4.5 knots. Velocities as high as 5.0 knots have been reported by the U. S. Coast Guard. Currents in Woods Hole Passage computed from the daily predictions at Cape Cod Canal in the Tidal Current Tables, Atlantic Coast should be used WITH CAUTION. actual velocities and directions shown on Tidal Current Charts, Narragansett Bay to Nantucket should be used only with EXTREME CAUTION. These differences result from dredging, filling, shoaling, and other modifications since the 1931 survey.
- <60> Depths at the locations were previously averaged. The original data has been separated into its component depths.
- <61> The time of minimum before ebb is indefinite.
- <62> Short term observational data taken by United States Power Squadrons (USPS) as part of the NOS/USPS Tidal Current Predictions Quality Assurance Program has shown that predictions at this location are accurate.
- <63> Short term observational data taken by United States Power Squadrons (USPS) as part of the NOS/USPS Tidal Current Predictions Quality Assurance Program have shown predictions at these locations to be inaccurate.
- Observed speeds at "Little Creek" were approximately twice the predicted values.
 - Observations at "Newport News Channel, west end" showed both time and speed of the currents were altered by the Monitor-Merrimac Tunnel. Predictions should be used with caution.
 - Observations at "Lake Worth Inlet" showed that maximum currents occurred up to 2 hours earlier than predicted, and speeds were decreased by at least 25%.
 - Observations at "Fort Pierce Inlet" showed that maximum currents occurred up to 1 hour earlier than predicted, and speeds were decreased by at least 25%.

CAUTION—During the first 2 hours of flood in the channel north of Governors Island, the current in the Hudson River is still ebbing while during the first 1 1/2 hours of ebb in this channel, the current in the Hudson River is still flooding. At such times, special care must be taken by large ships in navigating this channel.

- <64> At times of slack before flood there is a non-tidal current flowing NE at speeds of approximately 0.5 knots.

TABLE 3.—SPEED OF CURRENT AT ANY TIME

EXPLANATION

Though the predictions in this publication give only the slacks and maximum currents, the speed of the current at any intermediate time can be obtained approximately by the use of this table. Directions for its use are given below the table.

Before using the table for a place listed in Table 2, the predictions for the day in question should be first obtained by means of the differences and ratios given in Table 2.

The examples below follow the numbered steps in the directions.

Example 1.—Find the speed of the current in The Race at 6:00 on a day when the predictions which immediately precede and follow 6:00 are as follows:

(1)	Slack Water	Maximum (Flood)	
	Time	Time	Speed
	4:18	7:36	3.2 knots

Directions under the table indicate Table A is to be used for this station.

(2) Interval between slack and maximum flood is $7:36 - 4:18 = 3^h18^m$. Column heading nearest to 3^h18^m is 3^h20^m .

(3) Interval between slack and time desired is $6:00 - 4:18 = 1^h42^m$. Line labeled 1^h40^m is nearest to 1^h42^m .

(4) Factor in column 3^h20^m and on line 1^h40^m is 0.7. The above flood speed of 3.2 knots multiplied by 0.7 gives a flood speed of 2.24 knots (or 2.2 knots, since one decimal is sufficient) for the time desired.

Example 2.—Find the speed of the current in the Harlem River at Broadway Bridge at 16:30 on a day when the predictions (obtained using the difference and ratio in table 2) which immediately precede and follow 16:30 are as follows:

(1)	Maximum (Ebb)		Slack Water
	Time	Speed	Time
	13:49	2.5 knots	17:25

Directions under the table indicate Table B is to be used, since this station in Table 2 is referred to Hell Gate.

(2) Interval between slack and maximum ebb is $17:25 - 13:49 = 3^h36^m$. Hence, use column headed 3^h40^m .

(3) Interval between slack and time desired is $17:25 - 16:30 = 0^h55^m$. Hence, use line labeled 1^h00^m .

(4) Factor in column 3^h40^m and on line 1^h00^m is 0.5. The above ebb speed of 2.5 knots multiplied by 0.5 gives an ebb speed of 1.2 knots for the desired time.

When the interval between slack and maximum current is greater than 5^h40^m , enter the table with one-half the interval between slack and maximum current and one-half the interval between slack and the desired time and use the factor thus found.

TABLE 3.—SPEED OF CURRENT AT ANY TIME

TABLE A

		Interval between slack and maximum current												
		<i>h. m.</i> 1 20	<i>h. m.</i> 1 40	<i>h. m.</i> 2 00	<i>h. m.</i> 2 20	<i>h. m.</i> 2 40	<i>h. m.</i> 3 00	<i>h.m.</i> 3 20	<i>h.m.</i> 3 40	<i>h.m.</i> 4 00	<i>h.m.</i> 4 20	<i>h.m.</i> 4 40	<i>h.m.</i> 5 00	<i>h.m.</i> 5 20	h.m. 5 40
Interval between slack and desired time	<i>h. m.</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>
	0 20	0.4	0.3	0.3	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
	0 40	0.7	0.6	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
	1 00	0.9	0.8	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3
	1 20	1.0	1.0	0.9	0.8	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4
	1 40	----	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4
	2 00	----	----	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5
	2 20	----	----	----	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6
	2 40	----	----	----	----	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7
	3 00	----	----	----	----	----	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.7
	3 20	----	----	----	----	----	----	1.0	1.0	1.0	0.9	0.9	0.9	0.8
	3 40	----	----	----	----	----	----	----	1.0	1.0	1.0	0.9	0.9	0.9
	4 00	----	----	----	----	----	----	----	----	1.0	1.0	1.0	0.9	0.9
	4 20	----	----	----	----	----	----	----	----	----	1.0	1.0	1.0	0.9
	4 40	----	----	----	----	----	----	----	----	----	----	1.0	1.0	1.0
	5 00	----	----	----	----	----	----	----	----	----	----	----	1.0	1.0
	5 20	----	----	----	----	----	----	----	----	----	----	----	----	1.0
	5 40	----	----	----	----	----	----	----	----	----	----	----	----	1.0

TABLE B

		Interval between slack and maximum current												
		<i>h. m.</i> 1 20	<i>h. m.</i> 1 40	<i>h. m.</i> 2 00	<i>h. m.</i> 2 20	<i>h. m.</i> 2 40	<i>h. m.</i> 3 00	<i>h. m.</i> 3 20	<i>h. m.</i> 3 40	<i>h. m.</i> 4 00	<i>h. m.</i> 4 20	<i>h. m.</i> 4 40	<i>h. m.</i> 5 00	<i>h. m.</i> 5 20	h. m. 5 40
Interval between slack and desired time	<i>h. m.</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>	<i>knots</i>
	0 20	0.5	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
	0 40	0.8	0.7	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
	1 00	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4
	1 20	1.0	1.0	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.5
	1 40	----	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.6
	2 00	----	----	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6
	2 20	----	----	----	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.8	0.7	0.7
	2 40	----	----	----	----	1.0	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.7
	3 00	----	----	----	----	----	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.8
	3 20	----	----	----	----	----	----	1.0	1.0	1.0	1.0	0.9	0.9	0.9
	3 40	----	----	----	----	----	----	----	1.0	1.0	1.0	1.0	0.9	0.9
	4 00	----	----	----	----	----	----	----	----	1.0	1.0	1.0	1.0	0.9
	4 20	----	----	----	----	----	----	----	----	----	1.0	1.0	1.0	0.9
	4 40	----	----	----	----	----	----	----	----	----	----	1.0	1.0	1.0
	5 00	----	----	----	----	----	----	----	----	----	----	----	1.0	1.0
	5 20	----	----	----	----	----	----	----	----	----	----	----	----	1.0
	5 40	----	----	----	----	----	----	----	----	----	----	----	----	1.0

Use Table A for all places except those listed below for Table B.

Use Table B for Cape Code Canal, Hell Gate, Chesapeake and Delaware Canal, and all stations in table 2 which are referred to them.

1. From predictions find the time of slack water and the time and velocity of maximum current (flood or ebb), one of which is immediately before and the other after the time for which the velocity is desired.
2. Find the interval of time between the above slack and maximum current, and enter the top of Table A or B with the interval which most nearly agrees with this value.
3. Find the interval of time between the above slack and the time desired, and enter the side of Table A or B with the interval which most nearly agrees with this value.
4. Find, in the Table, the factor corresponding to the above two intervals, and multiply the maximum velocity by this factor. The result will be the approximate velocity at the time desired.

TABLE 4.—DURATION OF SLACK

The predicted times of slack water given in this publication indicate the instant of zero speed, which is only momentary. There is a period on each side of the slack water, however, during which the current is so weak that for practical purposes it may be considered negligible.

The following tables give, for various maximum currents, the approximate period of time during which weak currents not exceeding 0.1 to 0.5 knot will be encountered. This duration includes the last of the flood or ebb and the beginning of the following ebb or flood, that is, half of the duration will be before and half after the time of slack water.

Table A should be used for all places except those listed below for table B.

Table B should be used for Cape Cod Canal, Hell Gate, Chesapeake and Delaware Canal, and all stations in Table 2 which are referred to them.

Duration of weak current near time of slack water

TABLE A

Maximum current	<i>Period with a speed not more than -</i>				
	<i>0.1 knot</i>	<i>0.2 knot</i>	<i>0.3 knot</i>	<i>0.4 knot</i>	<i>0.5 knot</i>
<i>Knots</i>	<i>Minutes</i>	<i>Minutes</i>	<i>Minutes</i>	<i>Minutes</i>	<i>Minutes</i>
1.0	23	46	70	94	120
1.5	15	31	46	62	78
2.0	11	23	35	46	58
3.0	8	15	23	31	38
4.0	6	11	17	23	29
5.0	5	9	14	18	23
6.0	4	8	11	15	19
7.0	3	7	10	13	16
8.0	3	6	9	11	14
9.0	3	5	8	10	13
10.0	2	5	7	9	11

TABLE B

Maximum current	<i>Period with a speed not more than -</i>				
	<i>0.1 knot</i>	<i>0.2 knot</i>	<i>0.3 knot</i>	<i>0.4 knot</i>	<i>0.5 knot</i>
<i>Knots</i>	<i>Minutes</i>	<i>Minutes</i>	<i>Minutes</i>	<i>Minutes</i>	<i>Minutes</i>
1.0	13	28	46	66	89
1.5	8	18	28	39	52
2.0	6	13	20	28	36
3.0	4	8	13	18	22
4.0	3	6	9	13	17
5.0	3	5	8	10	13
6.0	2	4	6	8	11
7.0	2	4	5	7	9
8.0	2	3	5	6	8

When there is a difference between the speeds of the maximum flood and ebb preceding and following the slack for which the duration is desired, it will be sufficiently accurate for practical purposes to find a separate duration for each maximum speed and take the average of the two as the duration of the weak current.

TABLE 5.—ROTARY TIDAL CURRENTS

EXPLANATION

Offshore and in some of the wider indentations of the coast, the tidal current is quite different from that found in the more protected bays and rivers. In these inside waters the tidal current is of the reversing type. The current sets in one direction for a period of 6 hours after which it ceases to flow momentarily and then sets in the opposite direction during the following 6 hours. The offshore tidal current, not being confined to a definite channel, changes its direction continually and never slows to a true slack water. Thus in a tidal cycle of 12 ½ hours it will have set in all directions of the compass. This type of current is referred to as a rotary current.

A characteristic feature of the rotary current is the absence of slack water. Although the current generally varies from hour to hour, this variation from greatest current to least current and back again to greatest does not give rise to a period of slack water. When the speed of the rotary tidal current is least, it is known as the minimum current, and when it is greatest it is known as the maximum current. The minimum and maximum speeds of the rotary current are related to each other in the same way as slack and strength of current. A minimum speed of the current follows a maximum speed by an interval of approximately 3 hours and followed in turn by another maximum after a further interval of 3 hours.

The following table provides the direction and speed of the rotary current for each hour at a number of offshore stations. The times and speeds are referred to predictions for a reference station in Table 1. All times are in local standard time for the secondary station.

The speeds given in the table are the average speeds for the station. The Moon when new, full, or at perigee tends to increase the speeds 15 to 20 percent above average. When perigee occurs at or near the time of new or full Moon, the current speeds will be 30 to 40 percent above average. The Moon when at first and third quarter or at apogee tend to decrease the current speeds below average by 15 to 20 percent. When apogee occurs at or near the first or third quarter Moon, the currents will be 30 to 40 percent below average. The speeds will be about average when apogee occurs at or near the time of the new or full Moon and also when perigee occurs at or near the first or third quarter Moon. (See table of astronomical data for dates of Moon phases and other data.)

The direction of the current is given in degrees, true, reading clockwise from 0° at north, and is the direction toward which the water is flowing.

The speeds and directions are for tidal current only and do not include the effect of the wind. When a wind is blowing, a wind-driven current will be set up as is superimposed on the normal tidal current. The actual current encountered will thus be a combination of the wind-driven current and the tidal current. See the chapters on "Wind-Driven Currents" and "The Combination of Currents".

As an example, in the following table the current at Nantucket Shoals is given for each hour after maximum flood at Pollock Rip Channel. Suppose it is desired to find the direction and speed of the current at Nantucket Shoals at 3:15 p.m. (15:15) on a day when the maximum flood at Pollock Rip Channel is predicted in Table 1 to occur at 13:20. The desired time is therefore 2 hours after the maximum flood at Pollock Rip Channel. From the table the tidal current at Nantucket Shoals at 2 hours is setting 015° true with an average speed of 0.8 knots. If this day is near the time of new Moon and about half way between apogee and perigee, then the distance effect of the moon will be nil and the phase effect alone will increase the speed by about 15 percent, to 0.9 knots.

Caution - Speeds from 1 ½ to 3 knots have been observed at most of the stations in this table. Near Diamond Shoal Light a speed of 4 knots has occurred.

At some offshore stations, such as those near the entrance to Chesapeake Bay, the tidal current is directed alternately toward and away from the bay entrance with intervening periods of slack water. At these stations the current is essentially a reversing current. For such places, differences for predicting the current are given in Table 2.

TABLE 5. – ROTARY TIDAL CURRENTS

Station Name	Depth	Hourly time increments												
		0	1	2	3	4	5	6	7	8	9	10	11	
		after Maximum Flood at BAY OF FUNDY ENTRANCE (Add time increment to the time of maximum flood, then subtract 1 hour to correct to standard time at the subordinate station.)												
Horse Head Island, 0.2nm ENE of	14	0.13 106	0.19 298	0.20 340	0.17 133	0.16 198	0.18 184	0.20 174	0.15 121	0.12 084	0.19 054	0.23 036	0.21 083	knots degrees
Pickering Island, north of	14	0.23 296	0.20 278	0.21 281	0.31 283	0.29 256	0.27 254	0.22 237	0.23 200	0.24 198	0.20 171	0.24 088	0.24 087	knots degrees
Swains Ledge, WSW of	14	0.39 029	0.36 040	0.39 313	0.35 296	0.29 275	0.30 141	0.38 163	0.36 171	0.37 172	0.27 034	0.27 038	0.24 035	knots degrees
Isleboro Harbor, Penobscot Bay	14	0.30 342	0.29 348	0.22 336	0.32 348	0.31 210	0.32 205	0.43 188	0.42 177	0.25 139	0.24 090	0.25 069	0.20 063	knots degrees
Mark Island, 0.3 nm North of	14	0.33 044	0.19 088	0.17 171	0.18 244	0.28 235	0.23 204	0.20 329	0.21 294	0.23 308	0.25 312	0.28 022	0.32 037	knots degrees
		After Minimum Before Flood at BOSTON HARBOR												
Ram Island, 0.2nm NNE of	10	0.03 265	0.23 265	0.23 270	0.25 282	0.32 319	0.33 333	0.31 357	0.29 067	0.27 070	0.28 073	0.26 076	0.23 073	knots degrees
Ram Island, 0.2nm southeast of	10	0.30 210	0.45 258	0.46 248	0.50 262	0.51 280	0.50 340	0.51 009	0.49 049	0.48 068	0.49 074	0.46 082	0.40 090	knots degrees
Great Pig Rocks, southeast of	10	0.29 200	0.30 212	0.32 229	0.34 247	0.37 265	0.35 284	0.34 002	0.34 042	0.34 058	0.35 065	0.36 080	0.34 086	knots degrees
Galloupes Point, 0.4nm south of	10	0.50 138	0.52 220	0.56 284	0.54 252	0.55 250	0.55 240	0.52 211	0.52 078	0.49 081	0.51 085	0.50 091	0.49 095	knots degrees
Little Hahant 0.9nm northeast of	10	0.20 306	0.21 340	0.24 228	0.25 223	0.26 200	0.26 216	0.24 290	0.23 357	0.23 059	0.21 045	0.21 037	0.20 028	knots degrees
Egg Rock, southwest of	10	0.42 213	0.45 193	0.47 175	0.46 178	0.45 222	0.44 267	0.45 330	0.44 328	0.47 335	0.42 334	0.43 337	0.40 306	knots degrees
Egg Rock, 0.2nm north of	10	0.42 221	0.43 215	0.46 213	0.46 215	0.48 219	0.49 235	0.48 221	0.50 019	0.49 009	0.47 052	0.47 055	0.45 135	knots degrees

TABLE 5.—ROTARY TIDAL CURRENTS

Station Name	Depth	Hourly time increments												
		0	1	2	3	4	5	6	7	8	9	10		11
After Minimum Before Flood at BOSTON HARBOR														
Bass Point, 0.5nm SSW of	15	0.11 191	0.51 295	0.55 303	0.50 308	0.47 313	0.46 354	0.46 010	0.48 046	0.57 089	0.66 109	0.64 121	0.51 132	knots degrees
Bass Point, 0.7nm west of	10	0.30 251	0.38 331	0.38 332	0.37 343	0.36 343	0.35 347	0.30 029	0.19 144	0.30 146	0.35 165	0.38 173	0.36 190	knots degrees
Lovell Island and Calf Island, between	10	0.34 267	0.41 261	0.35 259	0.34 235	0.39 220	0.35 199	0.32 146	0.36 069	0.41 071	0.31 030	0.31 024	0.07 024	knots degrees
Deer Island Light, 1.3nm NW of	10	0.33 007	0.36 024	0.36 060	0.40 348	0.40 063	0.45 095	0.35 081	0.35 102	0.34 104	0.35 135	0.34 158	0.29 339	knots degrees
Georges Island, 0.2nm WSW of	10	0.22 217	0.29 209	0.37 052	0.44 074	0.44 066	0.44 032	0.50 029	0.47 061	0.39 082	0.37 071	0.36 070	0.30 069	knots degrees
Georges Island, 0.2nm WSW of	20	0.15 271	0.24 231	0.28 030	0.31 076	0.34 064	0.35 029	0.40 021	0.39 049	0.28 067	0.35 056	0.32 050	0.23 044	knots degrees
Peddocks Island, east of	10	0.20 246	0.27 282	0.41 019	0.35 024	0.28 355	0.34 338	0.33 345	0.29 013	0.33 002	0.33 345	0.32 333	0.26 331	knots degrees
Peddocks island, east of	20	0.15 220	0.20 232	0.34 020	0.24 024	0.22 345	0.31 333	0.32 331	0.26 009	0.28 003	0.31 339	0.26 329	0.17 322	knots degrees
After Maximum Flood at POLLOCK RIP CHANNEL														
Georges Bank 41°50'N 66°37'W		0.9 285	1.1 304	1.2 324	1.1 341	1.0 010	0.9 043	1.0 089	1.3 127	1.6 147	1.4 172	0.9 197	0.8 232	knots degrees
Georges Bank 41°48'N 67°34'W		1.5 325	2.1 332	2.0 342	1.3 358	0.7 035	0.8 099	1.3 126	2.0 150	1.9 159	1.7 169	1.2 197	0.9 275	knots degrees
Georges Bank 41°42'N 67°37'W		1.1 316	1.3 341	1.0 356	0.8 016	0.6 043	0.8 092	1.0 122	1.1 146	1.1 170	1.0 195	1.0 215	0.9 272	knots degrees
Georges Bank 41°54'N 67°08'W		1.1 298	1.4 325	1.5 344	1.2 000	0.7 033	0.8 082	1.1 118	1.5 138	1.2 153	1.1 178	0.9 208	0.8 236	knots degrees

