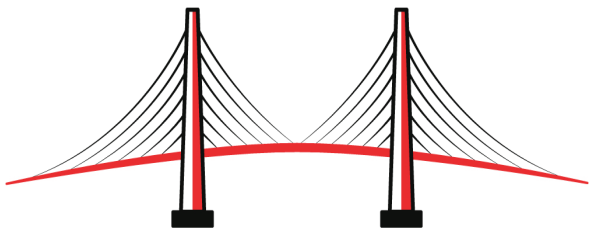
The History of Tampa Bay Pilots

From the earliest records of civilization, man has traveled the waters and has relied upon the expertise of pilots to assure safe passage. Pilots provide assistance to seaman approaching or leaving the seacoast, navigating harbors and when docking and undocking.

Pilots are an important aspect of the history of Tampa Bay. One of the earliest pilots, identified as Anton De Alaminos, explored both the Atlantic and Gulf Coast of Florida. He established the existence of the Gulf Stream and is credited with the discovery of Tampa Bay.

The pilots who followed played a vital role in the settling and growth of Tampa and the entire bay area. The "Tampa Bay Pilots Association", founded in 1886, originally waited for ships at the Egmont lighthouse. The height of the lighthouse allowed the pilots to see approaching ships from great distances. Later, the pilots moved their operation to the current site. For more than a century, Tampa Bay Pilots have met vessels from the pilot station on Egmont Key.

The profession of piloting remains relatively unchanged. Today, "The Tampa Bay Pilots" offer the same critical judgment and unsurpassed familiarity with the land, sea and the ever-changing elements as have pilots since the dawn of history. As the pilots enter into their second century of service to Tampa Bay, our commitment to excellence and dedication to service remains our top priority.



TAMPA BAY PILOTS ASSOCIATION

SERVING TAMPA BAY SINCE 1886

Contents

Pilot Ladder Requirements	4
General Information	10
Vessel Traffic Service	13
Regulated Navigation Areas	14
Hurricane Safety Zones	15
Restricted Visibility Safety Zones	18
Vessels Of Concern	28
Seaman's Facilities	36
Telephone Directory	37
Area Attractions	41
Port Maps	44
Assist Tugs	53
Channel and Facility Guidelines	54
Channel Distances	76
Metric Conversion Tables	78
Tides and Currents	85

The information contained in this booklet has been assembled from a variety of sources which are believed to be reliable. However, no effort has been made to verify said information. Our purpose is to provide the users of Tampa Bay Pilots' services with a collection of information useful for planning vessel movements in and around Tampa Bay. No warranty, expressed or implied, is made for the accuracy of the information contained in this booklet. The tide and current data has been obtained from published materials from designated publishers of the National Oceanic and Atmospheric Administration (NOAA). Although efforts have been made to verify that the data obtained from said designated publishers has been accurately compiled herein, no guarantee of accuracy is made. Persons using this booklet should consult original sources, including published NOAA charts.

30th Edition

Tampa Bay Pilots Association
www.tampabaypilots.com

1825 Sahlman Drive
Tampa, FL 33605-6081

Executive Director
Terry Fluke
terryfluke@tampabaypilots.com
(813) 247-3737, Option #4
(727) 252-3132

Pilot Dispatch Telephone: (813) 247-3737, Option #2
dispatch@tampabaypilots.com
Pilot Dispatch Fax: (813) 247-4425
Pilot Station Telephone: (727) 741-7110

How To Order

Arriving Vessels:

Contact Pilot Dispatch 24 hours before arrival with following information:

International Gross Tonnage, LOA, Beam, Deep Draft, name of local agent.

Call pilot station on VHF Ch. 16 four hours prior to arrival and one hour prior to arrival at the Tampa Sea Buoy. Pilot station stands by on VHF Ch. 16, 13, 12 and 10. Additional instructions will be given upon radio contact.

If instructed to anchor, please keep 24 hour radio watch on VHF Ch. 12 and Ch. 13.

If proceeding inbound in Egmont Channel, maintain radio watch on VHF Ch. 12 and Ch. 13.

Sailing or Shifting:

Alongside:

Call Pilot Dispatch via telephone or VHF Ch. 10. A minimum 2.5 hours is required prior to requested pilot boarding time.

From Gadsden Anchorage:

Call Pilot Dispatch via telephone or VHF Ch. 10. A minimum 3 hours is required prior to requested pilot boarding time for movements from Gadsden Anchorage.

SOLAS Pilot Ladder Requirements

1. Please contact pilot boat via VHF voice radio (CH 16/12) approximately 1 hour prior to arrival for desired lee.
2. The ladder must be kept clean and used solely for embarking and disembarking pilots.
3. Rigging of the ladder, along with embarking and disembarking pilot, must be under the supervision of a licensed officer.
4. The ladder must be made in one length and not consist of two lengths shackled or lashed together, and should be equipped with spreaders about 10 feet (3 meters) apart to comply with SOLAS regulation 17, chapter 5.
5. The pilot boats have their own lights to illuminate the pilot ladder, but a standby light should be ready for an emergency.
6. The area of the deck where the pilot boards and leaves must be well lighted and must be clear of all obstacles to insure a safe passage for the pilot.
7. **No tag lines, pull-up ropes, or trailing lines shall be attached to the lower ends of the ladder.**
8. Ladders must be rigged well clear of water and discharge outlets, and at a place near midship which affords the best lee for the pilot. At no time should the ladder be rigged near the stern of the vessel.
9. Means must be provided to allow the pilot to pass safely onto the ship's deck. Where portable stanchions and bulwark steps are used for this, the portable stanchions must be rigidly attached to the ship's structure and not the steps. The bulwark steps must also be securely fastened.
10. The ladder must be in good condition. The treads must remain horizontal when used and the upper surface must have a rough, non-skid quality.
11. Manropes, approximately 3" manila in circumference may be requested. A heaving line and a ring buoy with a self-igniting light must be provided.
12. If your vessel is to load deck cargo, make sure the agent makes arrangements to provide safe passage to the ladder for the pilot.

Accommodation Ladders

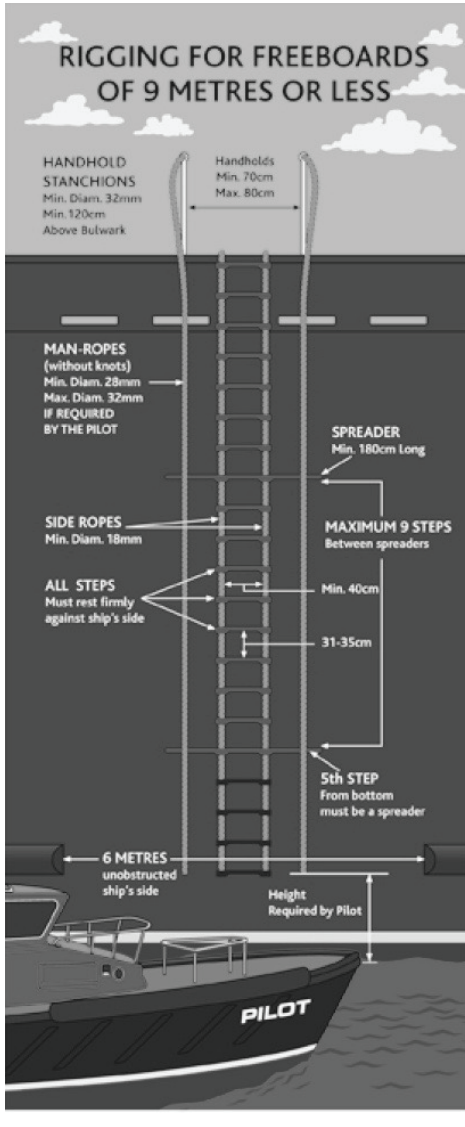
1. All vessels, where the distance from sea level to the point of access of the ship exceeds 30 feet (9 meters) at all times carry an accommodation ladder on each side. The ladder shall be secured to the ship's side, to be secure alongside under all conditions of roll and heel, clear of all discharges, and within the parallel length of the ship.
2. The conventional pilot ladder should be rigged just abaft the lower platform of the accommodation ladder. The pilot ladder must be firmly attached to the ship's side.

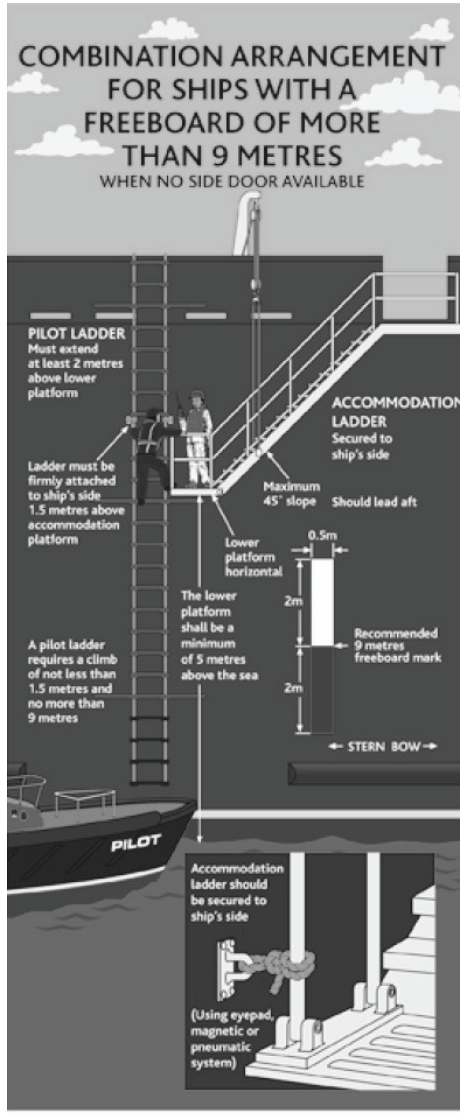
Pilot Boarding/Disembarking in Tampa Bay

- Pilot ladder should be rigged 2.5 metres (8 feet) above the water.
- Boarding speed will be a safe speed as directed, depending upon weather conditions.
- Tug/barge units are required to rig pilot ladders. These vessles may require boarding inside Egmont Key if a pilot ladder cannot be rigged on the barge.
- **No tag lines should be rigged near the ladder for boarding or disembarking.**
- Pilot boarding is normally done in Egmont Channel, at buoys 9 & 10.
- Some weather conditions may require alternative boarding arrangements, such as making a lee North of Egmont Channel or boarding inside of Egmont Key. The pilot boat will provide specific boarding instructions to inbound vessels.

Pilot Boats

Name	LOA	Description
Tampa	53'	Black hull & grey superstructure
Manatee	53'	Black hull & grey superstructure
Fort Dade	54'	Black hull & white superstructure
Ybor	30'	Black hull & white superstructure


RIGGING FOR FREEBOARDS OF 9 METRES OR LESS
HANDHOLD STANCHIONS
Min. Diam. 32mm
Min. 120cm
Above Bulwark
Handholds
Min. 70cm
Max. 80cm
MAN-ROPES
(without knots)
Min. Diam. 28mm
Max. Diam. 32mm
IF REQUIRED
BY THE PILOT
SPREADER
Min. 180cm Long
SIDE ROPES
Min. Diam. 18mm
MAXIMUM 9 STEPS
Between spreaders
ALL STEPS
Must rest firmly
against ship's side
Min. 40cm
31-35cm
5th STEP
From bottom
must be a spreader
6 METRES
unobstructed
ship's side
Height
Required by Pilot
PILOT


COMBINATION ARRANGEMENT FOR SHIPS WITH A FREEBOARD OF MORE THAN 9 METRES
WHEN NO SIDE DOOR AVAILABLE
PILOT LADDER
Must extend at least 2 metres above lower platform
ACCOMMODATION LADDER
Secured to ship's side
Ladder must be firmly attached to ship's side 1.5 metres above accommodation platform
Maximum 45° slope
Should lead aft
0.5m
Lower platform horizontal
The lower platform shall be a minimum of 5 metres above the sea
2m
Recommended 9 metres freeboard mark
A pilot ladder requires a climb of not less than 1.5 metres and no more than 9 metres
2m
STERN
BOW
PILOT
Accommodation ladder should be secured to ship's side
(Using eyepad, magnetic or pneumatic system)

Marine Safety Information Bulletin

Commandant
U.S. Coast Guard
Inspections and Compliance Directorate
2703 Martin Luther King Jr Ave SE, STOP 7501

MSIB Number: 21-20, Change 2
Date: November 05, 2020
E-Mail: FlagStateControl@uscg.mil
Washington, DC 20593-7501

Recommendation for Pilot Transfer Arrangements

Recent deaths of maritime pilots while embarking commercial vessels highlight the risks of operating in an unforgiving maritime environment. To ensure the safety of all personnel boarding a vessel at sea, the Coast Guard reminds vessel owners and operators of the requirements contained in the Safety of Life at Sea (SOLAS) Chapter V, Regulation 23 and **strongly recommends** that owners and operators follow the recommendations within IMO Resolution A.1045(27) – *Pilot Transfer Arrangements*.