TABLE 5.—ROTARY TIDAL CURRENTS

Station Name	Depth	Hourly time increments															
		0	1	2	3	4	5	6	7	8	9	10		11			
After Maximum Flood at POLLOCK RIP CHANNEL																	
Georges Bank 41°41'N 67°49'W		1.6	1.8	1.4	0.8	0.3	0.9	1.5	1.7	1.7	1.7	1.1	1.1	0.8	1.2	1.2	knots degrees
Georges Bank 41°30'N 68°07'W		1.5	1.7	1.5	1.1	0.9	0.9	1.3	1.7	1.7	1.6	1.3	1.0	1.0	1.1	1.1	knots degrees
Georges Bank 41°29'N 67°04'W		1.0	1.2	1.4	1.3	1.2	1.1	1.2	1.4	1.4	1.5	1.3	1.2	1.2	1.1	1.1	knots degrees
Georges Bank 41°14'N 67°38'W		1.4	1.6	1.6	1.4	1.1	0.9	1.2	1.6	1.6	1.6	1.5	1.4	1.4	1.2	1.2	knots degrees
Georges Bank 41°13'N 68°20'W		1.5	2.0	1.4	0.8	0.6	0.7	1.0	1.3	1.3	1.4	1.5	1.3	1.3	0.9	0.9	knots degrees
Georges Bank 40°48'N 67°40'W		0.9	0.9	0.8	0.6	0.6	0.6	0.9	1.0	1.0	1.0	0.9	0.8	0.8	0.8	0.8	knots degrees
Georges Bank 40°49'N 68°34'W		1.2	1.5	1.4	1.1	0.8	0.8	1.0	1.4	1.4	1.5	1.4	1.1	1.1	0.9	0.9	knots degrees
Great South Channel, Georges Bank 41°10'N 68°56'W		0.5	0.7	1.1	1.0	0.7	0.4	0.4	0.7	0.7	1.0	1.0	0.8	0.8	0.6	0.6	knots degrees
Nantucket Shoals		0.6	0.7	0.8	0.8	0.8	0.7	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.7	knots degrees
Davis Bank, Nantucket Shoals		1.5	2.1	2.4	2.1	1.1	0.4	1.2	1.9	1.9	2.2	2.2	1.6	1.6	0.7	0.7	knots degrees
Davis Bank, Nantucket Shoals, 15 miles SE of Nantucket Island		0.9	1.2	1.3	1.1	0.8	0.9	0.8	1.2	1.2	1.1	0.9	0.7	0.7	0.7	0.7	knots degrees
Davis Bank, Nantucket Shoals, 17.5 miles SE of Nantucket Island		0.8	1.5	1.9	1.8	1.1	0.4	1.2	1.9	1.9	1.7	1.5	0.9	0.9	0.2	0.2	knots degrees
Great South Channel, Georges Bank 40°31'N 68°47'W		0.7	0.9	1.1	1.0	0.8	0.4	0.7	0.9	0.9	1.0	1.0	0.8	0.8	0.6	0.6	knots degrees

TABLE 5.—ROTARY TIDAL CURRENTS

Station Name	Depth	Hourly time increments											
		0	1	2	3	4	5	6	7	8	9	10	11
		After Maximum Flood at POLLOCK RIP CHANNEL											
Davis Bank, Nantucket Shoals, 18.5 miles SE of Nantucket Island	0.6 030	1.3 036	1.5 038	1.4 050	1.1 080	0.8 105	0.6 178	1.3 230	1.7 235	1.4 238	1.0 241	0.3 265	knots degrees
Nantucket Island, 28 miles east of	0.9 019	1.3 007	1.4 359	1.1 351	0.5 334	0.3 221	0.8 198	1.1 185	1.1 184	0.9 184	0.7 183	0.1 060	knots degrees
Monomoy Point, 23 miles east of	0.7 320	1.0 324	0.9 326	0.7 330	0.3 334	0.1 144	0.5 145	0.8 146	0.9 147	0.8 148	0.5 150	0.1 230	knots degrees
Nauset Beach Light, 5 miles NE	0.5 315	0.6 327	0.5 340	0.2 357	0.1 016	0.2 124	0.4 132	0.6 135	0.6 139	0.4 145	0.2 269	0.2 297	knots degrees
Great Round Shoal Channel entrance	1.6 032	1.4 045	1.3 068	1.1 095	0.8 140	1.2 192	1.5 210	1.5 220	1.2 235	0.9 264	0.8 303	1.2 350	knots degrees
Great Round Shoal Channel, 4 miles NE of Great Point	0.8 080	1.1 088	1.3 096	1.0 104	0.5 129	0.5 213	1.1 267	1.4 275	1.2 280	0.7 284	0.2 328	0.4 042	knots degrees
Cuttyhunk Island, 3.25 miles SW	0.4 356	0.3 015	0.2 080	0.3 123	0.5 146	0.4 158	0.4 173	0.3 208	0.2 267	0.3 306	0.3 322	0.4 335	knots degrees
Gooseberry Neck, 2 miles SSE of	0.6 052	0.4 065	0.2 108	0.3 168	0.4 210	0.5 223	0.5 232	0.3 249	0.2 274	0.2 321	0.3 016	0.5 038	knots degrees
Browns Ledge, Massachusetts	0.3 330	0.3 012	0.3 028	0.4 104	0.4 118	0.3 123	0.2 168	0.2 205	0.3 201	0.3 270	0.4 282	0.5 318	knots degrees
		After Maximum Flood at THE RACE											
Point Judith, Harbor of Refuge	0.2 197	0.2 160	0.4 151	0.5 159	0.5 146	0.5 124	0.4 109	0.2 104	0.2 090	0.1 030	0.1 336	0.1 209	knots degrees
Point Judith, 4.5 miles SW of	0.6 264	0.6 270	0.5 270	0.2 280	0.2 062	0.6 070	0.7 078	0.5 095	0.3 105	0.1 120	0.1 286	0.3 277	knots degrees
Grace Point, 2 miles NW of	0.2 304	0.2 002	0.4 028	0.6 028	0.7 037	0.6 071	0.6 086	0.4 126	0.2 137	0.1 213	0.1 256	0.1 267	knots degrees

TABLE 5.—ROTARY TIDAL CURRENTS

Station Name	Depth	Hourly time increments												
		0	1	2	3	4	5	6	7	8	9	10	11	
		After Maximum Flood at THE RACE												
Little Gull Island, 3.7 miles ESE		0.8 271	0.5 284	0.2 320	0.2 068	0.7 077	1.1 095	1.6 118	1.2 128	0.6 150	0.2 171	0.4 221	0.7 228	knots degrees
Great Round Shoal Channel		1.0 047	1.3 060	1.3 070	0.8 091	0.5 153	0.7 211	0.9 234	1.3 247	1.1 252	0.9 260	0.3 305	0.4 035	knots degrees
		After Maximum Flood at THE NARROWS, NEW YORK												
Sandy Hook Approach Lighted Horn Bouy 2A, 0.2 miles W		0.4 313	0.3 325	0.2 356	0.2 055	0.3 094	0.4 118	0.6 136	0.5 147	0.2 177	0.2 256	0.3 290	0.4 298	knots degrees
		After Maximum Flood at DELAWARE BAY ENTRANCE												
Fenwick Shoal Lighted Whistle Bouy 2		0.2 342	0.2 349	0.1 357	0.1 043	0.1 110	0.2 135	0.3 150	0.3 165	0.2 185	0.1 226	0.1 282	0.2 318	knots degrees
		After Maximum Flood at CHESAPEAKE BAY ENTRANCE												
Point Lookout, 1.5nm east of	16	0.31 197	0.26 217	0.24 242	0.24 266	0.22 290	0.22 311	0.18 330	0.10 358	0.09 073	0.13 113	0.20 152	0.29 179	knots degrees
		After Maximum Flood at CHARLESTON HARBOR												
Frying Pan Shoals, off Cape Fear		0.3 335	0.2 010	0.2 050	0.3 090	0.3 110	0.3 128	0.3 150	0.2 188	0.2 235	0.3 268	0.3 290	0.3 305	knots degrees
Cape Romain, 5 miles SE		0.2 006	0.2 038	0.3 055	0.3 067	0.3 093	0.3 114	0.2 167	0.2 212	0.3 242	0.4 244	0.3 262	0.3 292	knots degrees
Cape Romain, 6.9 miles SW		0.3 317	0.2 350	0.2 019	0.3 071	0.3 115	0.3 111	0.2 132	0.2 160	0.2 216	0.2 251	0.3 266	0.3 303	knots degrees
Capers Inlet, 1.9 miles east of		0.1 012	0.1 058	0.2 052	0.2 053	0.1 067	0.1 098	0.1 129	0.1 214	0.2 222	0.2 254	0.1 246	0.1 247	knots degrees
Capers Inlet, 3.6 miles SE of		0.2 302	0.1 357	0.1 034	0.2 017	0.2 089	0.2 094	0.2 112	0.2 116	0.1 189	0.2 249	0.2 268	0.2 282	knots degrees

TABLE 5.—ROTARY TIDAL CURRENTS

Station Name	Depth	Hourly time increments												
		0	1	2	3	4	5	6	7	8	9	10	11	
Charleston Entrance, 37 miles E		0.3 328	0.3 350	0.2 020	0.2 065	0.3 095	0.3 118	0.3 140	0.3 163	0.2 195	0.2 235	0.2 268	0.3 295	knots degrees
Charleston Lighted Whistle Buoy 2C		0.2 300	0.2 332	0.1 017	0.2 055	0.3 077	0.3 093	0.3 117	0.2 153	0.2 207	0.2 242	0.3 260	0.3 275	knots degrees
Folly Island, 2 miles east of		0.1 346	0.2 024	0.3 058	0.3 076	0.2 102	0.2 121	0.1 164	0.2 222	0.2 256	0.3 256	0.3 271	0.2 290	knots degrees
Folly Island, 3.5 miles east of		0.1 322	0.2 047	0.2 069	0.2 086	0.2 096	0.2 115	0.1 148	0.1 215	0.2 256	0.2 260	0.2 265	0.1 285	knots degrees
Martins Industry, 5 miles east of		0.4 282	0.3 293	0.1 330	0.1 030	0.3 075	0.4 092	0.5 102	0.4 110	0.2 140	0.2 200	0.3 250	0.4 271	knots degrees
After Maximum Flood at SAVANNAH RIVER ENTRANCE														
Savannah Light, 1.2 miles SE		0.3 296	0.2 308	0.1 326	0.1 045	0.2 090	0.3 107	0.3 114	0.3 123	0.2 145	0.1 213	0.2 267	0.3 283	knots degrees
After Maximum Flood at BUCKSPORT														
Islesboro Ledge, PEB0612 Bin 8	51	0.24 035	0.12 037	0.04 116	0.19 203	0.32 204	0.37 196	0.34 182	0.26 168	0.13 155	0.06 074	0.18 040	0.26 039	knots degrees
Islesboro Ledge, PEB0612 Bin 13	18.5	0.17 013	0.08 354	0.06 276	0.14 215	0.28 192	0.43 183	0.48 189	0.46 205	0.37 216	0.21 223	0.06 287	0.17 002	knots degrees

Tabular values are mean current speed and direction at specific intervals relative to the reference station.

TABLE 5.—ROTARY TIDAL CURRENTS

Fire Island Inlet, N. Y., 22 miles south of:	Tidal current is weak, averaging about 0.1 knot at strength.
<i>Fire Island Lighted Whistle Buoy 2 FI:</i>	Tidal current is weak, averaging about 0.2 knot at strength.
<i>Ambrose Light, New York Harbor entrance:</i>	Tidal current is weak, averaging about 0.2 knot at strength.
<i>Cape May, N.J., 72 miles east of:</i>	Tidal current is weak, averaging about 0.1 knot at strength.
<i>Five-Fathom Bank Northeast Lighted Whistle Buoy 2FB:</i>	Tidal current is weak, averaging about 0.2 knot at strength.
<i>Winter-Quarter Shoal Lighted Whistle Buoy 6WQS, 9.2 miles SE of, off Assateague I.:</i>	Tidal current is weak, averaging less than 0.1 knot.
<i>Cape Charles, 70 miles east of:</i>	Tidal current is weak, averaging about 0.2 knot at strength.
<i>Chesapeake Light, 4.4 miles NE of, off Chesapeake Bay entrance, Va.:</i>	Tidal current is weak and variable.
<i>Cape Lookout Shoals Lighted Whistle Buoy 14:</i>	Tidal current is weak, averaging about 0.2 knot at strength. Current during June-August usually sets eastward, average speed 0.5 knot.
<i>Ocracoke Inlet, 3.5 miles SSE of:</i>	Tidal current is weak, averaging about 0.1 knot at strength.
<i>Diamond Shoal Light, 3.9 miles SSW of:</i>	Tidal current is weak, averaging less than 0.1 knot at strength. Current during June-August usually sets northeastward, average speed 0.75 knot.
<i>Frying Pan Shoals Light, 14.3 miles NW of:</i>	Tidal current is weak, averaging about 0.2 knot at strength. Current during June-August usually sets eastward, average speed 0.5 knot.
<i>St. Johns Point, 5 miles east of, Fla:</i>	Tidal current is weak, averaging about 0.2 knot at strength.
<i>Fowey Rocks Light, 1.5 miles SW of:</i>	Tidal current is weak and variable.

THE GULF STREAM

The region where the Gulf of Mexico narrows to form the channel between Florida Keys and Cuba may be regarded as the head of the Gulf Stream. From this region the stream sets eastward and northward through the Straits of Florida, and after passing Little Bahama Bank it continues northward and then northeastward, following the general direction of the 100-fathom curve as far as Cape Hatteras. The flow in the Straits is frequently referred to as the Florida Current.

Shortly after emerging from the Straits of Florida, the stream is joined by the Antilles Current, which flows northwesterly along the open ocean side of the West Indies before uniting with the water which has passed through the straits. Beyond Cape Hatteras the combined current turns more and more eastward under the combined effects of the deflecting force of the Earth's rotation and the eastwardly trending coastline, until the region of the Grand Banks of Newfoundland is reached.

Eastward of the Grand Banks the whole surface is slowly driven eastward and northeastward by the prevailing westerly winds to the coastal waters of northwestern Europe. For distinction, this broad and variable wind-driven surface movement is sometimes referred to as the North Atlantic Drift or Gulf Stream Drift.

In general, the Gulf Stream as it issues into the sea through the Straits of Florida may be characterized as a swift, highly saline current of blue water whose upper stratum is composed of warm water.

On its western or inner side, the Gulf Stream is separated from the coastal waters by a zone of rapidly falling temperature, to which the term "cold wall" has been applied. It is most clearly marked north of Cape Hatteras but extends, more or less well defined, from the Straits to Grand Banks.

Throughout the whole stretch of 400 miles in the Straits of Florida, the stream flows with considerable speed. Abreast of Havana, the average surface speed in the axis of the stream is about 2 1/2 knots. As the cross-sectional area of the stream decreases, the speed increases gradually, until abreast of Cape Florida it becomes about 3 1/2 knots. From this point within the narrows of the straits, the speed along the axis gradually decreases to about 2 1/2 knots off Cape Hatteras, N.C. These values are for the axis of the stream where the current is a maximum, the speed of the stream decreasing gradually from the axis as the edges of the stream are approached. The speed of the stream, furthermore, is subject to fluctuations brought about by variations in winds and barometric pressure.

The following tables give the mean surface speed of the Gulf Stream in two cross sections in the Straits of Florida:

<i>Between Rebecca Shoal and Cuba</i>		<i>Between Fowey Rocks and Gun Cay</i>	
<i>Distance south of Rebecca Shoal</i>	<i>Mean surface speed observed</i>	<i>Distance east of Fowey Rocks</i>	<i>Mean Surface Speed observe</i>
Nautical miles	Knots	Nautical miles	Knots
20	0.3	8	2.7
35	0.7	11 1/2	3.5
50	2.2	15	3.2
68	2.2	22	2.7
86	0.8	29	2.1
		36	1.7

Crossing the Gulf Stream at Jupiter or Fowey Rocks, an average allowance of 2.5 knots in a northerly direction should be made for the current.

Crossing the stream from Havana, a fair allowance for the average current between 100-fathoms curves is 1.1 knots in an east-north-easterly direction.

THE GULF STREAM

From within the straits, the axis of the Gulf Stream runs approximately parallel with the 100-fathom curve as far as Cape Hatteras. Since this stretch of coast line sweeps northward in a sharper curve than does the 100-fathom line, the stream lies at varying distances from the shore. The lateral boundaries of the current within the straits are fairly well fixed, but when the stream flows into the sea the eastern boundary becomes somewhat vague. On the western side, the limits can be defined approximately since the waters of the stream differ in color, temperature, salinity, and flow from the inshore coastal waters. On the east, however, the Antilles Current combines with the Gulf Stream, so that its waters here merge gradually with the waters of the open Atlantic. Observation of the National Ocean Service indicate that, in general, the average position of the inner edge of the Gulf Stream as far as Cape Hatteras lies inside the 50-fathom curve. The Gulf Stream, however, shifts somewhat with the seasons, and is considerably influenced by the winds which cause fluctuations in its position, direction, and speed; consequently, any limits which are assigned refer to mean or average positions.

The approximate mean positions of the inner edge and axis (point where greatest speed may be found) are indicated in the following table:

Approximate mean position of the Gulf Stream

Locality	Inner Edge	Axis
North of Havana, Cuba		25
Southeast of Key West, Florida.		45
East of Fowey Rocks, Florida		10
East of Miami Beach, Florida		15
East of Palm Beach, Florida		15
East of Jupiter Inlet, Florida		20
East of Cape Canaveral, Florida	10	45
East of Daytona Beach, Florida	25	75
East of Ormond Beach, Florida.	25	75
East of St. Augustine, Florida. (coast line)	40	85
East of Jacksonville, Florida. (coast line)	55	90
Southeast of Savannah, Georgia. (coast line)	65	95
Southeast of Charleston, South Carolina. (coast line)	55	90
Southeast of Myrtle Beach, South Carolina.	60	100
Southeast of Cape Fear, North Carolina (light).	35	75
Southeast of Cape Lookout, North Carolina (light)	20	50
Southeast of Cape Hatteras, North Carolina.	10	35
Southeast of Virginia Beach, Virginia.	85	115
Southeast of Atlantic City, New Jersey	120	
Southeast of Sandy Hook, New Jersey.	150	

At the western end of the Straits of Florida the limits of the Gulf Stream are not well defined, and for this reason the location of the inner edge has been omitted for Havana, Cuba, and Key West, Florida., in the above table. Between Fowey Rocks and Jupiter Inlet the inner edge is deflected westward and lies very close to the shore line.

Along the Florida Reefs between Alligator Reef and Dry Tortugas the distance of the northerly edge of the Gulf Stream from the edge of the reefs gradually increases toward the west. Off Alligator Reef it is quite close inshore, while off Rebecca Shoal and Dry Tortugas it is possibly 15 to 20 miles south of the 100-fathom curve. Between the reefs and the northern edge of the Gulf Stream the currents are ordinarily tidal and are subject at all times to considerable modification by local winds and barometric conditions. This neutral zone varies in both length and breadth; it may extend along the reefs a greater or lesser distance than stated, and its width varies as the northern edge of the Gulf Stream approaches or recedes from the reefs.

The approximate position of the axis of the Gulf Stream for various regions is shown on the following National Ocean Service Charts: No. 11013, Straits of Florida; No. 411, South Carolina to Cuba; No. 11460, Cape Canaveral to Key West; No. 11420, Alligator Reef to Havana. Chart No. 11009 show the axis and the position of the inner edge of the Gulf Stream from Cape Hatteras to Straits of Florida.