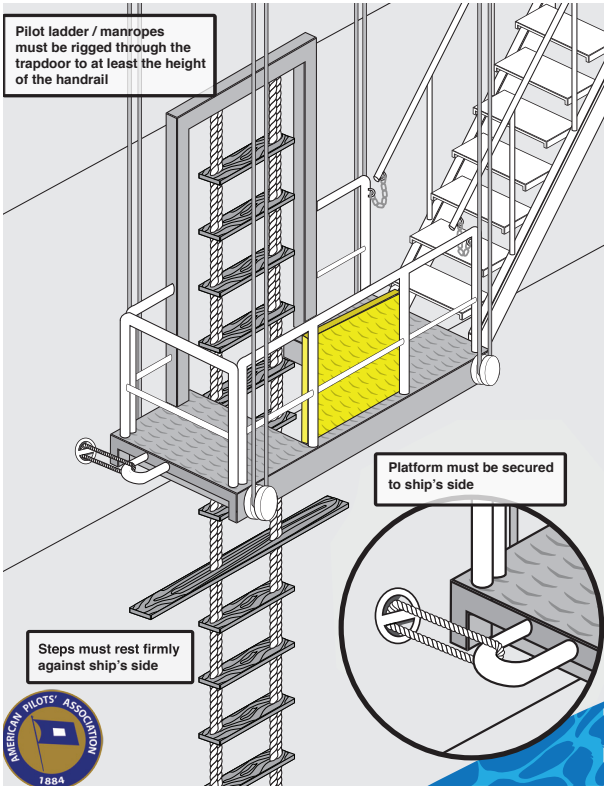
For vessels with equipment and arrangements installed on or after July 1, 2012, combination arrangements involving a trapdoor configuration are required to comply with SOLAS Chapter V, Regulation 23.3.3.2.1. A graphic depiction of a SOLAS compliant combination arrangement involving a trapdoor is included as an enclosure (Source: American Pilots Association).

In accordance with SOLAS Chapter V, Regulation 23.1.4, equipment and arrangements installed on or after 1 July 2012, which are a replacement of equipment and arrangements provided on ships before 1 July 2012, shall, in so far as is reasonable and practicable, comply with the requirements of SOLAS Chapter V, Regulation 23.3.3.2.1. The Coast Guard **strongly recommends** that such replaced equipment and arrangements meet the recommendations within IMO Resolution A.1045(27).

For vessels registered in the U.S., Coast Guard marine inspectors and classification society surveyors verify pilot transfer arrangements during initial construction. Any changes in the approved configuration should be brought to the attention of the local Officer in Charge, Marine Inspection (OCMI) or the classification society surveyor, if applicable, in order to verify that the pilot transfer arrangement is in compliance with SOLAS Chapter V, Regulation 23.

Questions concerning this notice may be forwarded to Coast Guard Office of Commercial Vessel Compliance, Flag State Control Division (CG-CVC-4) at FlagStateControl@uscg.mil.

-uscg-


Pilot ladder / manropes must be rigged through the trapdoor to at least the height of the handrail
Platform must be secured to ship's side
Steps must rest firmly against ship's side
AMERICAN PILOTS' ASSOCIATION
1884

General Information

Lighthouse and Bridge Information

Egmont Key Lighthouse	85 feet above MLLW, is shown from a white tower on the North end of Egmont Key. The light flashes every 15 seconds and has a nominal range of 18 nautical miles.
Sunshine Skyway Bridge	The bridge crosses lower Tampa Bay, connecting Maximo Point with Tierra Ceia Island. The bridge has a vertical clearance of 180 feet (54.8 Mtr) at the channel boundary at MHW, with a central span clearance of 875 feet at the extreme width of the protective islands at the bay bottom. The total causeway length, including the bridge span, is 9.4 nautical miles.

Anchorages

Fairway Anchorages	The fairway anchorage is established North of the Tampa Safety Fairway leading to Egmont Channel.
Egmont Key	There is an emergency anchorage South of Mullet Key (East of Egmont Key Lighthouse) in natural depths of 30 to 35 feet.
Gadsden Point Cut	Vessels no greater than 670 feet LOA, or to 685 with a tug, and 27 foot draft may anchor South of Gadsden Point Cut. Natural depths in the area range from 29 feet to 35 feet.
Explosives and Quarantine Anchorages	East of Mullet Key, South of Interbay Peninsula and North of the junction of Weedon Island Channel and K-Cut Channel in Old Tampa Bay. The use of the Explosive and Quarantine anchorages are restricted as outlined in 33 CFR 110.193.
East Bay	There is a 72-hour emergency anchorage in East Bay. This anchorage is available only with advanced notice to the Tampa Port Authority.

Common VHF Frequencies in Tampa Bay

Name	Radio Call Sign	Available Frequencies
Captain of the Port Sector St. Petersburg		16 / 21 / 22A
Tampa Bay Pilot Office	KAW-763	10
Tampa Bay Pilot Station	KAW-767	16/10/12/13
Vessel Traffic Advisory Service - "Tampa Traffic"	WHX-362	16/13/12
Marine Towing	WQA-331	16/10/14/77
Seabulk Towing	WQGS-425	16/10/14/77
Sea Taxi		16/06

Channel 13 is used for Bridge to Bridge and Vessel Traffic Advisories.

Time

Eastern Standard Time is kept in Tampa Bay from 0200 on the first Sunday in November to 0200 on the second Sunday in March. **ZD -5.**

Daylight Saving Time (Summer Time) is kept in Tampa Bay from 0200 on the second Sunday in March to 0200 on the first Sunday in November. **ZD -4**

Bunkers

All grades and types of bunkers are available via barge & truck. Martin Gas, Port Consolidated and Vane Brothers are the primary providers of bunkering services. Arrangements can be made through local agents.

Cooperative Vessel Traffic Service - Tampa Bay

The Cooperative Vessel Traffic Service (CVTS) is a partnership between the U.S. Coast Guard and the Tampa Port Authority. The operational portion of the CVTS, the Vessel Traffic Center (VTC), located at the Tampa Port Authority Security Operations Center is manned 24 hours a day by Coast Guard and Port Authority personnel.
The CVTS primary function is to coordinate safe and efficient vessel movement and to prevent marine accidents and waterway incidents in Tampa Bay and also the associated loss of life and damage to property and the environment. This is accomplished by coordinating vessel movements through the collection, verification, organization and dissemination of information.