WIND-DRIVEN CURRENTS

A wind continuing for some time will produce a current the speed of which depends on the speed of the wind, and unless the current is by some other cause, the deflective force of the Earth's rotation will cause it to set to the right of the direction of the wind in the northern hemisphere and to the left in the southern hemisphere.

The current produced at off-shore locations by local winds of various strengths and directions have been investigated from observations made at 20 lightships (some of which have since been moved) from Portland, Maine to St. John's River, Florida. The observations were made hourly and varied in length from 1 to 2 years at most of the locations to 5 years at Nantucket Shoals and 9 years at Diamond Shoal. The averages obtained are given below and may prove helpful in estimating the probable current that may result from various winds at the several locations.

Caution.—There were of course many departures from these averages of speed and direction, for the wind-driven current often depends not only on the length of time the wind blows but also on factors other than the local wind at the time and place of the current. The mariner must not, therefore, assume that the given wind will always produce the indicated current.

It should be remembered, too, that the current which a vessel experiences at any time is the resultant of the combined actions of the tidal current, the wind-driven current, and any other currents such as the Gulf Stream or currents due to river discharge.

Speed.—The table below shows the average speed of the current due to winds of various strengths.

Wind speed (mile per hour)	10	20	30	40	50
<i>Average current speed (knots) due to wind at following lightship stations:</i>					
Boston and Barnegat	0.1	0.1	0.2	0.3	0.3
Diamond Shoal and Cape Lookout Shoals	0.5	0.6	0.7	0.8	1.0
All other locations	0.2	0.3	0.4	0.5	0.6

Direction.—The position of the shore line with respect to the station influences considerably the direction of the currents due to certain winds. The following table shows for each station the average number of degrees by which the wind-driven current is deflected to the right or left (—) of the wind. Thus, at Cape Lookout Shoals the table indicates that with a north wind the wind-driven current flows on the average 030° west of south, and with an east wind it flows 029° south of west.

WIND-DRIVEN CURRENTS

Average deviation of current to right of wind direction

[A minus sign (—) indicates that the current sets to the left of the wind]

Wind from.....	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW
Old Lightship Stations	Lat.	Long.														
Portland.....	43 32	70 06	°	°	°	°	°	°	°	°	°	°	°	°	°	°
Boston.....	42 20	70 45	—	9	8	—	0	26	15	18	18	24	15	34	13	18
Pollock Rip Slue.....	41 37	69 54	6	—	21	—	—	29	—	20	—	2	—	19	—	15
Nantucket Shoals.....	40 37	69 37	44	48	—	30	—	—	—	167	70	59	36	53	20	19
Hen and Chickens.....	41 27	71 01	16	28	24	9	16	3	25	0	6	18	30	39	41	48
Brenton Reef.....	41 26	71 23	34	—	—	—	3	—	25	55	35	30	20	16	16	8
Fire Island.....	40 29	73 11	35	22	19	25	1	8	27	48	23	41	41	31	21	24
Ambrose Channel.....	40 27	73 49	36	15	8	2	—	55	40	41	31	14	—	0	25	37
Scotland.....	40 27	73 55	16	21	11	18	72	112	82	70	63	46	37	22	23	21
Barnegat.....	39 46	73 56	6	—	—	—	—	—	90	33	77	44	15	30	27	13
Northeast End.....	38 58	74 30	30	—	—	—	—	54	55	30	14	8	0	—	21	29
Overfalls.....	38 48	75 01	28	—	—	—	—	—	37	44	25	18	7	16	25	18
Winter-Quarter Shoal.....	37 55	74 56	18	—	2	—	—	—	68	28	55	54	32	31	32	45
Chesapeake.....	36 59	75 42	18	—	—	—	—	—	23	20	4	14	9	8	28	27
Diamond Shoal.....	35 05	75 20	11	—	—	—	—	—	57	38	27	26	22	18	15	22
Cape Lookout Shoals.....	34 18	76 24	30	—	—	—	—	—	40	22	7	—	—	—	—	—
Frying Pan Shoals.....	33 34	77 49	34	2	2	—	—	80	54	31	32	21	2	18	5	—
Savannah.....	31 57	80 40	12	18	6	2	9	55	48	38	26	14	—	—	—	—
Brunswick.....	31 00	81 10	17	—	—	—	—	—	43	17	7	—	—	—	—	—
St. Johns.....	30 23	81 18	3	—	—	—	—	—	23	2	6	—	—	—	—	—
			—	—	—	—	—	—	26	27	1	16	—	—	6	8

THE COMBINATION OF CURRENTS

In determining from the current tables the speed and direction of the current at any time, it is frequently necessary to combine the tidal current with the wind-driven current. The following methods indicate how the resultant of two or more currents may be easily determined.

Currents in the same direction.—When two or more currents set in the same direction it is a simple matter to combine them. The resultant current will have a speed which is equal to the sum of all the currents and it will set in the same direction.

For example, a vessel is near the Nantucket Shoals station at a time when the tidal current is setting 120° with a speed of 0.6 knot, and at the same time a wind of 40 miles per hour is blowing from the west; What current will the vessel be subject to at that time? Since a wind of 40 miles per hour from the west will give rise to a current setting 120° with a speed of 0.5 knot, the combined tidal and wind-driven currents will set in the same direction (120°) with a speed of $0.6 + 0.5 = 1.1$ knots.

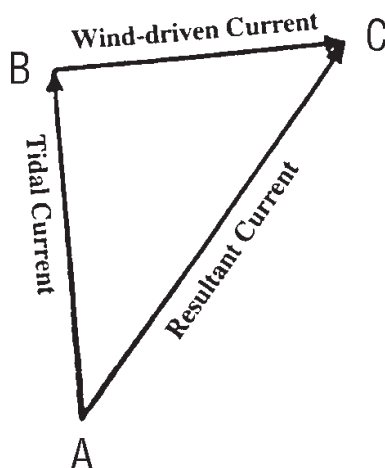
Currents in opposite directions.—The combination of currents setting in opposite directions is likewise a simple matter. The speed of the resultant current is the difference between the opposite setting currents, and the direction of the resultant current is the same as that of the greater current.

As an example, let it be required to determine the speed of the current at the Nantucket Shoals station when the tidal current is setting 205° with a speed of 0.8 knot, and when a wind of 40 miles per hour is blowing from the south. The current produced by a wind of 40 miles per hour from the south would set 025° with a speed of 0.5 knot. The tidal and wind-driven currents, therefore, set in opposite directions, the tidal current being the stronger. Hence, the resultant current will set in the direction of the tidal current (205°) with a speed of $0.8 - 0.5 = 0.3$ knot.

THE COMBINATION OF CURRENTS

Currents in different directions.—The combination of currents setting at arbitrary angles is best solved by a graphical method. Taking the combination of two currents as the simplest case, draw a line whose direction and length (to a suitable scale) represent the direction and speed of one of the currents to be combined. From this line draw another (to the same scale) representing the direction and speed of the second current. The line joining the origin of the first line with the end of the second line represents the direction and speed of the combined current.

As an example, take Nantucket Shoals station at a time when the tidal current is 0.7 knot setting 355° and a wind of 50 miles per hour is blowing from the west-southwest. The wind-driven current, according to the preceding chapter, would therefore be about 0.6 knot setting 085° .



Combination of tidal current and wind-driven current

Using a scale of 2 inches to represent 1 knot, draw from point A, the origin in the diagram above, the line AB 1.4 inches in length directed 355° to represent the tidal current. From point B draw the line BC 1.2 inches in length directed 085° to represent the wind-driven current. The line AC represents the resultant current, which on being measured, is found to be about 1.8 inches in length directed 035° . Hence, the combined current sets 35° with a speed of 0.9 knot.

The combination of three or more currents is made in the same way as above, for example, the third current to be combined being drawn from the point C. The resultant current is given by joining the origin with the end of the last line. For drawing the lines, a parallel rule and compass rose will be found convenient. A protractor or polar coordinate paper may also be used.

CURRENT DIAGRAMS

EXPLANATION

“Current diagram” is a graphic table that shows the velocities of the flood and ebb currents and the times of slack and strength over a considerable stretch of the channel of a tidal waterway. At definite intervals along the channel the velocities of the current are shown with reference to the times of turning of the current at some reference station. This makes it a simple matter to determine the approximate velocity of the current along the channel for any desired time.

In using the diagrams, the desired time should be converted to hours before or after the time of the nearest predicted slack water at the reference station.

Besides showing in compact form the velocities of the current and their changes through the flood and ebb cycles, the current diagram serves two other useful purposes. By its use the mariner can determine the most advantageous time to pass through the waterway to carry the most favorable current and also the speed and direction of the current that will be encountered in the channel at any time.

Each diagram represents average durations and average velocities of flood and ebb. The durations and velocities of flood and ebb vary from day to day. Therefore predictions for the reference station at times will differ from average conditions and when precise results are desired the diagrams should be modified to represent conditions at such particular times. This can be done by changing the width of the shaded and unshaded portions of the diagram to agree in hours with the durations of flood and ebb, respectively, as given by the predictions for that time. The speeds in the shaded area should then be multiplied by the ratio of the predicted flood speed to the average flood speed (maximum flood speed given opposite the name of the reference station on the diagram) and the speeds in the unshaded area by the ratio of the predicted ebb speed to the average ebb speed.

In a number of cases approximate results can be obtained by using the diagram as drawn and modifying the final result by the ratio of speeds as mentioned above. Thus, if the diagram in a particular case gives a favorable flood speed averaging about 1.0 knot and the ratio of the predicted flood speed to the average flood speed is 0.5 the approximate favorable current for the particular time would be $1.0 \times 0.5 = 0.5$ knot.

CURRENT DIAGRAMS

VINEYARD AND NANTUCKET SOUNDS EXPLANATION OF CURRENT DIAGRAM

The current diagram on the opposite page represents average conditions of the surface currents along the middle of the channel from Gay Head to the east end of Pollock Rip Channel, the scale being too small to show details.

Easterly streams are designated "Flood" and westerly streams "Ebb." The small figures in the diagram denote the speed of the current in knots and tenths. The times are referred to slack waters at Pollock Rip Channel (Butler Hole), daily predictions for which are given in Table 1 of these current tables.

The speed lines are directly related to the diagram. By transferring to the diagram the direction of the speed line which corresponds to the ship's speed, the diagram will show the general direction and speed of the current encountered by the vessel in passing through the sounds or the most favorable time, with respect to currents, for leaving any place shown on the left margin.

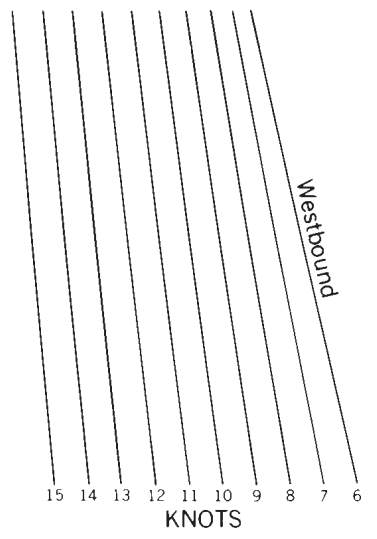
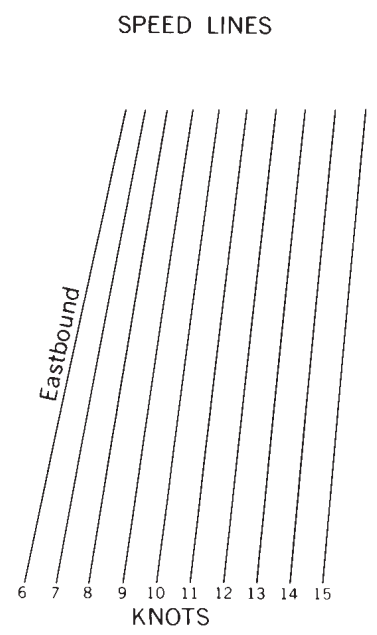
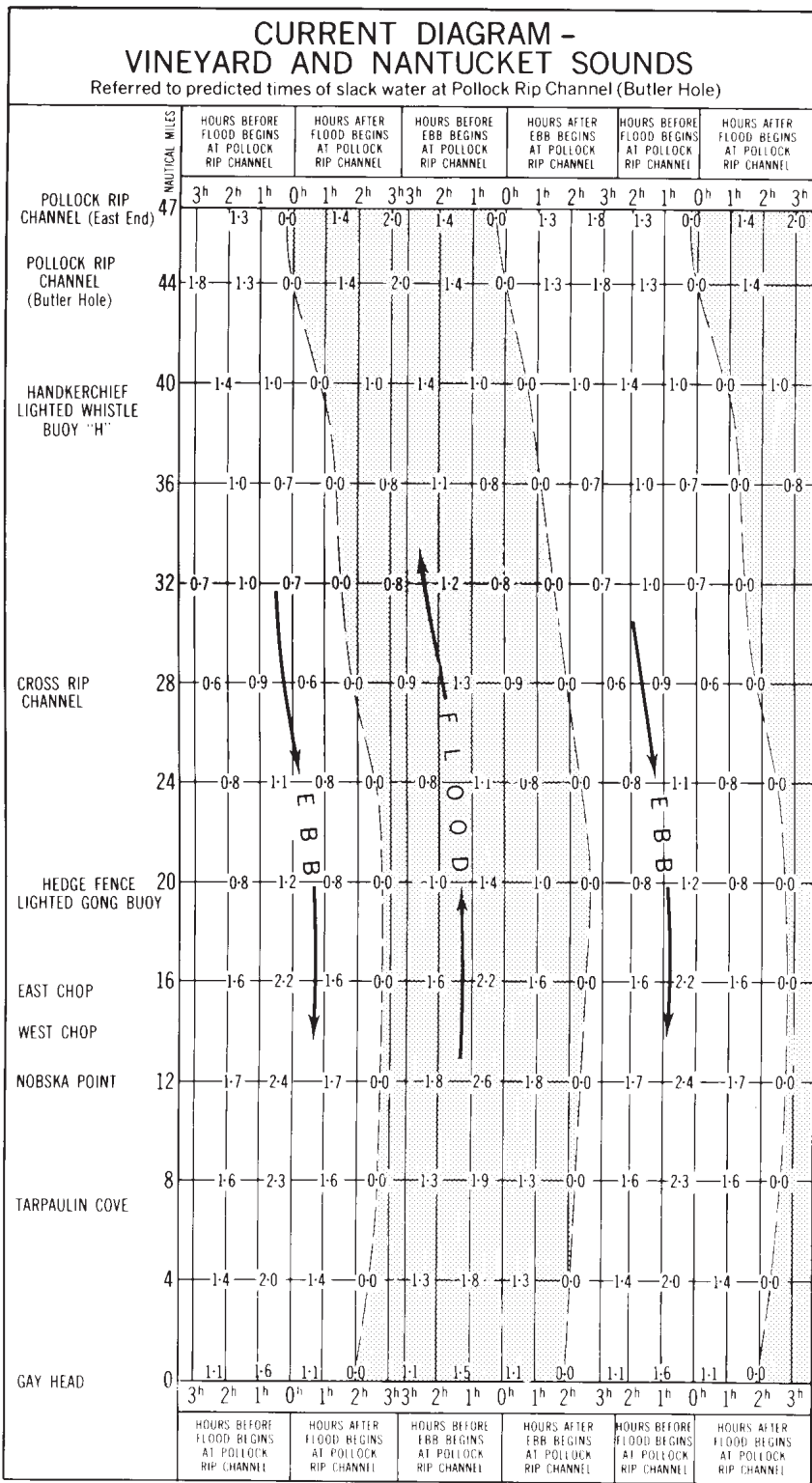
To determine speed and direction of current.—With parallel rulers transfer to the diagram the direction of the speed line corresponding to normal speed of vessel, moving edge of ruler to the point where the horizontal line representing place of departure intersects the vertical line representing the time of day in question. If the ruler's edge lies within the shaded portion of the diagram, a flood current will be encountered; if within the unshaded, an ebb current; and if along the boundary of both, slack water. The figures on the diagram along the edge of the ruler will show the speed of the current encountered at any place indicated on the left margin of the diagram.

Example.—A 12-knot vessel bound westward enters Pollock Rip Channel at 0700 of a given day, and it is desired to ascertain the speed and direction of the current which will be encountered on its passage through the sounds. Assuming that on the given day ebb begins at Pollock Rip Channel at 0508 and flood begins at 1120, the time 0700 will be about 2 hours after ebb begins. With parallel rulers transfer to the diagram the 12-knot speed line "Westbound," placing edge of ruler on the point where the vertical line "2 hours after ebb begins at Pollock Rip Channel" intersects the horizontal 47-mile line which is the starting point. It will be found that the edge of the ruler passes through the unshaded portion of the diagram, the speeds along the edge averaging about 1.4 knots. The vessel will, therefore, have a favorable ebb current averaging about 1.4 knots all the way to Gay Head. It will also be seen that the edge of the ruler crosses the horizontal 16-mile line (at East Chop) about halfway between the figures 1.6 and 2.2. Therefore, when passing the vicinity of East Chop she will have a favorable current of almost 2 knots.

To determine the time of a favorable current for passing through the sounds.—With parallel rulers transfer to the diagram the direction of the speed line corresponding to normal speed of vessel, moving the ruler over the diagram until its edge runs as nearly as possible through the general line of largest speeds of shaded portion if eastbound and unshaded portion if westbound, giving consideration only to that part of the diagram which lies between place of departure and destination. An average of the figures along the edge of the ruler will give the average strength of current. The time (before or after flood begins or ebb begins at Pollock Rip Channel) for leaving any place shown on the left margin will be indicated vertically above the point where the ruler cuts a line drawn horizontally through the name of the place in question.

Example.—A 12-knot vessel will leave Gay Head for Pollock Rip Channel on a day when flood begins at Pollock Rip Channel at 0454 and ebb begins at 1104. At what time should she get under way so as to carry the most favorable current all the way through the sounds?

Place parallel rulers along the 12-knot speed line "Eastbound." Transfer the direction to the shaded portion of the diagram and as near as possible to the axis so as to include the greatest possible number of larger current speeds. It will be found that the edge of the ruler cuts the horizontal line at Gay Head at the point representing "3 hours after flood begins at Pollock Rip Channel," and that the average of the currents along the edge of rulers is about 0.8 knot in a favorable direction. For the given day flood begins at Pollock Rip Channel at 0454; hence, if the vessel leaves Gay Head 3 hours later, or about 0754, she will average a favorable current of almost 1 knot all the way.



CURRENT DIAGRAMS

EAST RIVER, NEW YORK EXPLANATION OF CURRENT DIAGRAM

The current diagram on the opposite page represents average conditions of the surface currents along the middle of the channel between Governors Island and Throgs Neck, the scale being too small to show details. Eddies, of more or less violence, occur in numerous localities in the East River, but as a general rule the currents follow the channels.

On the diagram northerly and easterly streams are designated as "Flood" currents and westerly and southerly streams as "Ebb" currents. The small figures on the diagram denote the speed of the current in knots and tenths. The times are referred to slack waters at Hell Gate, daily predictions for which are given in Table 1 of these current tables.

The speed lines are directly related to the diagram. By their use the speed and general direction of the current encountered by a vessel passing through the river may be determined; also the time of a favorable current for leaving any place shown on the left margin of the diagram may be found.