- Contact the CVTS by telephone at 813-241-1886 or 813-242-1600; FAX 813-241-1810.
- The CVTS monitors VHF-FM channels 16, 13 and 12; works on channel 12.
- Voice calls are "Tampa Traffic" or "WHX-362".

Required Reports to the CVTS

1. Vessel should contact the CVTS prior to entering Tampa Bay, shifting or departing dock.
    a. When contacting the CVTS you should be prepared to provide the following information
        i. Vessel name, call sign, location, and intentions
        ii. Vessel beam and draft
        iii. Telephone number and/or VHF-FM channel you are standing by on
            1 Inbound
                A ETA Berth or Anchorage Outbound or Shifting
                B ETD Berth or Anchorage
            2 Outbound or Shifting
                A ETA Sunshine Skyway Bridge
                B All clear time
    b. When you call in you should receive the following information from the CVTS:
        i. Name, beam, draft, and destination of vessels you may expect to encounter during your time of transit
        ii. Their telephone number and/or standby on VHF-FM channel

Regulated Navigation Area
Navigational Advisory Broadcast VHF Channel 13
33 CFR 165.753 - Regulated navigation area

a. The following is a regulated navigation area (RNA): All the navigable waters of Tampa Bay, Hillsborough Bay and Old Tampa Bay, including all navigable waterways tributary thereto. Also included are the waters of Egmont Channel, Gulf of Mexico from Tampa Bay to the sea buoy, Tampa Lighted Whistle Buoy T, LLNR 18465.

b. The Master, Pilot or Person In Charge of any vessel of 50 meters or greater shall give a Navigation Advisory Broadcast in accordance with 47 CFR 80.331 on VHF channel 13 at the following broadcast reporting points:
   1. Prior to getting underway from any berth or anchorage.
   2. Prior to entering Egmont Channel from seaward.
   3. Prior to passing Egmont Key in any direction.
   4. Prior to transiting the Skyway Bridge in either direction.
   5. Prior to transiting the intersection of Tampa Bay Cut F Channel, Tampa Bay Cut G Channel, and Gadsden Point Cut Channel.
   6. Prior to anchoring or approaching the berth for docking.
   7. Prior to tending hawser.
   8. Prior to passing Point Pinellas Channel Light #1 in either direction.

c. Each navigational advisory required shall be made in the English Language and will contain the following information:
   1. The words "Hello all vessels, a Navigational Advisory follows";
   2. Name of vessel;
   3. If engaged in towing, the nature of the tow;
   4. Direction of movement;
   5. Present location;
   6. The nature of any hazardous conditions as defined by 33 CFR 160.203.

Hurricane Safety Zones
33 CFR 165.781 Safety Zone; hurricanes and other disasters in Western Florida.

a. Regulated areas. The following areas are established as a safety zone during the specified conditions:
   1. All waters within the Sector St. Petersburg Captain of the Port zone encompassing all navigable waters or tributaries between or within Fenholloway River through Chokoloskee Pass, Florida.
   2. [Reserved]

b. Definition.
   1. Designated Representative means Coast Guard Patrol Commanders including Coast Guard coxswains, petty officers and other officers operating Coast Guard vessels, and federal, state, and local officers designated by or assisting the COTP, in the enforcement of regulated navigation areas, safety zones, and security zones.
   2. **Hurricane Port Condition WHISKEY** means condition set when weather advisories indicates sustained gale force winds (39-54 mph/34-47 knots) from a tropical or hurricane force storm are predicted to make landfall at the port within 72 hours.
   3. **Hurricane Port Condition X-RAY** means condition set when weather advisories indicates sustained gale force winds (39-54 mph/34-47 knots) from a tropical or hurricane force storm are predicted to make landfall at the port within 48 hours.
   4. **Hurricane Port Condition YANKEE** means condition set when weather advisories indicate that sustained gale force winds (39-54 mph/34-47 knots) from a tropical or hurricane force storm are predicted to make landfall at the port within 24 hours.
   5. **Hurricane Port Condition ZULU** means condition set when weather advisories indicate that sustained gale force winds (39-54 mph/34-47 knots) from a tropical or hurricane force storm are predicted to make landfall at the port within 12 hours.

c. Regulations.
   1. **Hurricane Port Condition WHISKEY**. All vessel and port facilities must exercise due diligence in preparation for potential storm impacts. Slow-moving vessels may be ordered to depart to ensure safe avoidance of the incoming storm upon the anticipation of the setting of Port Condition X-RAY. The PHWAG will make recommendations to the Captain of the Port to identify vessels that may need to be diverted to ensure the safety of the port. Ports and waterfront facilities shall begin removing all debris and securing potential flying hazards. Container stacking plans shall be implemented. Waterfront facilities that, are unable to reduce container stacking height to no more than four high, must submit

Continued

a container stacking protocol to the Captain of the Port (COTP).

2. **Hurricane Port Condition X-RAY.** All vessels and port facilities shall ensure that potential flying debris is removed or secured. Hazardous materials/pollution hazards must be secured in a safe manner and away from waterfront areas. Facilities shall continue to implement container stacking protocol. Containers must not exceed four tiers, unless previously approved by the COTP. Containers carrying hazardous materials may not be stacked above the second tier. All oceangoing commercial vessels greater than 500-gross tons must prepare to depart ports and anchorages within Tampa Bay. These vessels shall depart immediately upon the setting of Port Condition YANKEE. During this condition slow-moving vessels may be ordered to depart to ensure safe avoidance of the incoming storm. A COTP Order will be issued to vessels asked to depart early. COTP orders requiring vessel departure will be considered on a case-by-case basis. Vessels that are unable to depart the port must contact the COTP to request and receive permission to remain in port. Proof of facility owner/operator approval is required. Vessels with COTP's permission to remain in port must implement their pre-approved mooring arrangement. Terminal operators shall prepare to terminate all cargo operations. The COTP may require additional precautions to ensure the safety of the ports and waterways. Coast Guard Port Assessment Teams will be deployed to validate implementation of Port Condition X-RAY. The COTP will convene the Port Heavy Weather Advisory Group (PHWAG) as deemed necessary.
3. **Hurricane Port Condition YANKEE.** Affected ports are closed to inbound vessel traffic. All oceangoing commercial vessels greater than 500-gross tons must have departed Tampa Bay. Appropriate container stacking protocol must be completed. Terminal operators must terminate all cargo operations not associated with storm preparations: cargo operations associated with storm preparations include moving cargo within or off the port for s ecuring purposes, crane and other port/facility equipment preparations, and similar activities, but do not include moving cargo onto the port or vessel loading/discharging operations unless specifically authorized by the COTP. All facilities shall continue to operate in accordance with approved Facility Security Plans and comply with the requirements of the Maritime

Hurricane Safety Zones
33 CFR 165.781 Safety Zone; hurricanes and other disasters in Western Florida.