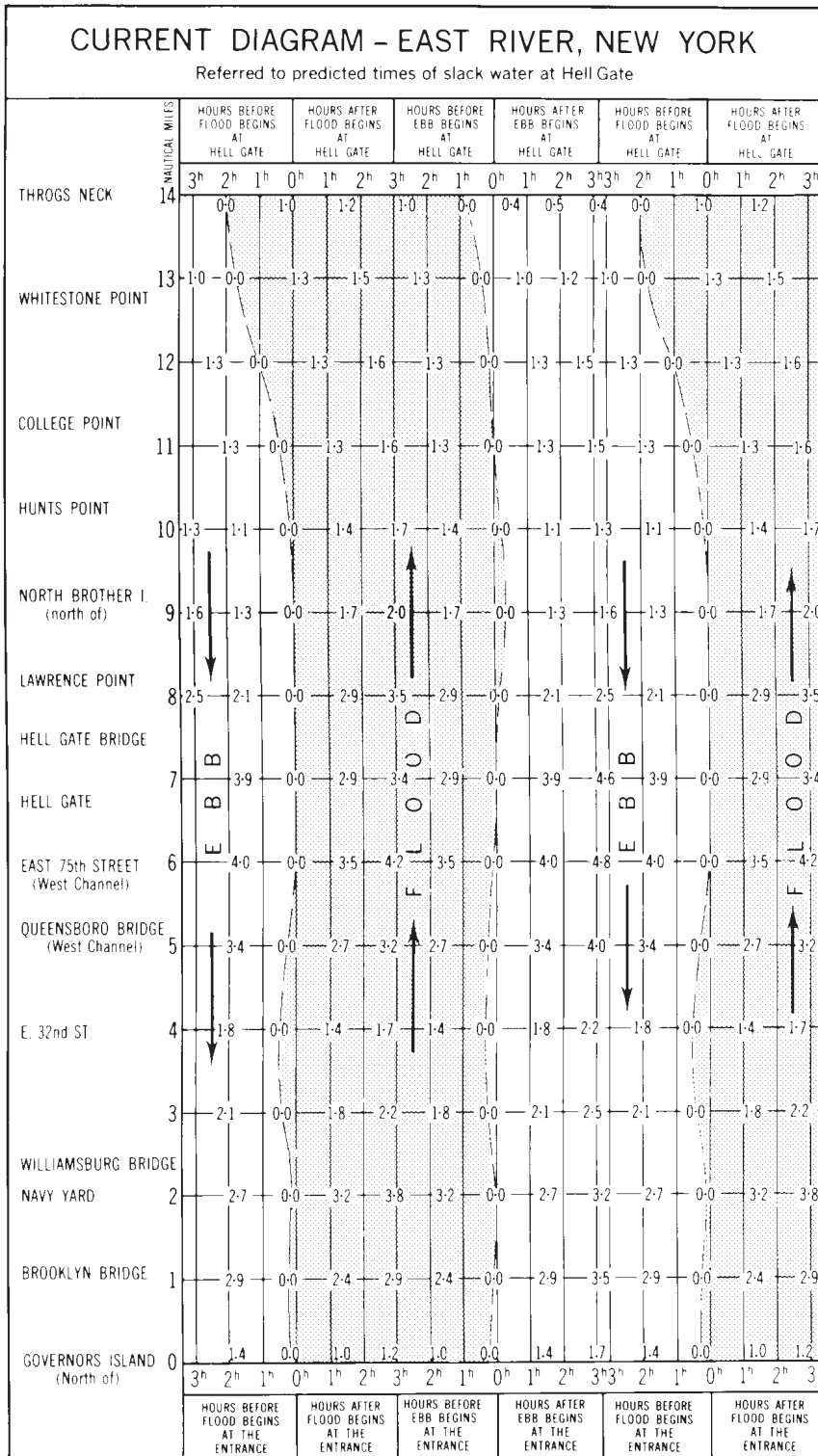
To determine the speed and direction of the current.—With parallel rulers transfer to the diagram the direction of the speed line corresponding to the normal speed of vessel, placing edge of ruler opposite the place of departure on the time before or after flood begins or ebb begins at Hell Gate that corresponds to the time of day desired. If the ruler's edge lies along the shaded portion of the diagram, a flood current will be encountered; if along the unshaded, an ebb current; and if along the boundary of both, slack water. The figures on the diagram along the edge of the ruler will show the speed of the current encountered at any place along the course indicated by the names on the left margin of diagram.

Example.—A 12-knot vessel passes Throgs Neck for Governors Island at 0820 of a given day and it is desired to ascertain the speed and direction of the current which will be encountered in passing through East River. Assuming that on the given day ebb begins at Hell Gate at 0614 and flood begins at 1245, the time 0820 will be about 2 hours after ebb begins. With parallel rulers transfer to the diagram the 12-knot speed line "Southbound", placing edge of ruler at the top in the column "Hours after ebb begins at Hell Gate" and intersecting 2h. It will be found that the edge of the ruler passes through strength of current in the unshaded portion of diagram averaging about 2.4 knots. The vessel will, therefore, have a favorable current averaging about 2.4 knots all the way.

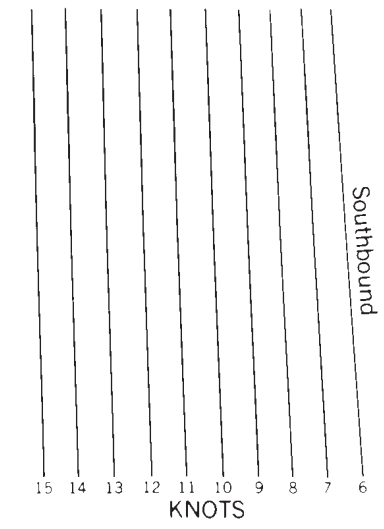
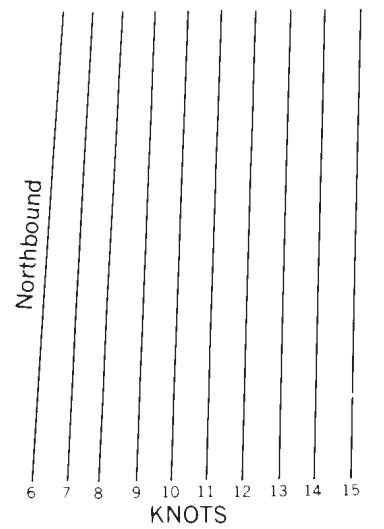
To determine the time of a favorable current for passing through the East River.—With parallel rulers transfer to the diagram the direction of the speed line corresponding to normal speed of vessel, moving the ruler over the diagram until its edge runs as nearly as possible through the general line of greatest current of unshaded portion if bound westward and southward, and shaded portion if bound northward and eastward. An average of the figures along edge of ruler will give average strength of current. The time (before or after flood begins or ebb begins at Hell Gate) for leaving any place on the left margin of diagram will be found vertically above the point where the parallel ruler cuts the horizontal line opposite the name of the place in question.

Example.—A 12-knot vessel in New York Harbor desires to pass through the East River in the afternoon of a day when flood begins at Hell Gate at 1404 and ebb begins at 1934. At what time should she get under way as to carry the most favorable current all the way to Throgs Neck?

Place parallel rulers along the 12-knot speed line "Northbound." Transfer this direction to the shaded portion of diagram so as to include the greatest number of larger current speeds. It will be found that the ruler's edge cuts the horizontal line at Governors Island about vertically under "2 1/2 hours after flood begins at Hell Gate", and the average of the speeds along the edge of the ruler is about 2.3 knots. For the given day flood begins in Hell Gate at 1404 hence, if the vessel leaves Governors Island about 2 1/2 hours later, or 1630 on that day, she will have a favorable current, averaging about 2.3 knots all the way.



SPEED LINES



CURRENT DIAGRAMS

NEW YORK HARBOR VIA AMBROSE CHANNEL EXPLANATION OF CURRENT DIAGRAM

The current diagram on the opposite page represents average conditions of the surface currents along the middle of the channel from Ambrose Channel entrance to Spuyten Duyvil, the scale being too small to show details.

Northerly streams are designated "Flood" and southerly streams "Ebb." The small figures in the diagram denote the speed of the current in knots and tenths. The times are referred to slack waters at The Narrows, daily predictions for which are given in Table 1 of these current tables.

The speed lines are directly related to the diagram. By transferring to the diagram the direction of the speed line which corresponds to the ship's speed, the diagram will show the general direction and speed of the current encountered by the vessel on entering or leaving the harbor or the most favorable time, with respect to currents, for leaving any place shown on the left margin.

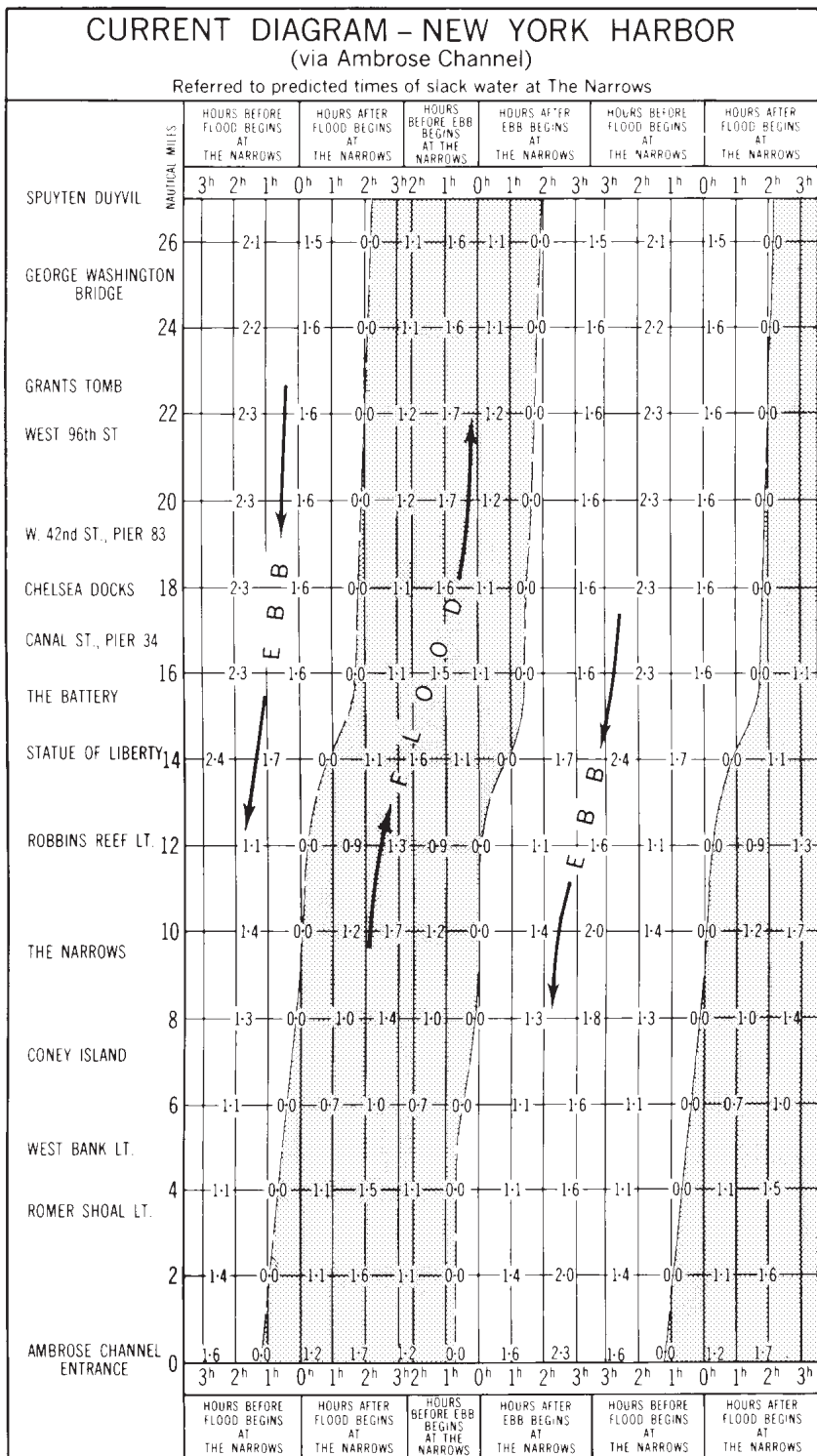
To determine speed and direction of current.—With parallel rulers transfer to the diagram the direction of the speed line corresponding to normal speed of vessel, moving edge of ruler to the point where the horizontal line representing place of departure intersects the vertical line representing the time of day in question. If the ruler's edge lies within the shaded portion of the diagram, a flood current will be encountered; if within the unshaded, an ebb current; and if along the boundary of both, slack water. The figures on the diagram along the edge of the ruler will show the speed of the current encountered at any place indicated on the left margin of the diagram.

Example.—A 10-knot vessel enters Ambrose Channel about 1040 of a given day. Flood begins at The Narrows at 0835 and ebb begins at 1420. The time 1040 will be about 2 hours after flood begins. With parallel rulers transfer to the diagram the 10-knot speed line "Northbound," placing edge of ruler on the point where the vertical line "2 hours after flood begins" intersects the horizontal 0-mile line which is the starting point. It will be found that the edge of the ruler passes through the shaded portion of the diagram, the speeds along the edge of the ruler from Ambrose Channel entrance to Chelsea Docks averaging about 1.4 knots. The vessel will, therefore, have a favorable flood current averaging about 1.4 knots all the way to Chelsea Docks.

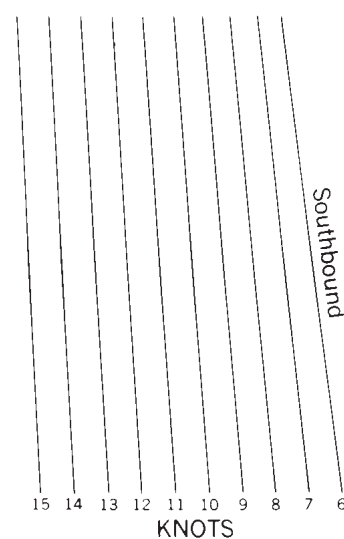
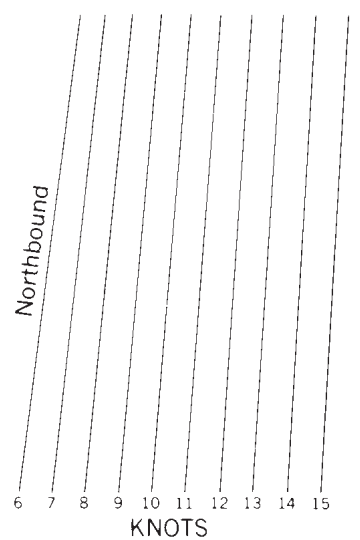
To determine the time of a favorable current for leaving or entering the harbor.—With parallel rulers transfer to the diagram the direction of the speed line corresponding to normal speed of vessel, moving the ruler over the diagram until its edge runs as nearly as possible through the general line of largest speeds of shaded portion if northbound and unshaded portion if southbound, giving consideration only to that part of the diagram which lies between place of departure and destination. An average of the figures along the edge of the ruler will give the average strength of current. The time (before or after flood or ebb begins at The Narrows) for leaving any place shown on the left margin will be indicated vertically above the point where the ruler cuts a line drawn horizontally through the name of the place in question.

Example.—A 10-knot vessel will leave Chelsea Docks on a day when flood begins at The Narrows at 0804 and ebb begins at 1338. At what time should she get under way so as to carry the most favorable current all the way to Ambrose Channel entrance?

Place parallel rulers along the 10-knot speed line "Southbound." Transfer the direction to the unshaded portion of the diagram as near as possible to the axis so as to include the greatest possible number of larger current speeds on the portion of the chart below Chelsea Docks. It will be found that the edge of the ruler cuts the horizontal line at Chelsea Docks at the point representing "2½ hours after ebb begins at The Narrows," and that the average of the currents along the edge of the ruler is about 1.5 knots in a favorable direction. For the given day, ebb begins at The Narrows at 1338; hence, if the vessel leaves Chelsea Docks 2½ hours later, or about 1608, she will average a favorable current of about 1.5 knots all the way to Ambrose Channel entrance.



SPEED LINES



CURRENT DIAGRAMS

**DELAWARE BAY AND RIVER
EXPLANATION OF CURRENT DIAGRAM**

This current diagram represents average conditions of the surface currents along the middle of the channel between Bristol and Delaware Bay Entrance, the scale being too small to show details.

Northerly streams are designated "Flood" and Southerly streams "Ebb." The small figures in the diagram denote the speed of the current in knots and tenths. The times are referred to slack waters at Delaware Bay Entrance, daily predictions for which are given in Table 1 of these current tables.

The speed lines are directly related to the diagram. By transferring to the diagram the direction of the speed line which corresponds to the ship's speed, the diagram will show the general direction and speed of the current encountered by the vessel in passing up or down the bay and river or the most favorable time, with respect to currents, for leaving any place shown in the left margin.

To determine speed and direction of current.—With parallel rulers transfer to the diagram the direction of the speed line corresponding to the normal speed of vessel, moving edge of ruler to the point where the horizontal line representing place of departure intersects the vertical line representing the time in question. If the ruler's edge lies within the shaded portion of the diagram, a flood current will be encountered; if within the unshaded, an ebb current, and if along the boundary of both, slack water. The figures in the diagram along the edge of the ruler will show the speed of the current encountered at any place indicated in the left margin of the diagram.

Example.—A 15-knot vessel bound southward leaves Philadelphia (Chestnut Street) at 0330 of a given day and it is desired to ascertain the speed and direction of the current which will be encountered between Philadelphia and Delaware Bay Entrance. Assuming that on the given day flood begins at Delaware Bay Entrance at 0436 and ebb begins at 1038, the time 0330 will be about 1 hour before flood begins. With parallel rulers transfer to the diagram the 15-knot speed line "Southbound" placing the edge of ruler on the intersection of the vertical line "1 hour before flood begins at Delaware Bay Entrance" and a horizontal line through Philadelphia (Chestnut Street) which is the starting point. It will be found that the edge of the ruler passes through an unshaded (ebb) portion with an average speed of about 1.3 knots from Philadelphia to the vicinity of Arnold Point, and the rest of the way through a shaded (flood) portion with an average speed of about 0.8 knot. The vessel will, therefore, have a favorable current averaging about 1.3 knots to the vicinity of Arnold Point and an unfavorable current averaging about 0.8 knot the rest of the way to Delaware Bay Entrance.

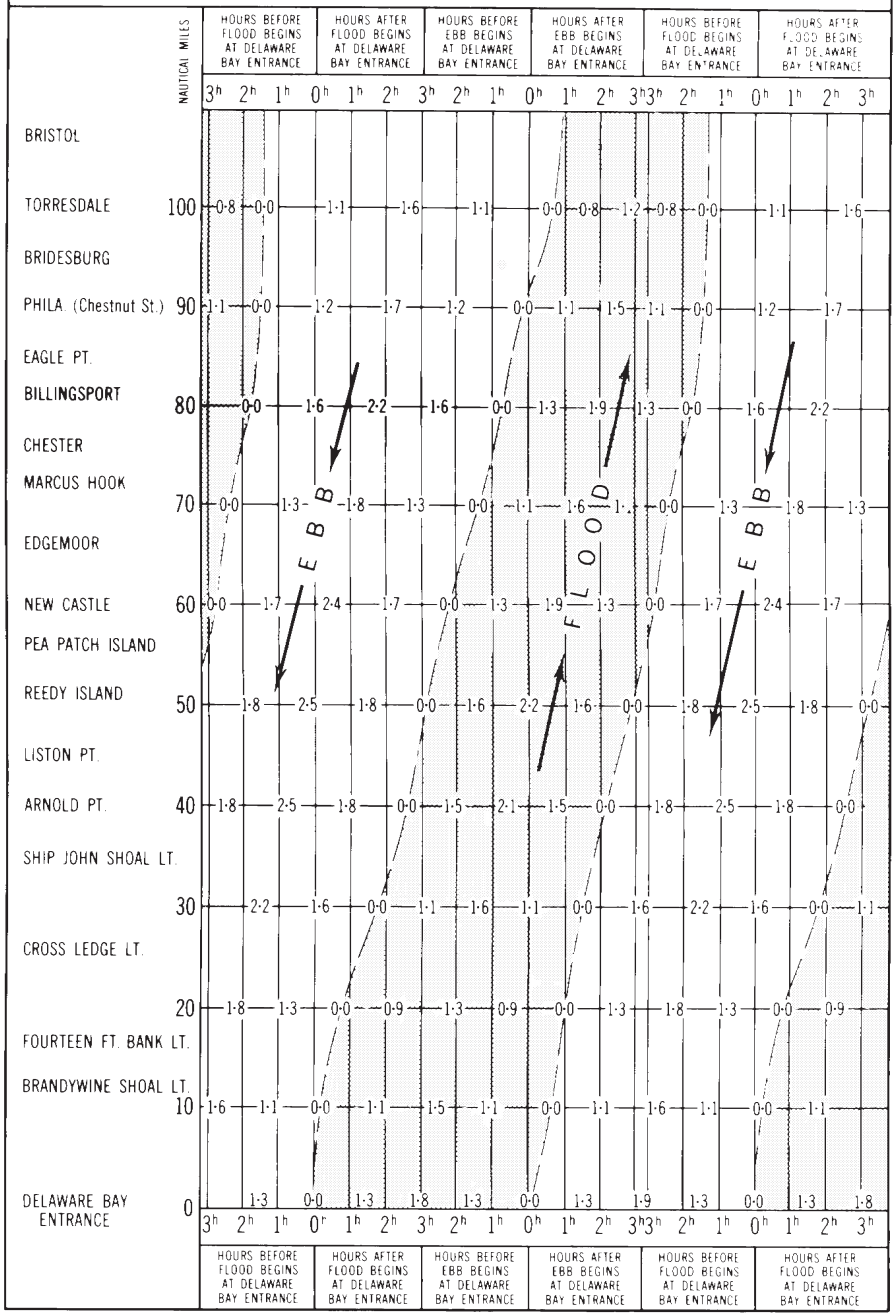
To determine the time of a favorable current for passing up or down the bay and river.—With parallel rulers transfer to the diagram the direction of the speed line corresponding to normal speed of vessel, moving the ruler over the diagram until its edge runs as nearly as possible through the general line of largest speeds of shaded portion if northbound or unshaded portion if southbound giving consideration only to that part of the diagram which lies between places of departure and destination. An average of the figures along edge of ruler will give the average speed of current. The time (before or after flood begins or ebb begins at Delaware Bay Entrance) for leaving any place shown in the left margin will be indicated vertically above or below the point where the ruler cuts a line drawn horizontally through the place in question.

Example.—A 12-knot vessel will leave Delaware Bay Entrance on a day when flood begins at 0505 and ebb begins at 1112. At what time should she get under way so as to carry the most favorable current all the way to Philadelphia? With parallel rulers transfer the direction of 12-knot speed line "Northbound" to the shaded portion of diagram and as near as possible to the axis so as to include the greatest number of larger speeds. The edge of the ruler will cut the horizontal line at Delaware Bay Entrance near the vertical line "2 hours after flood begins at Delaware Bay Entrance" and the speeds along the ruler's edge will average about 1.7 knots. On the given day flood begins at Delaware Bay Entrance at 0505, hence, if the vessel leaves about 2 hours later, i.e., about 0700, she will have a favorable current averaging about 1.7 knots all the way.

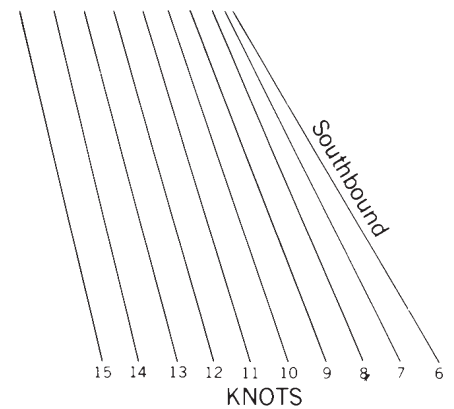
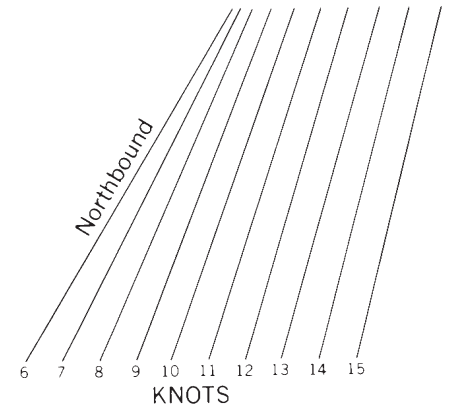
Note.—It is readily seen by transferring southbound speed lines to this diagram that southbound vessels can carry a favorable current for about 50 miles only.

CURRENT DIAGRAM - DELAWARE BAY AND RIVER

Referred to predicted times of slack water at Delaware Bay Entrance



SPEED LINES



CURRENT DIAGRAMS

CHESAPEAKE BAY EXPLANATION OF CURRENT DIAGRAM

This current diagram represents average conditions of the surface currents along the middle of the channel from Cape Henry Light to Baltimore, the scale being too small to show details.

Northerly streams are designated "Flood" and southerly streams "Ebb." The small figures in the diagram denote the speed of the current in knots and tenths. The times are referred to slack waters at Chesapeake Bay Entrance, daily predictions for which are given in Table 1 of these current tables.

The speed lines are directly related to the diagram. By transferring to the diagram the direction of the speed line which corresponds to the ship's speed, the diagram will show the general direction and speed of the current encountered by the vessel in passing up or down the bay or the most favorable time, with respect to currents, for leaving any place shown in the left margin.

To determine speed and direction of current.—With parallel rulers transfer to the diagram the direction of the speed line corresponding to the normal speed of vessel, moving edge of ruler to the point where the horizontal line representing place of departure intersects the vertical line representing the time in question. If the ruler's edge lies within the shaded portion of the diagram, a flood current will be encountered; if within the unshaded, an ebb current, and if along the boundary of both, slack water. The figures in the diagram along the edge of the ruler will show the speed of the current encountered at any place indicated in the left margin of the diagram.

Example.—A 12-knot vessel bound for Baltimore passes Cape Henry Light at 1430 of a given day, and it is desired to ascertain the speed and direction of the current which will be encountered. Assuming that on the given day flood begins at Chesapeake Bay entrance at 1256 and ebb begins at 1803, the time 1430 will be about 1½ hours after flood begins. With parallel rulers transfer to the diagram the 12-knot speed line "Northbound," placing edge of ruler so that it will cross the horizontal line opposite Cape Henry at a point "1½ hours after flood begins at the entrance." It will be found that the edge of the ruler passes through strength of current in the shaded portion of the diagram averaging about 0.7 knot. The vessel will, therefore, have a favorable current averaging about 0.7 knot all the way to Baltimore.

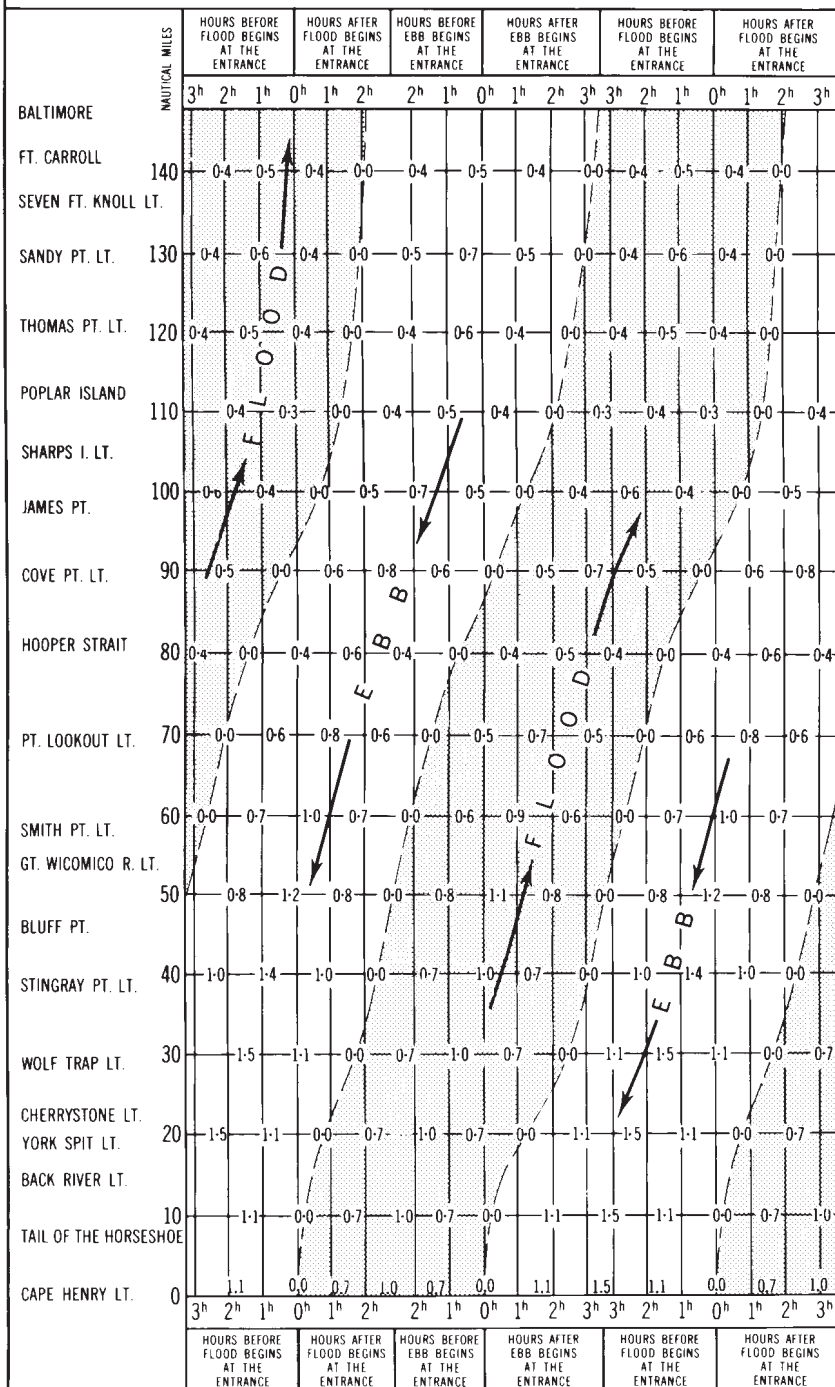
To determine the time of a favorable current for passing through the bay.—With parallel rulers transfer to the diagram the direction of the speed line corresponding to normal speed of vessel, moving the ruler over the diagram until its edge runs approximately through the general line of greatest current of unshaded portion if southbound and shaded portion if northbound. An average of the figures along edge of ruler will give average strength of current. The time (before or after ebb or flood begins at the entrance) for leaving any place in the left margin of diagram will be found vertically above the point where the parallel ruler cuts the horizontal line opposite the place in question.

Example.—A 12-knot vessel in Baltimore Harbor desires to leave for Cape Henry Light on the afternoon of a day when flood begins at Chesapeake Bay Entrance at 1148 and ebb begins at 1718. At what time should she get under way so as to carry the most favorable current?

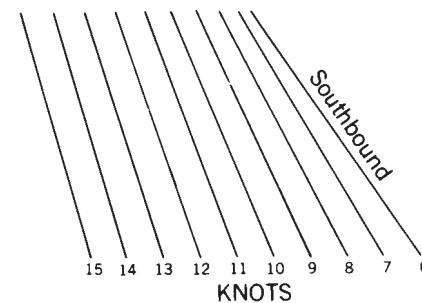
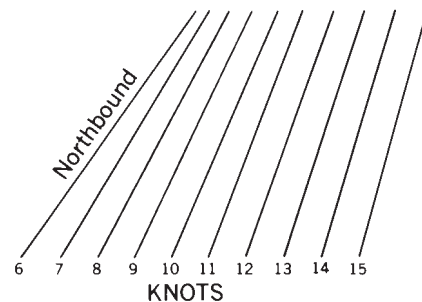
Place parallel rulers along the 12-knot speed line "Southbound." Transfer this direction to the diagram and move it along so as to include the greatest possible number of larger current speeds in the unshaded portion of the diagram. The most favorable time for leaving Baltimore thus found is about 1 hour after flood begins at the entrance, or about 1248. There will be an unfavorable current of about 0.2 knot as far as Seven Foot Knoll Light; after passing this light there will be an average favorable current of about 0.3 knot as far as Cove Point Light; from Cove Point Light to Bluff Point a contrary current averaging about 0.3 knot will be encountered; from Bluff Point to Tail of the Horseshoe there will be an average favorable current of about 0.9 knot; and from Tail of the Horseshoe to Cape Henry an average contrary current of about 0.2 knot will again be encountered.

CURRENT DIAGRAM - CHESAPEAKE BAY

Referred to predicted times of slack water at Chesapeake Bay Entrance



SPEED LINES



PUBLICATIONS RELATING TO TIDES AND TIDAL CURRENTS

TIDE TABLES

Advance information relative to the rise and fall of the tide is given in annual tide tables. These tables include the predicted times and heights of high and low waters for every day in the year for a number of reference stations and differences for obtaining similar predictions for numerous other places.

Tide Tables, Central and Western Pacific Ocean and Indian Ocean.

Tide Tables, East Coast of North and South America (Including Greenland).

Tide Tables, Europe and West Coast of Africa (Including the Mediterranean Sea).

Tide Tables, West Coast of North and South America (Including the Hawaiian Islands).

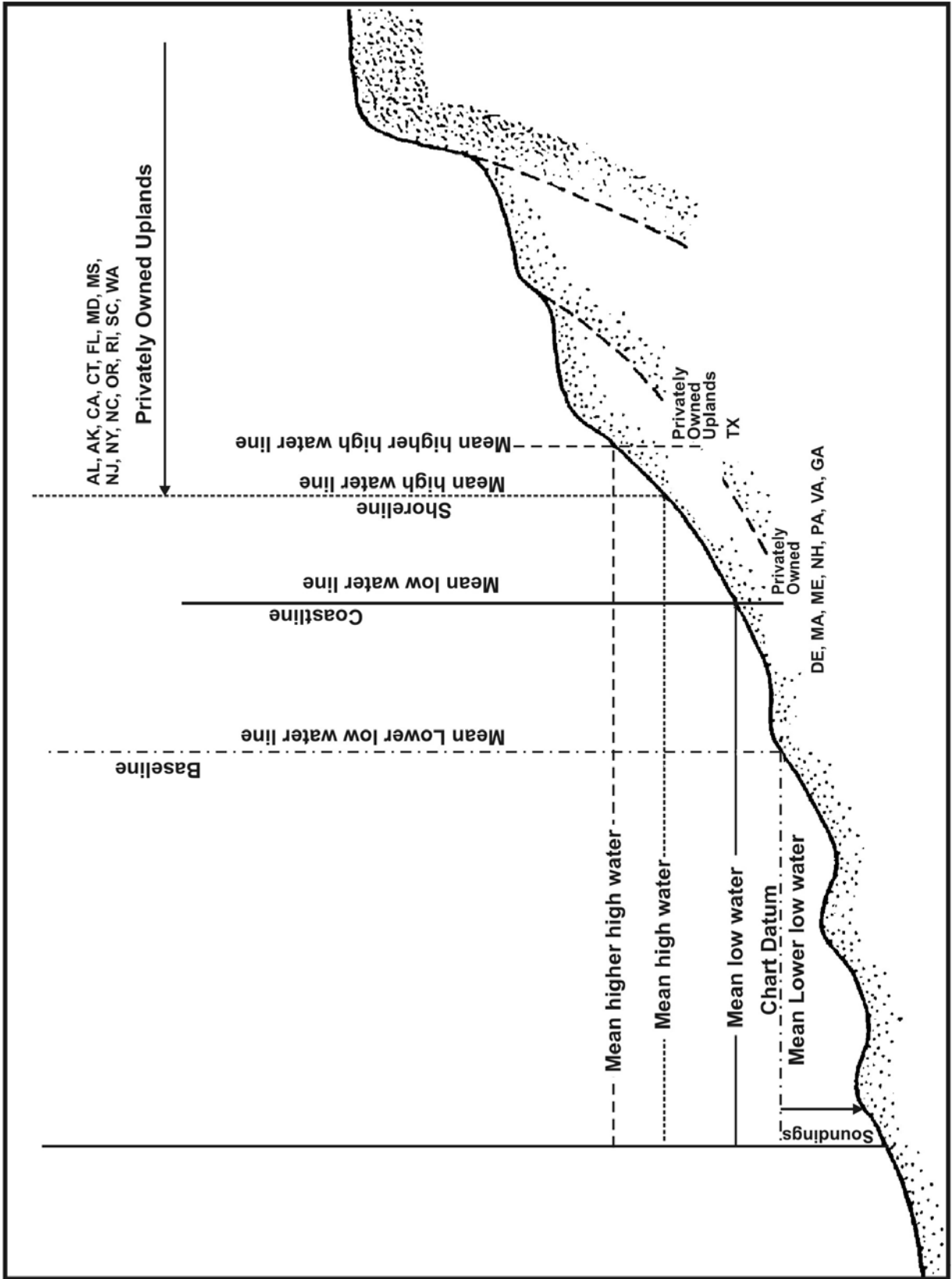
TIDAL CURRENT TABLES

Accompanying the rise and fall of the tide is a periodic horizontal flow of the water known as the tidal current. Advance information relative to these currents is made available in annual tidal current tables which include daily predictions of the times of slack water and the times and velocities of strength of flood and ebb currents for a number of waterways together with differences for obtaining predictions for numerous other places.

Tidal Current Tables, Atlantic Coast of North America.

Tidal Current Tables, Pacific Coast of North America and Asia.

OFFICIAL U.S. DATUMS



GLOSSARY OF TERMS

- ANNUAL INEQUALITY**—Seasonal variation in the water level or current, more or less periodic, due chiefly to meteorological causes.
- APOGEAN TIDES OR TIDAL CURRENTS**—Tides of decreased range or currents of decreased speed occurring monthly as the result of the Moon being in apogee (farthest from the Earth).
- AUTOMATIC TIDE GAGE**—An instrument that automatically registers the rise and fall of the tide. In some instruments, the registration is accomplished by recording the heights at regular intervals in digital format, in others by a continuous graph in which the height versus corresponding time of the tide is recorded.
- BENCH MARK (BM)**—A fixed physical object or marks used as reference for a vertical datum. A *tidal bench mark* is one near a tide station to which the tide staff and tidal datums are referred. A *Geodetic bench mark* identifies a surveyed point in the National Geodetic Vertical Network.
- CHART DATUM**—The tidal datum to which soundings on a chart are referred. It is usually taken to correspond to low water elevation of the tide, and its depression below mean sea level is represented by the symbol Zo.
- CURRENT**—Generally, a horizontal movement of water. Currents may be classified as *tidal* and *nontidal*. Tidal currents are caused by gravitational interactions between the Sun, Moon, and Earth and are a part of the same general movement of the sea that is manifested in the vertical rise and fall, called *tide*. Nontidal currents include the permanent currents in the general circulatory systems of the sea as well as temporary currents arising from more pronounced meteorological variability.
- CURRENT DIFFERENCE**—Difference between the time of slack water (or minimum current) or strength of current in any locality and the time of the corresponding phase of the tidal current at a reference station, for which predictions are given in the *Tidal Current Tables*.
- CURRENT ELLIPSE**—A graphic representation of a rotary current in which the velocity of the current at different hours of the tidal cycle is represented by radius vectors and vectorial angles. A line joining the extremities of the radius vectors will form a curve roughly approximating an ellipse. The cycle is completed in one-half tidal day or in a whole tidal day according to whether the tidal current is of the semidiurnal or the diurnal type. A current of the mixed type will give a curve of two unequal loops each tidal day.
- CURRENT METER**—An instrument for measuring the speed and direction or just the speed of a current. The measurements are usually Eulerian since the meter is most often fixed or moored at a specific location.
- DATUM (vertical)**—For marine applications, a base elevation used as a reference from which to reckon heights or depths. It is called a *tidal datum* when defined by a certain phase of the tide. Tidal datums are local datums and should not be extended into areas which have differing topographic features without substantiating measurements. In order that they may be recovered when needed, such datums are referenced to fixed points known as *bench marks*.
- DAYLIGHT SAVING TIME**—A time used during the summer in some localities in which clocks are advanced 1 hour from the usual standard time.
- DIURNAL**—Having a period or cycle of approximately 1 tidal day. Thus, the tide is said to be diurnal when only one high water and one low water occur during a tidal day, and the tidal current is said to be diurnal when there is a single flood and single ebb period in the tidal day. A rotary current is diurnal if it changes its direction through all points of the compass once each tidal day.
- DIURNAL INEQUALITY**—The difference in height of the two high waters or of the two low waters of each day; also the difference in speed between the two flood tidal currents or the two ebb tidal currents of each day. The difference changes with the declination of the Moon and to a lesser extent with the declination of the Sun. In general, the inequality tends to increase with an increasing declination, either north or south, and to diminish as the Moon approaches the Equator. *Mean diurnal high water inequality* (DHQ) is one-half the average difference between the two high waters of each day observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). It is obtained by subtracting the mean of all high waters from the mean of the higher high waters. *Mean diurnal low water inequality* (DLQ) is one-half the average difference between the two low waters of each day observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). It is obtained by subtracting the mean of the lower low waters from the mean of all low waters. *Tropic high water inequality* (HWQ) is the average difference between the two high waters of the day at the times of the tropic tides. *Tropic low water inequality* (LWQ) is the average difference between the two low waters of the day at the times of the tropic tides. Mean and tropic inequalities as

GLOSSARY OF TERMS

defined above are applicable only when the type of tide is either semidiurnal or mixed. Diurnal inequality is sometimes called *declinational inequality*.