Continued

Transportation Security Act (MTSA). Drawbridges may be closed to vessel traffic as early as eight hours prior to the arrival of tropical storm force winds. Coast Guard Port Assessment Teams will conduct Port Condition YANKEE validation. The COTP will convene the Port Heavy Weather Advisory Group (PHWAG), as deemed necessary.

4. **Hurricane Port Condition ZULU.** All port waterfront operations are suspended, except final preparations that are expressly permitted by the COTP necessary to ensure the safety of the ports and facilities. Coast Guard Port Assessment Teams will conduct final port assessments.
5. Emergency Restrictions for Other Disasters. Any natural or other disasters that are anticipated to affect the Sector St. Petersburg Captain of the Port zone will result in the prohibition of commercial vessel traffic transiting or remaining in the port and/or facility operations.

Restricted Visibility Safety Zone

33 CFR 165.782 Safety Zone; restricted visibility in Tampa Bay.

a. Regulated areas. The following areas are established as safety zones during the specified conditions:
   1. Zone 1 (Interbay) means all navigable waters within a box marked by the following coordinates: 27°52’56” N., 82°29’44” W.; thence to 27°52’50” N., 82°23’41” W.; thence to 27°57’27” N., 82°23’50” W. thence to 27°57’19” N., 82°29’39” W.. This encompasses all Navigable waterways North of Hillsborough Cut “C” Channel LB “25” (LLNR 23445) & “26” (LLNR 23450).
   2. Zone 2 (East Tampa/Big Bend) means all navigable waters within a box marked by the following coordinates: 27°52’50” N., 82°23’41” W.; thence to 27°46’36” N.; 82°24’04” W.; thence to 27°46’29” N., 82°31’21” W.; thence to 27°52’59” N., 82°31’24” W. This zone encompasses all navigable waterways between Hillsborough Cut “C” Channel LB “25” (LLNR 23445) & “26” (LLNR 23450) to Cut “6F” (LLNR 22830) Channel.
   3. Zone 3 (Old Tampa Bay) means all navigable waters within a box marked by the following coordinates: 27°46’29” N., 82°31’21” W.; 28°01’58” N., 82°31’39” W.; thence to 28°02’01” N., 82°43’20” W.; thence to 27°46’15” N., 82°43’24” W. This zone encompasses all navigable waterways between all of Old Tampa Bay to Cut “6F” (LLNR 22830) Channel.
   4. Zone 4 (Middle Tampa Bay) means all navigable waters within a box marked by the following coordinates: 27°46’34” N., 82°34’04” W.; thence to 27°38’40” N., 82°31’54” W.; thence to 27°44’38” N., 82°40’44” W.; thence to 27°46’15” N., 82°40’46” W. This zone encompasses all navigable waterways between Cut “6F” (LLNR 22830) Channel to Tampa Bay “1C” (LLNR 22590).
   5. Zone 5 (Lower Tampa Bay/Manatee) means all navigable waters within a box marked by the following coordinates: 27°44’33” N., 82°40’37” W.; thence to 27°58’59” N., 82°40’34” W.; thence to 27°36’18” N., 82°38’57” W.; thence to 27°34’10” N., 82°34’50” W.; thence to 27°37’56” N., 82°31’15” W. This zone encompasses all navigable waterways between Tampa Bay “1C” (LLNR 22590) to Sunshine Skyway Bridge.
   6. Zone 6 (Mullet Key) means all navigable waters within a box marked by the following coordinates: 27°38’59” N., 82°40’35” W.; thence to 27°36’44” N., 82°44’13” W.; thence to 27°32’20” N., 82°44’37” W.; thence to 27°31’18” N., 82°38’59” W.; thence to 27°34’09” N., 82°34’53” W.; thence to 27°36’15” N., 82°39’00”

Restricted Visibility Safety Zone

33 CFR 165.782 Safety Zone; restricted visibility in Tampa Bay.

W. This zone encompasses all navigable waterways between the Sunshine Skyway Bridge to Mullet Key Channel LB "21" (LLNR 22365) & "22" (LLNR 22370).

7. Zone 7 (Egmont Entrance) means all navigable waters within the area encompassed by the following coordinates: 27°36'27" N., 82°44'14" W.; thence to 27°39'46" N., 82°44'45" W.; thence to 27°39'36" N., 83°05'10" W.; thence to 27°32'29" N., 83°04'50" W.; thence to 27°32'21" N., 82°44'42" W. This zone includes the fairway anchorages.
8. All coordinates are North American Datum 1983.

b. Definition.
   1. Designated Representative means Coast Guard Patrol Commanders including Coast Guard coxswains, petty officers and other officers operating Coast Guard vessels, and federal, state, and local officers designated by or assisting the COTP, in the enforcement of regulated navigation areas, safety zones, and security zones.
   2. [Reserved]

c. (c) Regulations.
   1. Vessel should not commence an inbound, shift, or outbound transit during periods where visibility is less than one nautical mile due to fog or inclement weather.
   2. The COTP may open or close Tampa Bay or specific zones to vessel traffic described in the regulated areas section of this chapter.