DOUBLE EBB—An ebb tidal current where, after ebb begins, the speed increases to a maximum called *first ebb*; it then decreases, reaching a *minimum ebb* near the middle of the ebb period (and at some places it may actually run in a flood direction for a short period); it then again ebbs to a maximum speed called second ebb after which it decreases to slack water.

DOUBLE FLOOD—A flood tidal current where, after flood begins, the speed increases to a maximum called first flood; it then decreases, reaching a minimum flood near the middle of the flood period (and at some places it may actually run in an ebb direction for a short period); it then again floods to a maximum speed called second flood after which it decreases to slack water.

DOUBLE TIDE—A double-headed tide, that is, a high water consisting of two maxima of nearly the same height separated by a relatively small depression, or a low water consisting of two minima separated by a relatively small elevation. Sometimes, it is called an agger.

DURATION OF FLOOD AND DURATION OF EBB—Duration of flood is the interval of time in which a tidal current is flooding, and the *duration of ebb* is the interval in which it is ebbing. Together they cover, on an average, a period of 12.42 hours for a semidiurnal tidal current or a period of 24.84 hours for a diurnal current. In a normal semidiurnal tidal current, the duration of flood and duration of ebb will each be approximately equal to 6.21 hours, but the times may be modified greatly by the presence of a nontidal flow. In a river the duration of ebb is usually longer than the duration of flood because of the freshwater discharge, especially during the spring when snow and ice melt are the predominant influences.

DURATION OF RISE AND DURATION OF FALL—*Duration of rise* is the interval from low water to high water, and *duration of fall* is the interval from high water to low water. Together they cover, on an average, a period of 12.42 hours for a semidiurnal tide or a period of 24.84 hours for a diurnal tide. In a normal semidiurnal tide, the duration of rise and duration of fall will each be approximately equal to 6.21 hours, but in shallow waters and in rivers there is a tendency for a decrease in the duration of rise and a corresponding increase in the duration of fall.

EBB CURRENT—The movement of a tidal current away from shore or down a tidal river or estuary. In the

mixed type of reversing tidal current, the terms *greater ebb* and *lesser ebb* are applied respectively to the ebb tidal currents of greater and lesser speed of each day. The terms *maximum ebb* and *minimum ebb* are applied to the maximum and minimum speeds of a current running continuously ebb, the speed alternately increasing and decreasing without coming to a slack or reversing. The expression maximum ebb is also applicable to any ebb current at the time of greatest speed.

EQUATORIAL TIDAL CURRENTS—Tidal currents occurring semimonthly as a result of the Moon being over the Equator. At these times the tendency of the Moon to produce a diurnal inequality in the tidal current is at a minimum.

EQUATORIAL TIDES—Tides occurring semi monthly as the result of the Moon being over the Equator. At these times the tendency of the Moon to produce a diurnal inequality in the tide is at a minimum.

FLOOD CURRENT—The movement of a tidal current toward the shore or up a tidal river or estuary. In the mixed type of reversing current, the terms *greater flood* and *lesser flood* are applied respectively to the flood currents of greater and lesser speed of each day. The terms *maximum flood* and *minimum flood* are applied to the maximum and minimum speeds of a flood current, the speed of which alternately increases and decreases without coming to a slack or reversing. The expression maximum flood is also applicable to any flood current at the time of greatest speed.

GREAT DIURNAL RANGE (Gt)—The difference in height between mean higher high water and mean lower low water. The expression may also be used in its contracted form, *diurnal range*.

GREENWICH INTERVAL—An interval referred to the transit of the Moon over the meridian of Greenwich as distinguished from the local interval which is referred to the Moon's transit over the local meridian. The relation in hours between Greenwich and local intervals may be expressed by the formula:

Greenwich interval = local interval + 0.069 L
where L is the west longitude of the local meridian in degrees. For east longitude, L is to be considered negative.

GULF COAST LOW WATER DATUM—A chart datum. Specifically, the tidal datum formerly designated for the coastal waters of the Gulf Coast of the United States. It was defined as *mean lower low water* when the type of tide was mixed and *mean low water* when the type of tide was diurnal.

HALF-TIDE LEVEL—See *mean tide level*.

GLOSSARY OF TERMS

- HARMONIC ANALYSIS**—The mathematical process by which the observed tide or tidal current at any place is separated into basic harmonic constituents.
- HARMONIC CONSTANTS**—The amplitudes and epochs of the harmonic constituents of the tide or tidal current at any place.
- HARMONIC CONSTITUENT**—One of the harmonic elements in a mathematical expression for the tide-producing force and in corresponding formulas for the tide or tidal current. Each constituent represents a periodic change or variation in the relative positions of the Earth, Moon, and Sun. A single constituent is usually written in the form $y=A \cos (at+\alpha)$, in which y is a function of time as expressed by the symbol t and is reckoned from a specific origin. The coefficient A is called the amplitude of the constituent and is a measure of its relative importance. The angle $(at+\alpha)$ changes uniformly and its value at any time is called the phase of the constituent. The speed of the constituent is the rate of change in its phase and is represented by the symbol a in the formula. The quantity α is the phase of the constituent at the initial instant from which the time is reckoned. The period of the constituent is the time required for the phase to change through 360° and is the cycle of the astronomical condition represented by the constituent.
- HIGH WATER (HW)**—The maximum height reached by a rising tide. The height may be due solely to the periodic tidal forces or it may have superimposed upon it the effects of prevailing meteorological conditions. Use of the synonymous term, *high tide*, is discouraged.
- HIGHER HIGH WATER (HHW)**—The higher of the two high waters of any tidal day.
- HIGHER LOW WATER (HLW)**—The higher of the two low waters of any tidal day.
- HYDRAULIC CURRENT**—A current in a channel caused by a difference in the surface level at the two ends. Such a current may be expected in a strait connecting two bodies of water in which the tides differ in time or range. The current in the East River, N.Y., connecting Long Island Sound and New York Harbor, is an example.
- KNOT**—A unit of speed, one international nautical mile (1,852.0 meters or 6,076.11549 international feet) per hour.
- LOW WATER (LW)**—The minimum height reached by a falling tide. The height may be due solely to the periodic tidal forces or it may have superimposed upon it the effects of meteorological conditions. Use of the synonymous term, *low tide*, is discouraged.
- LOWER HIGH WATER (LHW)**—The lower of the two high waters of any tidal day.
- LOWER LOW WATER (LLW)**—The lower of the two low waters of any tidal day.
- LUNAR DAY**—The time of the rotation of the Earth with respect to the Moon, or the interval between two successive upper transits of the Moon over the meridian of a place. The mean lunar day is approximately 24.84 solar hours long, or 1.035 times as long as the mean solar day.
- LUNAR INTERVAL**—The difference in time between the transit of the Moon over the meridian of Greenwich and over a local meridian. The average value of this interval expressed in hours is $0.069 L$, in which L is the local longitude in degrees, positive for west longitude and negative for east longitude. The lunar interval equals the difference between the local and Greenwich interval of a tide or current phase.
- LUNICURRENT INTERVAL**—The interval between the Moon's transit (upper or lower) over the local or Greenwich meridian and a specified phase of the tidal current following the transit. Examples: *strength of flood interval and strength of ebb interval*, which may be abbreviated to *flood interval and ebb interval*, respectively. The interval is described as local or Greenwich according to whether the reference is to the Moon's transit over the local or Greenwich meridian. When not otherwise specified, the reference is assumed to be local.
- LUNITIDAL INTERVAL**—The interval between the Moon's transit (upper or lower) over the local or Greenwich meridian and the following high or low water. The average of all high water intervals for all phases of the Moon is known as *mean high water lunitidal interval* and is abbreviated to high water interval (HWI). Similarly the *mean low water lunitidal interval* is abbreviated to low water interval (LWI). The interval is described as local or Greenwich according to whether the reference is to the transit over the local or Greenwich meridian. When not otherwise specified, the reference is assumed to be local.
- MEAN HIGH WATER (MHW)**—A tidal datum. The arithmetic mean of the high water heights observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). For stations with shorter series, simultaneous observational comparisons are made with a primary control tide station in order to derive the equivalent of a 19-year value.

GLOSSARY OF TERMS

- MEAN HIGHER HIGH WATER (MHHW)**—A tidal datum. The arithmetic mean of the higher high water heights of a mixed tide observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Only the higher high water of each pair of high waters, or the only high water of a tidal day is included in the mean.
- MEAN HIGHER HIGH WATER LINE (MHHWL)**—The intersection of the land with the water surface at the elevation of mean higher high water.
- MEAN LOW WATER (MLW)**—A tidal datum. The arithmetic mean of the low water heights observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). For stations with shorter series, simultaneous observational comparisons are made with a primary control tide station in order to derive the equivalent of a 19-year value.
- MEAN LOW WATER SPRINGS (MLWS)**—A tidal datum. Frequently abbreviated *spring low water*. The arithmetic mean of the low water heights occurring at the time of the spring tides observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch).
- MEAN LOWER LOW WATER (MLLW)**—A tidal datum. The arithmetic mean of the lower low water heights of a mixed tide observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Only the lower low water of each pair of low waters, or the only low water of a tidal day is included in the mean.
- MEAN RANGE OF TIDE (Mn)**—The difference in height between mean high water and mean low water.
- MEAN RIVER LEVEL**—A tidal datum. The average height of the surface of a tidal river at any point for all stages of the tide observed over a 19-year Metonic cycle (the National Tidal Datum Epoch), usually determined from hourly height readings. In rivers subject to occasional freshets the river level may undergo wide variations, and for practical purposes certain months of the year may be excluded in the determination of tidal datums. For charting purposes, tidal datums for rivers are usually based on observations during selected periods when the river is at or near low water stage.
- MEAN SEA LEVEL (MSL)**—A tidal datum. The arithmetic mean of hourly water elevations observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Shorter series are specified in the name; e.g., monthly mean sea level and yearly mean sea level.
- MEAN TIDE LEVEL (MTL)**—Also called half-tide level. A tidal datum midway between mean high water and mean low water.
- MIXED TIDE**—Type of tide with a large inequality in the high and/or low water heights, with two high waters and two low waters usually occurring each tidal day. In strictness, all tides are mixed but the name is usually applied to the tides intermediate to those predominantly semidiurnal and those predominantly diurnal.
- NATIONAL TIDAL DATUM EPOCH**—The specific 19-year period adopted by the National Ocean Service as the official time segment over which tide observations are taken and reduced to obtain mean values (e.g., mean lower low water, etc.) for tidal datums. It is necessary for standardization because of periodic and apparent secular trends in sea level. The present National Tidal Datum Epoch is 1960 through 1978. It is reviewed annually for possible revision and must be actively considered for revision every 25 years.
- NEAP TIDES OR TIDAL CURRENTS**—Tides of decreased range or tidal currents of decreased speed occurring semimonthly as the result of the Moon being in quadrature. The *neap range* (Np) of the tide is the average semidiurnal range occurring at the time of neap tides and is most conveniently computed from the harmonic constants. It is smaller than the mean range where the type of tide is either semidiurnal or mixed and is of no practical significance where the type of tide is diurnal. The average height of the high waters of the neap tides is called *neap high water* or *high water neaps* (MHWN) and the average height of the corresponding low waters is called neap low water or low water neaps (MLWN).
- PERIGEAN TIDES OR TIDAL CURRENTS**—Tides of increased range or tidal currents of increased speed occurring monthly as the result of the Moon being in perigee or nearest the Earth. The *perigean range* (Pn) of tide is the average semidiurnal range occurring at the time of perigean tides and is most conveniently computed from the harmonic constants. It is larger than the mean range where the type of tide is either semidiurnal or mixed, and is of no practical significance where the type of tide is diurnal.
- RANGE OF TIDE**—The difference in height between consecutive high and low waters, the *mean range* is the difference in height between mean high water and mean low water. Where the type of tide is diurnal the mean range is the same as the diurnal range.

GLOSSARY OF TERMS

For other ranges, see great diurnal, spring, neap, perigean, apogean, and tropic tides.

REFERENCE STATION—A tide or current station for which independent daily predictions are given in the *Tide Tables and Tidal Current Tables*, and from which corresponding predictions are obtained for subordinate stations by means of differences and ratios.

REVERSING CURRENT—A tidal current which flows alternately in approximately opposite directions with a slack water at each reversal of direction. Currents of this type usually occur in rivers and straits where the direction of flow is more or less restricted to certain channels. When the movement is towards the shore or up a stream, the current is said to be flooding, and when in the opposite direction it is said to be ebbing. The combined flood and ebb movement including the slack water covers, on an average, 12.42 hours for the semidiurnal current. If unaffected by a nontidal flow, the flood and ebb movements will each last about 6 hours, but when combined with such a flow, the durations of flood and ebb may be quite unequal. During the flow in each direction the speed of the current will vary from zero at the time of slack water to a maximum about midway between the slacks.

ROTARY CURRENT—A tidal current that flows continually with the direction of flow changing through all points of the compass during the tidal period. Rotary currents are usually found offshore where the direction of flow is not restricted by any barriers. The tendency for the rotation in direction has its origin in the Coriolis force and, unless modified by local conditions, the change is clockwise in the Northern Hemisphere and counterclockwise in the Southern. The speed of the current usually varies throughout the tidal cycle, passing through the two maxima in approximately opposite directions and the two minima with the direction of the current at approximately 90° from the direction at time of maximum speed.

SEMIIDIURNAL—Having a period or cycle of approximately one-half of a tidal day. The predominating type of tide throughout the world is semidiurnal, with two high waters and two low waters each tidal day. The tidal current is said to be semidiurnal when there are two flood and two ebb periods each day.

SET (OF CURRENT)—The direction *towards* which the current flows.

SLACK WATER—The state of a tidal current when its speed is near zero, especially the moment when a

reversing current changes direction and its speed is zero. The term is also applied to the entire period of low speed near the time of turning of the current when it is too weak to be of any practical importance in navigation. The relation of the time of slack water to the tidal phases varies in different localities. For standing tidal waves, slack water occurs near the times of high and low water, while for progressive tidal waves, slack water occurs midway between high and low water.

SPRING TIDES OR TIDAL CURRENTS—Tides of increased range or tidal currents of increased speed occurring semimonthly as the result of the Moon being new or full. The *spring range* (Sg) of tide is the average semidiurnal range occurring at the time of spring tides and is most conveniently computed from the harmonic constants. It is larger than the mean range where the type of tide is either semidiurnal or mixed, and is of no practical significance where the type of tide is diurnal. The mean of the high waters of the spring tide is called *spring high water or mean high water springs* (MHWS), and the average height of the corresponding low waters is called *spring low water or mean low water springs* (MLWS).

STAND OF TIDE—Sometimes called a platform tide. An interval at high or low water when there is no sensible change in the height of the tide. The water level is stationary at high and low water for only an instant, but the change in level near these times is so slow that it is not usually perceptible. In general, the duration of the apparent stand will depend upon the range of tide, being longer for a small range than for a large range, but where there is a tendency for a double tide the stand may last for several hours even with a large range of tide.

STANDARD TIME—A kind of time based upon the transit of the Sun over a certain specified meridian, called the *time meridian*, and adopted for use over a considerable area. With a few exceptions, standard time is based upon some meridian which differs by a multiple of 15° from the meridian of Greenwich.

STRENGTH OF CURRENT—Phase of tidal current in which the speed is a maximum; also the speed at this time. Beginning with slack before flood in the period of a reversing tidal current (or minimum before flood in a rotary current), the speed gradually increases to flood strength and then diminishes to slack before ebb (or minimum before ebb in a rotary current), after which the current turns in direction, the speed increases to ebb strength and then diminishes to slack before flood completing the cycle. If it is assumed that the speed throughout the cycle varies as the ordinates of a cosine curve, it can

GLOSSARY OF TERMS

be shown that the average speed for an entire flood or ebb period is equal to $2/\pi$ or 0.6366 of the speed of the corresponding strength of current.

SUBORDINATE CURRENT STATION—(1) A current station from which a relatively short series of observations is reduced by comparison with simultaneous observations from a control current station. (2) A station listed in the *Tidal Current Tables* for which predictions are to be obtained by means of differences and ratios applied to the full predictions at a reference station .

SUBORDINATE TIDE STATION—(1) A tide station from which a relatively short series of observations is reduced by comparison with simultaneous observations from a tide station with a relatively long series of observations. (2) A station listed in the *Tide Tables* for which predictions are to be obtained by means of differences and ratios applied to the full predictions at a reference station.

TIDAL CURRENT TABLES—Tables which give daily predictions of the times and speeds of the tidal currents. These predictions are usually supplemented by current differences and constants through which additional predictions can be obtained for numerous other places.

TIDAL DIFFERENCE—Difference in time or height of a high or low water at a subordinate station and at a reference station for which predictions are given in the *Tide Tables*. The difference, when applied according to sign to the prediction at the reference station, gives the corresponding time or height for the subordinate station .

TIDE—The periodic rise and fall of the water resulting from gravitational interactions between the Sun, Moon, and Earth. The vertical component of the particulate motion of a tidal wave. Although the accompanying horizontal movement of the water is part of the same phenomenon, it is preferable to designate the motion as tidal current.

TIDE TABLES—Tables which give daily predictions of the times and heights of high and low waters. These predictions are usually supplemented by tidal differences and constants through which additional predictions can be obtained for numerous other places.

TIME MERIDIAN—A meridian used as a reference for time.

TROPIC CURRENTS—Tidal currents occurring semimonthly when the effect of the Moon's maximum declination is greatest. At these times the tendency of the Moon to produce a diurnal inequality in the current is at a maximum.

TROPIC RANGES—The *great tropic range* (G_c), or *tropic range*, is the difference in height between tropic higher high water and tropic lower low water. The *small tropic range* (S_c) is the difference in height between tropic lower high water and tropic higher low water. The *mean tropic range* (M_c) is the mean between the great tropic range and the small tropic range. The small tropic range and the mean tropic range are applicable only when the type of tide is semidiurnal or mixed. Tropic ranges are most conveniently computed from the harmonic constants.

TROPIC TIDES—Tides occurring semimonthly when the effect of the Moon's maximum declination is greatest. At these times there is a tendency for an increase in the diurnal range. The tidal datums pertaining to the tropic tides are designated as *tropic higher high water* (T_cHHW), *tropic lower high water* (T_cLHW), *tropic higher low water* (T_cHLW), and *tropic lower low water* (T_cLLW).

TYPE OF TIDE—A classification based on characteristic forms of a tide curve. Qualitatively, when the two high waters and two low waters of each tidal day are approximately equal in height, the tide is said to be *semidiurnal*; when there is a relatively large diurnal inequality in the high or low waters or both, it is said to be *mixed*; and when there is only one high water and one low water in each tidal day, it is said to be *diurnal*.

VANISHING TIDE—In a mixed tide with very large diurnal inequality, the lower high water (or higher low water) frequently becomes indistinct (or vanishes) at time of extreme declinations. During these periods the diurnal tide has such overriding dominance that the semidiurnal tide, although still present, cannot be readily seen on the tide curve.

	No.
Christina River.....	4271
Church Neck Point.....	4591
City Island.....	3211, 3216, 3231
City Point, Conn.....	2871
City Point, Mass.....	1186
City Point, Va.....	5291
Clam Island.....	141
Claremont Landing.....	5271
Clarks Cove.....	1961
Clark Island.....	731, 736
Clason Point.....	3271
Clay Bank Pier.....	5381
Clay Head.....	2281
Clay Point.....	2566
Clearwater Pass.....	8531
Clump Island.....	5571
Coast Guard Tower, Oregon Inlet.....	6196
Coggins Point.....	5286
Cohansey River.....	4146
Cold Spring Harbor.....	3086
Cold Spring Point.....	2236
College Point.....	4376
College Point Reef.....	3276
Combahee River.....	7051, 7056
Commodore Point.....	7951
Compass Island.....	196
Common Fence Point.....	2066, 2151
Conanicut Point.....	2126
Conrail Bri dge.....	6166
Coney Island Channel.....	3796
Coney Island Lt.....	3781
Connecticut River.....	2701-2741
Cook Poi nt.....	5901
Cooper River.....	6696-6816
Coosaw Isl and.....	7076
Coosaw River.....	7036, 7056, 7066, 7081
Cornfi el d Pt., L. I. Sound.....	2756-2771
Cornfi el d Poi nt, Md.....	5691-5701
Coronala Laja.....	8831
Corson's Inlet, New Jersey.....	3936
Cortez.....	8281
Cos Cob Harbor.....	3106
Cotuit Bay.....	1721
Courtney Campbell Parkway.....	8466
Courtney Point.....	8566, 8571
Cove Poi nt.....	4781-4796
Coxsackie, Hudson River.....	3711
Crab Poi nt.....	4306
Craig hill Angle.....	4951
Craig hill Channel.....	4921, 4946
Crabtree Point.....	476
Craig hill Channel.....	4941, 4946
Crane Neck Poi nt.....	2961, 2981, 2986
Craney Isl and.....	5146, 5151
Crescent River.....	7636
Christina River.....	4271
Cross Rip Channel.....	1691
Crotch Isl and.....	156, 426
Crow Poi nt.....	1381
Cryders Point.....	3261
Cumberland Isl and.....	7806
Cumberland River.....	7776, 7781
Cumberland Sound.....	7786-7836
Curtis Creek entrance.....	6091
Cushing Isl and, Casco Bay.....	661
Customhouse Reach.....	6616, 6621
Cut A & Cut B, Tampa Bay.....	8351
Cuttyhunk Isl and.....	1836

D

Dahlgren Harbor Channel.....	5771
Damari scotta River.....	576
Dames Point.....	7921, 7926

	No.
Daniel Isl and Bend.....	6716, 6721
Daniel Isl and Reach.....	6701, 6711
Daufuskie Landi ng Light.....	7261
Davids Isl and.....	3171
Davis Bank.....	1536
Dawho River.....	6966, 6971
Daws Isl and, Broad River.....	7171
Daws Isl and, Chechessee River.....	7181
Deadman Shoal.....	4081
Deal Isl and.....	5596
Deep Poi nt.....	6061
Deepwater Poi nt.....	4266
Deepwater Poi nt, Miles River.....	6006
Deepwater Shoals.....	5251
Deer Isl and.....	1036, 1071
Deer Isl and Flats.....	1081
Deer Isl and Light... 1026, 1041-1066, 1086, 1096	1026, 1041-1066, 1086, 1096
Delancey Poi nt.....	3156
Delaware Bay and River.....	3976-4396
Delaware Bay entrance * (64).....	3991
Dennis Port.....	1606
Derby-Shel ton bri dge.....	2921
Deveaux Banks.....	6941
Di amond Isl and Ledge.....	681
Di amond Shoal Light.....	6211
Dice Head.....	321
Dobbs Ferry.....	3601
Doboy Isl and.....	7681
Doboy Sound.....	7646-7686
Doctor Poi nt, Cape Fear River.....	6401
Doctor Poi nt, Chesapeake Bay.....	5446
Dodge Isl and.....	8071
Dodge Poi nt.....	456
Dogfi sh Isl and.....	461
Dorchester Bay.....	1226
Doubling Poi nt.....	621
Dover Bri dge.....	5941
Dover Poi nt.....	791
Dram Tree Poi nt.....	6411
Drum I., Charleston Hbr.....	6676-6696
Drum Poi nt.....	4776, 5856
Drum Poi nt Isl and.....	7811
Drummond Poi nt.....	7931
Duck Isl and Bl uff.....	3046
Duck Pond Poi nt.....	2811
Ducktrap Harbor.....	526-536
Dumpling Isl and.....	5211
Dumpling Rocks.....	1951
Dutch Gap Canal.....	5306
Dutch Isl and, Narragansett Bay... 2181-2191	2181-2191
Dutch Isl and, Ski daway River.....	7426
Dyer Isl and.....	2121, 2131

E

Eagle Isl and.....	176
Eagle Poi nt.....	4326
East Boston.....	1161
East Branch, Cooper River.....	6811
East Chop.....	1751, 1756
East Fort Poi nt.....	3036
East Goose Rock.....	506
East River.....	3261-3391
East Rockaway Inlet.....	3476
Eastchester Bay.....	3221
Eastern Bay.....	5966-6011
Eastern Plain Poi nt.....	2431, 2436
Eastern Poi nt, Long Isl and Sound.....	2611
Easton Poi nt.....	5951
Eastport.....	91
Eatons Neck Poi nt.....	3016-3031
Echo Bay.....	3166
Eddy Rock Shoal.....	2721
Eddystone.....	4296

	No.
Greenwich Point, L. I. Sound.....	3091, 3096
Gregory Point.....	3001
Grog Island.....	146
Grove Point.....	5051, 6121
Gulfport.....	8501
Gull Island.....	1921
Gull Point.....	1436
Gunpowder River entrance.....	6111
Gurnet Point.....	1511
Gwynn Island.....	4621, 4626

H

Hackensack River.....	3891
Hagan Island.....	6791
Halg Point Light.....	7211
Hail Point.....	6056
Hains Point.....	5826
Halfmoon Shoal.....	1621, 1626
Hallowing Point.....	5816
Hammonasset Point.....	2801, 2806
Hampton Roads.....	5081-5141
Handkerchief Lighted Whistle Buoy "H".....	1616
Harbor Key.....	8361
Harbor of Refuge.....	2241, 2246, 2261
Harlem River.....	3396-3431
Harri s Creek.....	5961
Hart Island, N. Y.....	3196, 3201, 3206, 3211
Hartford Jetty.....	2741
Hatchett Point.....	2681, 2686
Hat Island.....	136
Hatteras Inlet.....	6206
Haverstraw.....	3621
Havre de Grace.....	5076
Hay Beach Point.....	2496
Head of the Cape.....	546, 551
Heald Bank.....	8781
Hedge Fence.....	1771
Hedge Fence Lighted Gong Buoy.....	1731
Hell Gate * (44).....	3321
Hempstead Harbor.....	3136-3146
Henderson Point.....	741, 746
Hendersons Point.....	6146
Henry Hudson Bridge.....	3431
Herbert C. Bonner Bridge.....	6201
Herod Point.....	2851-2861
Heron Neck.....	391
Higganum Creek.....	2726
High Bridge.....	3416
Highland Falls.....	3641
Hills Point.....	5891
Hillsborough Bay.....	8476, 8481
Hilton Head.....	7121
Hobcaw Creek.....	6671
Hoffman Island.....	3786
Hog Creek Point.....	2461
Hog Island, Narragansett Bay.....	2146
Hog Island, Penobscot Bay.....	231
Hog Island, Delaware River.....	4311
Hog Island Channel.....	6646
Hog Island Reach.....	6546, 6686
Hog Point, James River.....	5256
Hog Point, Patuxent River.....	5851
Hole Point Reach.....	1461
Holland Point.....	4856, 5906
Honga River Entrance.....	5661
Hooper Strait, Chesapeake Bay.....	4756
Hooper Strait, Tangier Sound.....	5651, 5656
Horlbeck Creek entrance.....	6836, 6851
Horse Head Island.....	211
Horse Reach.....	6666
Horseshoe Point.....	4871
Horseshoe Shoal.....	6361
Horton Point.....	2796

	No.
Hosmer Ledge.....	316
Houghtaling Island, Hudson River.....	3716
Housatonic River.....	2901-2921
Houston Channel.....	8746, 8751
Howard Ledges.....	266, 271
Howell Point.....	5041, 5046, 5921
Huckleberry Island.....	3176, 3181
Hudson, Hudson River.....	3706
Hudson River.....	3571-3736
Hudson River entrance.....	3571
Hull Gut.....	1281
Hunnwell Point.....	601
Huntington Bay.....	3036
Hunts Point.....	3296
Hussey Sound.....	641-651
Hutchinson Island.....	7011
Hutchinson River.....	3226
Hyannis Harbor.....	1711
Hyde Park.....	3671
Hypocrite Channel.....	976

I

I-95 Bridge, Piscataqua River.....	771
India Point.....	2226
Indian River Inlet.....	4401
Indian Rocks Beach.....	8526
Intracoastal Waterway, Southport, N. C.....	6341
ICW, St. Johns River, Florida.....	7896
Isaac Shoal.....	8176
Isla Marina.....	8826
Isle au Haut.....	161
Isle of Hope City.....	7431, 7436
Islesboro Harbor.....	286-296
Islesboro Ledge.....	301

J

Jacksonville.....	7956, 7961
Jamaica Bay.....	3491-3521
Jamaica Point, off.....	5931
James Island, Chesapeake Bay.....	4806-4816
James River.....	5216-5311
Jamestown Island.....	5261
Jamestown, Narragansett Bay.....	2196
Janes Island.....	5576
Jehossee Island.....	7001
Jekyll Creek.....	7771
Jennings Point.....	2501
Joe Island.....	8356
Joe's Cut.....	7396
Johns Island.....	6921
Johns Island Airport.....	6906
Johns Island Bridge.....	6911
Johns Pass.....	8516
Johnson Creek.....	7606
Jones Inlet.....	3466
Jones Point, Alexandria, Va.....	5821
Jones Point, Penobscot Bay.....	331
Jones Point, Rappahannock River.....	5496

K

Katama Point, Katama Bay.....	1746
Kedges Strait.....	5586
Kelly Island.....	4116
Kelly Point.....	4256
Kelsey Point.....	2776, 2781
Kennebec River.....	601-631
Kent Island Narrows.....	6051
Kent Point.....	4861, 4866, 5971
Kenwood Beach.....	4801
Key West.....	8131-8161
Key West * (108).....	8141

Keyport Channel.....	No. 3816	Lowe Point.....	No. 586
Kickamuit River.....	2161	Lower Coal Dock.....	2636
Kill Van Kull.....	3876, 3881	Lower Hell Gate, Knubble Bay.....	591
King Island.....	7346	Lower Machodoc Creek entrance.....	5731
Kings Bay.....	7816	Lummus Island.....	8066, 8081
Kings Cove.....	1441	Lurcher Shoal.....	36-46
Kings Island Channel.....	7336	Lynch Point.....	6106
Kingsley Creek.....	7836	Lynde Point.....	2701
Kingston Point, Hudson River.....	3676	Lynn Harbor.....	931
Kingston-Rhecliff Bridge * (56).....	3681	Lynnhaven Inlet.....	4476
Kitts Rocks.....	696	Lynnhaven Roads.....	4471
Knights Hill Township.....	806	Lyons Creek Wharf.....	5886
L		M	
Lafayette Swing Bridge.....	6491	McCrie Shoal.....	3956
Laireys Island.....	431	McQueen Island Cut.....	7291
Lake George.....	7981	MacKay Creek.....	7231
Lake Worth Inlet.....	7991	Mackay River.....	7736
Lamberts Point.....	5156	Mackerel Cove.....	2086
Largo Shoals.....	8806	Macombs Dam Bridge.....	3411
Las Mareas, Puerto Rico.....	8786	Madison Ave. Bridge.....	3406
Lassell Island.....	501	Magothy River entrance.....	6041
Leadbetter Island.....	441-451	Main Ship Channel.....	8131, 8136
Lazaretto Creek Entrance.....	7376	Maine Coast.....	91-681
Lemon Island.....	7186	Mamaroneck Harbor.....	3161
Lester Manor.....	5426	Manahawkin Drawbridge.....	3926
Lewis Bay.....	1716	Manasquan Inlet.....	3906
Lewis Island.....	8406	Manasquan River.....	3911
Lewis Point.....	2291, 2296, 2341	Mandarin Point.....	7971
L'Hommedieu Shoal.....	1771, 1781	Manhasset Bay.....	3191
Lincoln Ledge.....	626	Manhattan Bridge.....	3371
Little Barnwell Island.....	7201	Manhattan, East River, N.Y.....	3351
Little Brewster Island.....	971	Manilla.....	8656
Little Calf Island.....	981, 1016	Manokin River entrance.....	5591
Little Choptank River.....	5891, 5896	Manomet Point.....	1506
Little Creek.....	4551	Marblehead Channel.....	846
Little Deer Island.....	236	Marcus Hook.....	4291
Little Don Island.....	7471	Marcus Hook Bar.....	4286
Little Eaton Island.....	221	Mark Island.....	166, 486, 496
Little Egg Island.....	7691	Martha's Vineyard.....	1571
Little Gull Island.....	2421, 2441, 2586-2601	Martin Point.....	5916
Little Harbor entrance.....	701	Martins Industry.....	7096
Little Hurricane Island.....	386	Maryland Point.....	5796
Little Mud River Range.....	7696	Matagorda Channel.....	8761
Little Nahant.....	871	Matinecock Point.....	3126, 3131
Little Nahant Cupola.....	921	Matlacha Pass.....	8211
Little Narragansett Bay entrance.....	2541	Mattapoisett Harbor.....	1986
Little Ogeechee River Entrance.....	7476, 7516	Mattaponi River.....	5411, 5416
Little Peconic Bay entrance.....	2521	Mattituck Point.....	2816
Little Pine Island Bridge.....	8211	Maurice River.....	4096-4106
Little St. Simon Island.....	7701	Mauricetown.....	4101
Little Sarasota Bay.....	8246	Maximo Pt., bridge 0.8 mile south of.....	8496
Little Wassaw Island.....	7506	Mayport.....	7881, 7886
Lloyd Point.....	3056	Medway River.....	7556, 7566
Long Beach, Long Island.....	3471	Megansett Harbor.....	1941
Long Beach Point.....	2491	Memorial Bridge, Piscataqua River.....	761
Long Branch, Fla.....	7946	Menemsha Bight.....	1821
Long Island, Ga.....	7451, 7456	Merrimack River entrance.....	816
Long Island Head, Mass.....	1076	Mesquite Point.....	8716
Long Island Sound, N.Y.....	2576-3256	Miacomet Pond.....	1561
Long Island, south coast, N.Y.....	3436-3486	Miah Maul Range.....	4121
Long Key.....	8106	Miami Harbor.....	8031-8096
Long Key Viaduct.....	8111	Miami Harbor entrance * (104).....	8051
Long Neck Point.....	3051	Miami River entrance.....	8091
Long Point, Eastern Bay.....	5976, 6011	Mid-Hudson Suspension Bridge.....	3666
Long Point, Pocomoke Sound.....	5551	Middle Branch ent., Patapsco River.....	6101
Long Point, St. Andrew Bay.....	8591	Middle Marshes.....	6326
Long Shoal.....	1681	Middle and Beach.....	3776
Longboat Pass.....	8276	Midnight Pass entrance.....	8251
Lord Delaware Bridge.....	5406	Milby Point.....	4656, 5536
Love Point, Chesapeake Bay.....	4926-4936	Mile Point.....	7891
Love Point, Chester River.....	6046	Miles River.....	6006, 6011
Love Island.....	956, 1031, 1206, 1236, 1241	Milford Point.....	2901

	No.
Mill Rock, Hell Gate.....	3311, 3316
Miller Island.....	5016
Millville.....	4106
Mission River.....	4036
Mississippi Sound.....	8636
Mobile Bay.....	8601-8631
Mobile Bay entrance * (128).....	8606
Mobile Point.....	8606, 8611
Mobile River entrance.....	8621
Mobjack Bay.....	5436-5446
Money Point.....	5196
Monomoy Point.....	1541, 1591, 1611
Montauk Harbor entrance.....	2406
Montauk Point.....	2371-2381
Montgomery.....	7481
Moon Head.....	1336, 1361
Moore Harbor.....	406
Moosabec Reach.....	116, 121
Morehead City.....	6281, 6286
Moreland.....	6786
Morgan Island.....	7036, 7066
Morgans Point.....	8756
Moser Channel.....	8116
Mosquito Creek, SC.....	6456
Mosquito Point.....	5461, 5466
Mount Hope Bay.....	2151, 2161
Mount Hope Bridge.....	2141
Mount Hope Point.....	2156
Mount Prospect.....	2411
Mount St. Vincent College.....	3596
Mountain Point.....	6041
Mud River.....	7631
Mulberry Point.....	5956
Mulford Point.....	2746
Mullet Key Channel entrance.....	8306
Mullet Key Channel.....	8326
Muscongus Sound.....	571
Muskeget Channel.....	1671
Muskeget Island.....	1661
Muskeget Rock.....	1666
Myakka River Bridge.....	8226
Myrtle Sound.....	6391
Mystic, Mystic River, Conn.....	2561
Mystic River Bridge, Mass.....	1176, 1181

N

Nahant.....	886-896
Nansemond River.....	5201-5211
Nanticoke River.....	5631, 5641
Nantucket Harbor entrance.....	1651
Nantucket Island.....	1551
Nantucket Shoals.....	1546
Nantucket Sound.....	1591-1786
Napatree Point.....	2536
Narragansett Bay.....	2041-2236
Nasketucket Bay.....	1981
Nassau River.....	7851
Nassau Sound.....	7841-7856
Nassawadox Point.....	4616
Nauset Beach Light.....	1526
Nayatt Point.....	2221
Neponset River.....	1201
Newport.....	6291, 6296
New Baltimore.....	3721
New Bedford Harbor.....	1966
New Brighton.....	3881
New Castle.....	4251
New Dorp Beach.....	3761, 3771
New Ground.....	8171
New Hamburg.....	3661
New Haven Harbor entrance.....	2866
New Jersey Coast.....	3906-3971