Tampa Bay Restricted Visibility

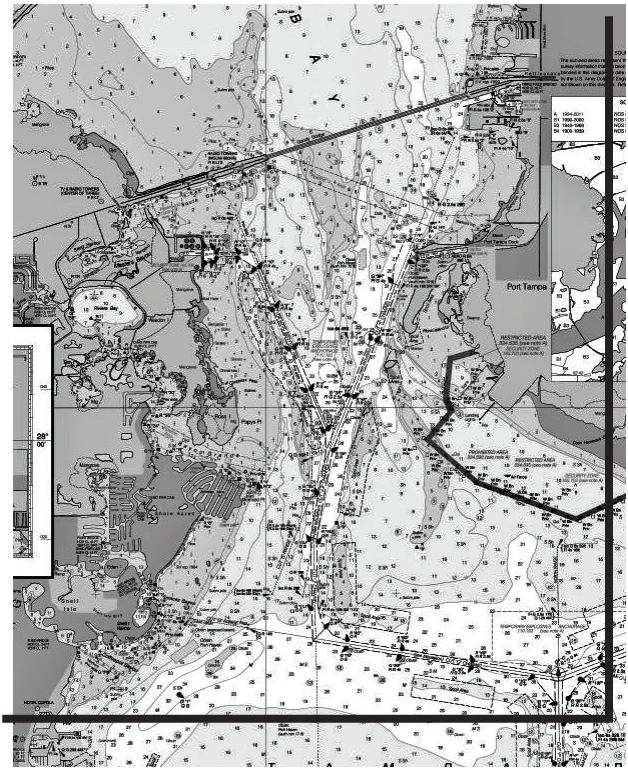
Zone 1

Tampa Bay Restricted Visibility

Zone 2

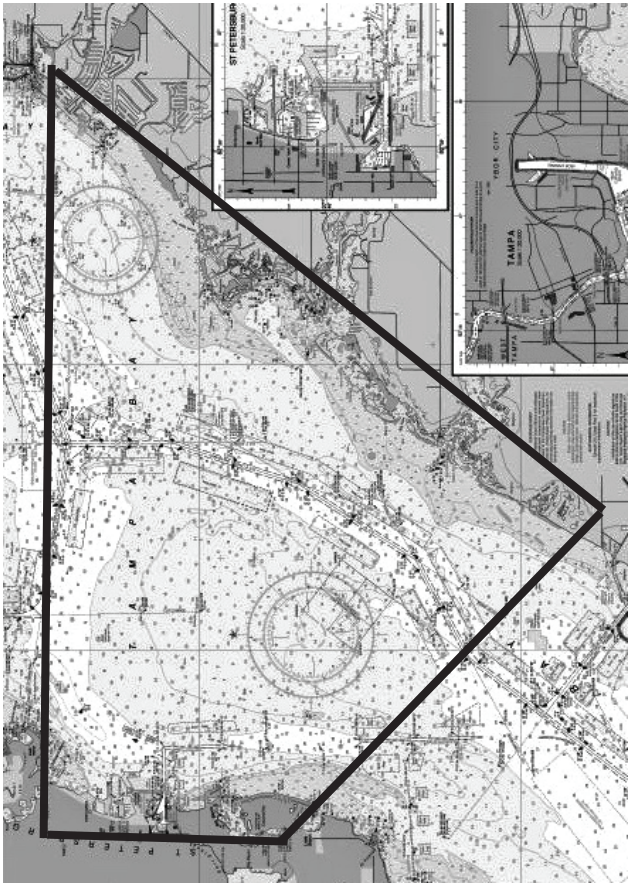
Tampa Bay Restricted Visibility

Zone 3



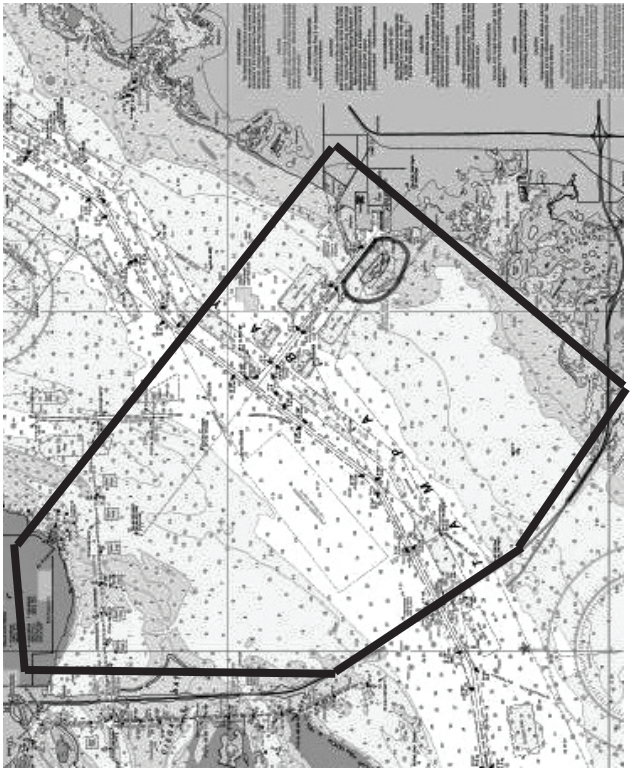
Tampa Bay Restricted Visibility

Zone 4



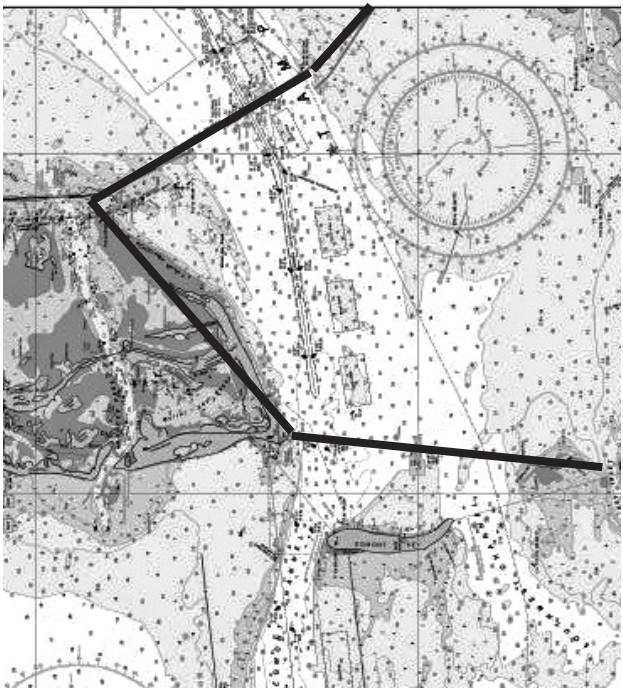
Tampa Bay Restricted Visibility

Zone 5



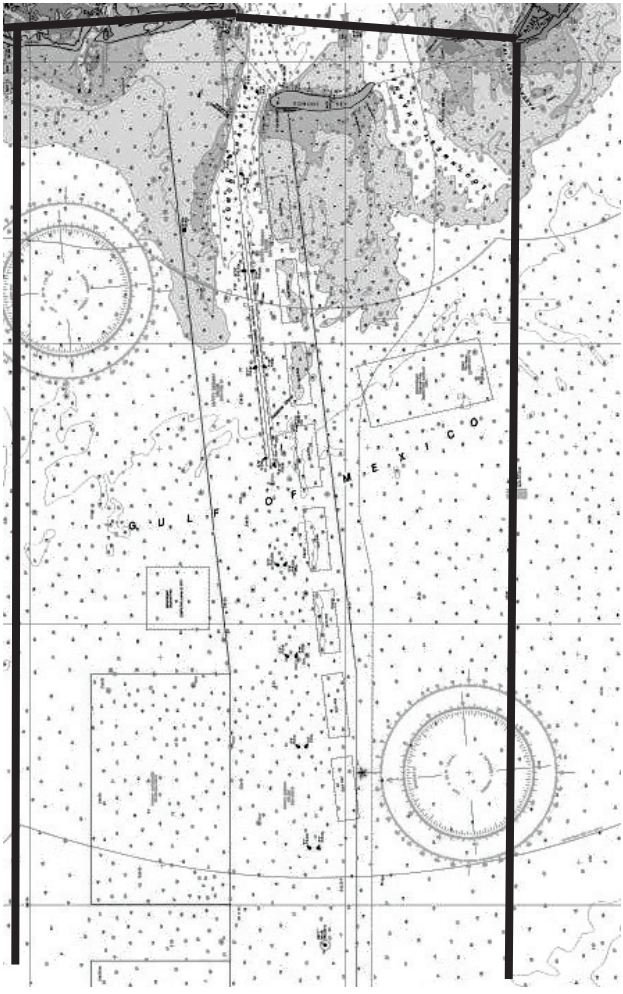
Tampa Bay Restricted Visibility

Zone 6



Tampa Bay Restricted Visibility

Zone 7



Dead Ship Movements

Dead ship movements are handled on a case-by-case basis by the USCG Captain of the Port. Guidelines have been developed through the joint efforts of the USCG and the Vessel Movement Committee.

Any proposed movement should be planned in a timely manner. Transit and towing arrangements will be evaluated by the USCG and the Tampa Bay Pilots. Each situation is unique and sufficient lead time is essential for proper evaluation.

Dead Ship Assist Tug Recommendations

LOA of Tow	Tow Tugs	Asst. Tugs	Total
Less than 350'	1	1	2
350' to 650'	1	2	3
More than 650'	1	4	5

Any dead ship tow with a LOA of less than 650 feet and a draft greater than 26 feet will require one additional assist tug to the requirements listed above.

Dead ship transits are made in Daylight Only.

Dead ship transits are made with a minimum visibility of 3 nautical miles only.

USCG Dead Ship Safety Zone Criteria

Draft Less than 21 feet

A Safety Zone is in effect from Bravo/Charlie intersection to the berth. There is a free zone from Gadsden Point Cut buoys 3 and 4 to Gadsden Point Cut buoys 7 and 8.

Draft 21 feet and greater

A Safety Zone is in effect from Mullet Key Channel buoys 23 and 24 to the berth.

Dead Ship shifts within the port generally do not require a Safety Zone.

No vessel may meet or pass the dead ship while in Safety Zone transit.

Vessels of Concern

Captain of the Port Policy Letter No 01-17

1. Except as follows, when transits are scheduled for cruise ships or vessles carrying especially hazardous cargo, all **other transits in Tampa Bay will be one way, with no meeting or passing between Mullet Key Chhannel lighted buoys 23/24 and Port Tampa Bay Berth 272.** Any vessel desiring to meet and cruise ship or vessel carrying especially hazardous cargos may meet the opposing vessel(s) in Gadsden Point Cut Channel or anywhere west of lighted buoys 23/24 in Mullet Key Channel.
2. Vessel operators desiring to enter or transit through a moving security zone at any other location in Tampa Bay shall obtain permission from the COTP prior to commencing their transit. To request permission, contact Cooperative Vessel Traffic Service Tampa Bay via VHF channel 12 or 813-242-1600. If permission is granted, all persons and vessels must comply with any given instrustions.

Vessel of Concern (VOC) is defined as a vessel carrying Especially Hazardous Cargos or of a class or type, with a certain size or maneuvering characteristics, that requires special handling while transiting within Tampa Bay.