	No.
New London Harbor entrance.....	2616
New Pass, Sarasota Bay.....	8266
New Point Comfort.....	5436, 4576
New River.....	7236, 7241
New York Harbor.....	3541-3566, 3741-3796
New York Harbor Entrance.....	3526-3536
Newark Bay.....	3886
Newbold Island.....	4391
Newburgh Beacon Bridge.....	3651
Newburyport.....	821
Newport Harbor.....	2091
Newport News.....	5131-5141, 5216-5226
Newtown Creek.....	3356
Niantic.....	2656
No Name Key.....	8126
Noank.....	2556
Nobska Point.....	1786, 1796
Nomini Creek entrance.....	5736
Norfolk Harbor Reach.....	5121
North Charleston.....	6726
North Edisto River entrance.....	6946
North Haven Peninsula.....	2511
North Hill Point.....	2571
North Newport River.....	7571-7586
North Point, Chesapeake Bay.....	4991
North Point, Brewerton Channel.....	6071
North River, Darien River.....	7676
North Santee River entrance.....	6501
Northbury.....	5431
Northport Bay.....	3046
Northport Bay entrance.....	3041
Norton Point, New York Harbor Entrance.....	3531
Norton Point, Vineyard Sound.....	1801
Norton Shoal.....	1681
Norwalk River.....	3001
Nowell Creek.....	6841-6846
Nubble Channel.....	1271
Nut Island.....	1346, 1351

O

Oak Neck Point.....	3101
Oak Point.....	371
Oatland Island.....	7411
Ocracoke Inlet.....	6216-6231, 6241
Odi ngse l l River Entrance.....	7486
Odi ornes Poi nt.....	686, 691
Odom Ledge.....	341
Ogeechee River.....	7516, 7526
Old Fernandina.....	7826
Old Field Point.....	2941-2951
Old Harbor Point.....	2286
Old Man Shoal, Nantucket Shoals.....	1556
Old Orchard Shoal Light.....	3766
Old Plantation Flats Light.....	4566
Old Point Comfort.....	5091-5101
Old Tampa Bay entrance * (120).....	8441
Old Teakettle Creek.....	7641, 7656, 7661
Old Town Wharf.....	3151
Old Town Point Wharf.....	6141
Oldsmans Point.....	4281
Onemile Cut.....	7706
Onset Bay.....	2006, 2011
Orchard Point.....	5471
Ordinary Point.....	6126
Ordnance Reach.....	6746
Oregon Inlet.....	6191-6201
Orient Point.....	2471, 2691
Ossabaw Sound.....	7491-7531
Ossining.....	3616
Oxford, Tred Avon River.....	5946
Oyster Bay.....	3071-3086
Oyster River Point.....	2876

P	No.	No.
Pablo Creek.....	7901	Point No Point, Conn..... 2926
Pages Rock.....	5371	Point No Point, Md..... 4741-4751
Palominos Island.....	8816	Point of Pines..... 936, 941
Pamlico Sound.....	6191-6241	Point of Shoals..... 5246
Pamunkey River.....	5421-5431	Point Patience..... 5866
Paper Mill, St. Andrew Bay.....	8581	Point Peter..... 6431
Paradise Point.....	2516	Point Pleasant Canal..... 3916
Parri's Island.....	7131, 7141	Point Shirley..... 1101
Parri's Island Lookout Tower.....	7176	Point Ybel..... 8191
Parrot Creek.....	7061	Pollock Rip Channel..... 1576
Parson Island.....	5986, 5991	Pollock Rip Channel * (32)..... 1581
Parsonage Point.....	3116	Pond entrance..... 2251
Pasaje de San Juan.....	8836	Pond Island..... 251, 261
Pascagoula River Highway Bridge.....	8636	Pond Point, Conn..... 2881
Pass Abel.....	8646	Pond Point, Maine..... 111
Pass aux Herons.....	8631	Pooles Island..... 5001-5011, 5021
Passage Key Inlet.....	8311	Poplar Island..... 4846-4851, 5966
Passaic River.....	3896	Poplar Point..... 5936
Pass-a-Grille Channel.....	8491	Port of Albany, Hudson River..... 301
Patapsco River.....	6071-6101	Port Arthur Canal entrance..... 8711
Patience Island.....	2211, 2216	Port Everglades..... 8001-8026
Patuxent River.....	5851-5886	Port Ingle side..... 8771
Pawcatuck River.....	2546	Port Jefferson Harbor entrance..... 2956
Pea Island.....	901	Port Manatee Channel..... 8391, 8396
Pea Patch Island.....	4231	Port of St. Petersburg..... 8426
Peddocks Island..... 1286, 1291, 1321, 1356, 1401		Port Royal..... 5526
Pee Dee River.....	6486	Port Royal Plantation Tower..... 7106
Peekskill.....	3631	Port Royal Sound..... 7101-7201
Pelican Bank.....	7021	Port Wentworth..... 7351
Penikese Island.....	1911, 1916	Portland Breakwater Light..... 671
Penigo Neck.....	3121	Portland Bridge..... 666
Penns Neck.....	4241, 4246	Portland Harbor entrance..... 661
Penns Landing.....	4346	Portsmouth Harbor..... 686-756
Penobscot Narrows Bridge.....	351	Portsmouth Harbor entrance * (16)..... 711
Pensacola Bay.....	8596	Potomac River..... 5671-5846
Persimmon Point.....	5781	Potomac River Bridge..... 5786
Petty Island.....	4351	Powell's Bluff..... 4641
Philidelphia * (76).....	4346	Prim Point..... 71
Philip Head.....	1456	Providence..... 2231
Pi ankatank River.....	5441	Provincetown Harbor..... 1476
Pi ckering Island.....	216, 226	Prudence Island..... 2191
Pier 67, East River.....	3361	Puerto Rico..... 8791-8846
Pierces Island.....	756	Pumpkin Island..... 281
Pigeon Island.....	7461	Punta Gorda..... 8221
Pig Point.....	5201	Punta Ostiones..... 8791
Pig Rock.....	1421, 1426	Purtan Island..... 5391
Pine Creek Point.....	2971	
Pine Island.....	6981	Q
Pine Key.....	8336	Quamisset Harbor..... 1931
Pine Island Sound.....	8206	Quanti co..... 5801
Pine Point.....	1451	Quanti co Creek entrance..... 5806
Pinelias Point.....	8366-8386	Quarantine Station..... 8731
Piney Point, Fla.....	8401	Quarte Bayoux Pass..... 8641
Piney Point, Md.....	5716-5726	Quicks Hole..... 1876-1886
Pinner Point.....	5166	Quonochontaug Beach..... 2331, 2336
Piscataqua River.....	761-811	Quonset Point * (28)..... 2136
Pleasant Point.....	6926	
Plum Gut.....	2676	R
Plum Point.....	4821, 4841	Rabbit Island..... 6471
Plum Island, Long Island Sound.....	2666, 2671	Raccoon Key..... 7501
Plum Island Sound entrance, Mass.....	826	Race Point, Cape Cod Bay..... 1466, 1471
Plymouth Harbor.....	1516	Race Point, Long Island Sound..... 2576
Pocomoke River.....	5556	Radio Island..... 6301
Pocomoke Sound.....	5531-5556	Ragged Point..... 5896
Pocomoke Sound Approach.....	5531	Rainsford Island..... 1296-1316
Point Allerton.....	991-1001	Ram Island, Mass..... 851, 856
Point Gammon.....	1706	Ram Island, N.Y..... 2466, 2486
Point Judith.....	2241-2261	Ram Island, Penobscot Bay..... 556
Point Lookin.....	4726	Ram Island Reef..... 2551
Point Lookout.....	4716, 4721, 5671-5686	Ramos Cay..... 8811

	No.		No.
Shoal Point.....	2976		
Shrewsbury River.....	3801, 3806		
Shutes Folly Island.....	6611		
Shutes Reach.....	6661		
Silver Point, Hudson River.....	3696		
Sippican Harbor.....	1991		
Sisters Creek entrance.....	7906		
Six Mile Reef.....	2786, 2791		
Ski daway Island.....	7421		
Ski daway Narrows.....	7446		
Ski daway River.....	7416		
Skull Creek.....	7166, 7226		
Smith Cove.....	2626		
Smith Island.....	4711		
Smith Island Shoal.....	4416		
Smith Point Light.....	4676-4706		
Smoking Point.....	3856		
Smuggedy Swamp.....	7006		
Smyrna River.....	4161		
Snake Island.....	6901		
Snell Isle.....	8431		
Snake Island.....	1091		
Snow Point.....	6771		
Snows Cut.....	6386		
Snub Point.....	376		
Soper Point, Oyster Bay.....	3081		
Sound Beach.....	2891		
South Amelia River.....	7846		
South Boston.....	1146, 1151		
South Brother Island.....	3301		
South Capitol Street Bridge, D.C.....	5836		
South Carolina Coast.....	6501-6526		
South Edisto River.....	6976-7006		
South Newport River.....	7591, 7596		
South River, Ga.....	7671		
South River, Md.....	6021		
South River, N. J.....	3846		
South Santee River entrance.....	6506		
Southport.....	6346, 6351		
Southwest Ledge.....	2346, 2351		
Sow and Pigs Reef.....	1906		
Spanish Wells.....	7221		
Spectacle Island, Boston Harbor.....	1101-1126		
Spectacle Island, Penobscot Bay.....	276		
Spesutie Island.....	5061		
Spuyten Duyvil.....	3586		
Squantum.....	1366		
Squantum Point.....	1191, 1196		
Squash Meadow.....	1751		
Stafford Island.....	7821		
Stage Harbor.....	1601		
Stamford Harbor entrance.....	3066		
Statue of Liberty.....	3566		
Stingray Point.....	4631, 4636, 5451		
Stoddard Hill.....	2631		
Stodders Neck.....	1431		
Stono Inlet.....	6896		
Stono River.....	6896-6926		
Stony Point, Delaware Bay.....	4166		
Stony Point, Hudson River.....	3626		
Stratford Point.....	2931, 2936		
Stratford Shoal.....	2886		
Strawberry Hill.....	1376		
Sugarloaf Island.....	6276		
Sullivans Island.....	6591		
Sunken Ledge.....	1326		
Sunshine Skyway Bridge * (116).....	8346		
Sunny Point.....	6356		
Susquehanna River.....	5076		
Sutherland Bluff.....	7621		
Swains Ledge.....	241, 246		
Swan Point, Chesapeake Bay.....	4956-4966		
Swan Point, Potomac River.....	5766		
		T	
		Tail of the Horseshoe.....	4491
		Tampa Bay.....	8286-8486
		Tampa Bay entrance * (112).....	8296
		Tangier Sound.....	5566-5651
		Tangier Sound Light.....	5561, 4666
		Tappahannock Bridge.....	5516, 5521
		Tappan Zee Bridge.....	3606
		Tarpaulin Cove.....	1806
		Tarpley Point.....	5491
		Tarrytown.....	3611
		Teaches Hole Channel.....	6221
		Temple Heights.....	561, 566
		Tensaw River entrance.....	8626
		Terrebonne Bay.....	8671
		Texas Point.....	8701
		Thames River.....	2621-2636
		The Cove.....	6641
		The Graves.....	961
		The Narrows, Fla.....	8526
		The Narrows, New York Harbor * (48).....	3536
		The Race.....	2576-2601
		The Race * (36).....	2581
		The Reach.....	396, 411
		The Tee.....	6796, 6801
		Thieves Ledge.....	966
		Thimble Shoal Channel.....	4486, 5081
		Thimble Shoal Light.....	5081
		Thomas Pt. Shoal Light.....	4881-4891
		Thompson Island.....	1126, 1131
		Throgs Neck * (40).....	3241
		Throgs Neck.....	3241-3256
		Throgs Neck Bridge.....	3256
		Thrumcap Island.....	306
		Thunderbolt.....	7406
		Tilghman Point.....	5996
		Tiverton.....	2056, 2061
		Tocoi.....	7981
		Tolchester Beach.....	4996
		Tolchester Channel.....	4976-4986
		Tolly Point.....	4896
		Tombstone Point.....	6266
		Torresdale.....	4366
		Tottenville.....	3851
		Towles Point.....	5476
		Town Creek.....	6626, 6631
		Town Point Bridge.....	5206
		Treasure Island.....	8511, 8521
		Tred Avon River.....	5946, 5951
		Tremley Point Reach.....	3861
		Triangle Ledge.....	401
		Trout River Cut.....	7936
		Troy.....	3736
		Tuckernuck Island.....	1566
		Tuckernuck Shoal.....	1641
		Tue Marshes Light.....	5331-5351
		Tufts Point.....	3856
		Turkey Point, Eastern Bay.....	5981
		Turkey Point.....	5056
		Turtle Head Point.....	311
		Turtle River.....	7756, 7761
		Turning Basin, Beaufort Inlet.....	6271
		Turning Basin, Northeast River.....	6436
		Twotree Island Channel.....	2651
		U	
		Upper Hell Gate.....	596
		Upper Machodoc Creek entrance.....	5776
		Upper Midget Channel.....	6396

	No.		No.
V			
Valiant Rock.....	2581	Western Passage, Maine.....	101, 106
Venice Inlet.....	8236	Westport River.....	1896
Vernon River.....	7471, 7481, 7511	Weymouth Back River.....	1421
Verona Island.....	346	Whale Branch River.....	7086
Victor Point.....	5611	Whaleback Reef.....	706
Viques Passage * (144).....	8796	Whit haven.....	5616, 5621
Viques Sound.....	8801	Whit hill.....	4396
Vineyard Haven.....	1761	Whit e Islands.....	416
Vineyard Sound.....	1791-1891	Whit e Point.....	6966
Virginia Beach.....	6186	Whoopi ng Island.....	6971
W			
W Howard Frankland Bridge.....	8461	Wickford Harbor.....	2201
Waccamaw River.....	6491, 6496	Wicomco River, Tangier Sound.....	5606-5626
Wadmalaw River.....	6951-6961	Wicopset Island.....	2386
Wakema.....	5411	Widow Island.....	171
Walcerton.....	5416	Wilcox Island Park.....	2731
Wallace Channel.....	6231	Willetts Point (Throgs Neck).....	3251
Walls Cut.....	7256	Williamsburg Bridge.....	3366
Wando River.....	6821-6851	Williman Creek.....	7071
Wappoo Creek.....	6861	Willis Ave. Bridge, Harlem River.....	3401
Waquoit Bay.....	1776	Willoughby Bay.....	5111
Ward Point.....	3831	Willoughby Spit.....	5106
Wareham River.....	1996, 2001	Wilming ton, N. C.....	6426
Warren.....	2171	Wilming ton Island.....	7371
Warren Island.....	521	Wilming ton River, GA.....	7321, 7391-7406
Warren River entrance.....	2166	Windmill Point Light.....	4646, 4651
Washington, D. C.....	5841, 5846	Windmill Point, Mass.....	1296, 1391
Washington Canal, N. J.....	3841	Windmill Point, Va.....	5281, 5456
Wasque Point.....	1676	Wine Island Pass.....	8676
Wassaw Island.....	7386	Winter Point.....	7966
Wassaw Island, Ossabaw Sound.....	7491	Winterport.....	366
Wassaw Island, Wassaw Sound.....	7361	Winter-Quarter Shoal.....	4411
Wassaw Sound.....	7366-7486	Winthrop Head.....	951
Watch Hill Point.....	2356, 2366	Winthrop Point.....	2621
Waterview.....	5486	Winyah Bay.....	6451-6496
Watts Island.....	5541, 5546	Wolf Trap Light.....	4581, 4586, 4596-4611
Weedon Island.....	8446	Wood Island.....	716
Weepecket Island.....	1926	Woods Hole.....	1846-1856
Weir River.....	1371	Woods Point.....	6761, 6766
Wellfleet Harbor.....	1481	Wooster Island.....	2916
West Chop.....	1766, 1791	Worton Point.....	5031, 5036
West Falmouth Harbor.....	1936	Wreck Shoal.....	1726
West Head.....	1321, 1326, 1341	Wright River.....	7246
West Island.....	1971, 1976	Wye River.....	6001
West Marsh Island.....	6886	Y	
West Norfolk Bridge.....	5161	Yelow House Creek.....	6751
West Penobscot Bay.....	381-396	Yelow House Landi ng.....	6756
West Point, N. Y.....	3646	Yeocomico River entrance.....	5711
West Point, Va.....	5401	York River.....	5316-5431
West River.....	6016	York Spit Channel.....	4561
		York Spit Light.....	5321
		Yorktown.....	5356

ASTRONOMICAL DATA, 2010

January				February				March				April			
	d.	h	m		d.	h	m		d.	h	m		d.	h	m
P	1	20	..	E	1	21	..	E	1	08	..	S	4	06	..
E	5	11	..	☉	5	23	48	☉	7	15	42	☉	6	09	37
☉	7	10	39	S	8	15	..	S	7	22	..	A	9	02	..
S	12	09	..	A	13	02	..	A	12	10	..	E	11	17	..
●	15	07	11	●	14	02	51	E	15	11	..	●	14	12	29
A	17	01	..	E	16	04	..	●	15	21	01	N	18	18	..
E	19	22	..	☉	22	00	42	☉ _M	20	17	32	☉	21	18	20
☉	23	10	53	N	23	06	..	N	22	13	..	P	24	21	..
N	26	21	..	P	27	21	..	☉	23	11	00	E	25	03	..
○	30	06	18	○	28	16	38	P	28	04	..	○	28	12	18
P	30	09	..					○	28	19	..				
								○	30	02	25				

May				June				July				August			
	d.	h	m		d.	h	m		d.	h	m		d.	h	m
S	1	14	..	A	3	16	..	A	1	10	..	☉	3	04	59
☉	6	04	15	☉	4	22	13	E	2	15	..	N	6	03	..
A	6	21	..	E	5	08	..	☉	4	14	35	●	10	03	08
E	9	00	..	N	12	07	..	N	9	17	..	P	10	17	..
●	14	01	04	●	12	11	15	●	11	19	40	E	12	05	..
N	15	23	..	P	15	14	..	P	13	11	..	☉	16	18	14
P	20	08	..	E	18	13	..	E	15	20	..	S	18	17	..
☉	20	23	43	☉	19	04	29	☉	18	10	11	○	24	17	05
E	22	08	..	☉ _J	21	11	28	S	22	12	..	A	25	05	..
○	27	23	07	S _J	25	06	..	○	26	01	37	E	26	05	..
S	28	22	..	○	26	11	30	A	28	23	..				
								E	29	22	..				

September				October				November				December			
	d.	h	m		d.	h	m		d.	h	m		d.	h	m
☉	1	17	22	☉	1	03	52	E	2	11	..	●	5	17	36
N	2	12	..	E	6	03	..	P	3	17	..	S	6	02	..
P	8	04	..	P	6	13	..	●	6	04	52	E	13	08	..
●	8	10	30	●	7	18	44	S	8	17	..	A	13	08	..
E	8	16	..	S	12	08	..	☉	13	16	39	☉	13	13	59
S	15	00	..	☉	14	21	27	A	15	11	..	N	20	13	..
☉	15	05	50	A	18	18	..	E	16	00	..	○	21	08	13
A	21	08	..	E	19	17	..	○	21	17	27	☉ _D	21	23	38
E	22	11	..	○	23	01	36	N	23	05	..	P _D	21	12	..
☉ _S	23	03	09	N	26	23	..	☉	28	20	36	E	26	22	..
○	23	09	17	☉	30	12	46	E	29	17	..	☉	28	04	18
N	29	18	..					P	30	19	..				

LUNAR DATA

- | | |
|--|--|
| <ul style="list-style-type: none"> ● – new Moon ☉ – first quarter ○ – full Moon ☉ – last quarter | <ul style="list-style-type: none"> A – Moon in apogee P – Moon in perigee N – Moon farthest north of Equator E – Moon on Equator S – Moon farthest south of Equator |
|--|--|

SOLAR DATA

- ☉_M – March equinox
- ☉_J – June solstice
- ☉_S – September equinox
- ☉_D – December solstice

Greenwich mean time (GMT) or universal time (UT) is the mean solar time on the Greenwich meridian reckoned in days of 24 mean solar hours written as 00^h at midnight and 12^h at noon. To convert the above times to those of other standard time meridians, add 1 hour for each 15° of east longitude of the desired meridian and subtract 1 hour for each 15° of west longitude. This table was compiled from data supplied by the Nautical Almanac Office, United States Naval Observatory.