This protocol addresses the arrival and departure of a single VOC as ·well as the arrival and departure of multiple VOC(s) on the same calendar day based on local time, therefore it is essential that all affected vessel traffic adhere to the following vessel traffic protocol. This protocol does not supersede or negate security zone regulations established by reference (a) of COTP Policy Letter 01-17.

Requirements Common to All VOC Movements:

Except as follows, all transits will be one way, with no meeting or passing between Mullet Key
Channel Buoys 23/24 and Port Tampa Bay Beith 272.
Gadsden Point Cut Cham1el and Mullet Key Channel west of LB 23/24 may be used for passing arrangements as follows:

1. A single VOC may only meet a maximum of two opposing vessels (no hawser tows unless tug master and pilot make prior passing arrangements) when forecasted, sustained winds are predicted to be 15 knots or less and reasonable visibility (no fog or heavy rain) is predicted. Only one opposing vessel shall plan on meeting two VOCs in convoy.
2. A single VOC may meet a maximum of one opposing vessel (no hawser tows unless tug master and pilot make prior passing arrangements) when forecasted, sustained winds are predicted to be between 16 and 20 knots and reasonable visibility (no fog or heavy rain) is predicted. Only one opposing vessel should plan on meeting two VOCs in convoy.

All vessels shall give the Cooperative Vessel Traffic Service (CVTS), 24- and 4- hour notices prior to arrival at the sea buoy and 4- and 2- hour notices prior to depaiture from berth. Vessel operators who foresee a conflict with scheduled movements must contact the CVTS.

Especially Hazardous Cargos:
The owner, master, agent, or person in charge of a vessel or barge, loaded with EHCs, shall report the following information to CVTS Tampa Bay at least twenty-four hours before entering Tampa Bay or its approaches, shifting, or departing Tampa Bay:

a. Name and country of registry of the vessel or barge;
b. The name of the port or place of departure;
c. The name ofthe port or place ofdestination;
d. The estimated time that the vessel is expected at Egmont Channel Lighted Buoys "9" and "10" to begin its transit of Tampa Bay (Moving security zones and procedures are established for all waters, from surface to bottom, within a 500-yard radius);
e. The cargo carried and amount.

Passenger Ship Guidelines

The following applies to cruise ships measuring 855' LOA, 106' Beam, and 70,000 GRT or greater:

Single Cruise Ship

- Cruise ships that meet the aforementioned criteria shall arrive at the "T" Buoy at 0230 for a 0230-0500 start-up window depending on traffic, with an expected docking time between 0630 and 0830. Start up for the cruise ship shall be adjusted, within the window, to allow for movement of other commercial vessels that are restricted in sailing by tide or current, as long as such movement does not cause the cruise ships to deviate the window. If the arrival time is changed due to exceptional weather circumstances, the cruise ship will be allowed to reestablish its arrival time. The cruise ship must notify the VTS no later than 1200 the day prior to the scheduled arrival date with its reestablished arrival time. Any deviation greater than 30 minutes from the reestablished arrival time will move the cruise ship inline with other traffic that has reported to the VTS.

- The departure window will be no earlier than 1600 and no later than 1730 under favorable weather conditions. The cruise ship must notify the VTS no later than 1200 with a departure time for that day. Any deviation greater than 30 minutes from that day's established departure time will move the cruise ship departure time inline with other traffic that has reported to the VTS. If the departure time is delayed due to exceptional weather circumstances, the cruise ship will be allowed to reestablish its departure time. Any deviation greater than 30 minutes from the reestablished departure time will move the cruise ship inline with other traffic that has reported in to the VTS.

Passenger Ship Guidelines

The following applies to cruise ships measuring 855' LOA, 106' Beam, and 70,000 GRT or greater:

Multiple Cruise Ship

- The cruise ships arrive at the "T" Buoy at 0230 for a 0230 – 0500 start-up window depending on traffic, with an expected docking time of 0630 – 0830. The cruise ships will be expected to coordinate arrival so that they can convoy together, within the window, at a distance established by the pilots on each vessel. Start-up for the cruise ships shall be adjusted, within the window, to allow for movement of other commercial vessels that are restricted in sailing by tide or current, as long as such movement does not cause the cruise ships to deviate from the window. If one or more of the cruise ship's arrival times are changed due to exceptional weather circumstances, the cruise ships will be given the opportunity to reestablish an arrival time. The cruise ships must notify the VTS no later than 1200 the day prior to the scheduled arrival date, with their reestablished arrival times. Any deviation greater than 30 minutes from the reestablished arrival time will move the cruise ships in line with other traffic that has reported to the VTS.

- Upon departure, the cruise ships will convoy together during a departure window no earlier than 1600 and no later than 1730 under favorable weather conditions. The cruise ships must notify the VTS no later than 1200 with a departure time for that day. Any deviation greater than 30 minutes by any cruise ship from its established departure time will move the departure time in line with other traffic that has reported to the VTS. If the cruise ship's departure time is delayed due to exceptional weather circumstances, the cruise ship will be allowed to reestablish its departure time within the 30- minute convoy requirement. Any deviation greater than 30 minutes from the reestablished departure time will move the delayed cruise ship in line with other traffic that has reported to the VTS.

- Vessels at berths in Ybor Channel shall enter and depart in a sequence coordinated by the pilots on board.

Passenger Ship Guidelines

Additional Requirements for Cruise Ships Measuring 900' LOA, 106' Beam, and 85,000 GRT or Greater

The requirements in this section are in addition to the requirements listed above for all cruise ships.

- With sustained winds of 20 knots or less, as measured at Terminal 2, East Bay Causeway, or Peter O. Knight Airport, the vessel may transit Sparkman Channel.

- With sustained winds of 21 to 25 knots, as measured at Terminal 2, East Bay Causeway, or Peter O. Knight Airport, the vessel may transit Sparkman Channel with the mutual agreement of the master and pilot taking into consideration variables, such as wind direction, tug availability, vessels at berth along Sparkman Channel, etc.

- With sustained winds of 26 to 30 knots, as measured at Terminal 2, East Bay Casueway, or Peter O. Knight Airport, the vessel may transit from the "T" Buoy to East Bay only.

An alternative berth will be identified and communicated to the pilot and master of the vessel prior to the inbound transit.

Passenger Ship Guidelines

The following general guidelines apply to all passenger ship transits in Tampa Bay.

Maximum Air Draft - 180 feet at MHW.

One-way traffic in Hillsborough Cut D, Sparkman Channel and Ybor Channels.

Wind Conditions - Arrivals

Sustained winds as measured at PORTS Middle Tampa Bay sensor.

Sustained Winds	Tug/Berthing Requirements
20 to 25 knots	1 Class A tug
25 to 30 knots	2 Class A tugs.
30 knots or greater	2 Class A tugs. Proceed to alternate berth.

Sparkman Channel - Arrivals

Winds greater than 25 knots up to 30 knots, as measured at Terminal 2, Seabulk Towing or Peter O. Knight Airport:

May transit Sparkman Channel with the mutual agreement of the vessel Master and Pilot, taking into consideration variables such as wind direction, tug availability and vessels alongside in Sparkman Channel.

Sparkman Channel - Departures

Winds greater than 20 knots up to 25 knots, as measured at Terminal 2, Seabulk Towing or Peter O. Knight Airport:

May transit Sparkman Channel with the mutual agreement of the vessel Master and Pilot, taking into consideration variables such as wind direction, tug availability and vessels alongside in Sparkman Channel.

A final determination of berthing arrangements and tug use will be made by mutual agreement of the vessels Master and the Pilot based upon the actual conditions in the port area.

Wide Beam Restrictions

Maximum combined beam width in the 500-foot sections of the main channel is 220 feet. Beam combinations that exceed 220 feet are not permitted and these vessels will require one-way traffic.

Maximum combined beam width for vessels bound for Old Port Tampa is 196 feet.

Notes

Seafarers Facilities

Seafarers Ministry

1309 Shoreline Ave, Tampa FL 33605
Phone (813) 247-5237
tampaportministries.com

The Ministry provides an average of 1800 Christmas boxes per year to seafarers. A Chaplain is available to board ships or at the center. Services include free clothing, telephones, refreshments, bibles, magazines, city tours and transportation.

Port Manatee Anchor House

13285 Eastern Ave, Palmetto (Port Manatee)
Phone (941) 722-0764
Email tim@anchorhousemission.com
Website anchorhousemission.com

The Anchor Houses' Mission for Jesus Christ is to meet the spiritual, social, physical and emotional needs of international seafarers, truckers, and dock workers at Port Manatee.

Marine Telephone Directory

Tampa Bay Pilots

Dispatch	813-247-3737
Dispatch Fax	813-247-4425
Pilot Station	727-741-7110

Useful Numbers

Tampa Bay PORTS	866-827-6787
Tampa Bay CTVS	813-241-1886

Tug Companies

Marine Towing	813-242-4116
Seabulk Towing	813-247-3187

Line Handlers

Best of the Bay	813-689-0118
Harborside	813-920-8043
Palmetto Beach	727-644-8781
Tampa Bay Ship Services	813-280-6950

Shipping Agents

A.R. Savage and Son LLC	813-247-4550
Fillette Green	813-348-1481
Intercruises	813-226-8900
Norton Lilly Shipping	813-247-2900
Nova International	813-625-8416
Sea and Land	813-251-6100
Trans Atlantic	813-995-3027
Valls Shipping Agencies	813-639-4300

Marine Telephone Directory

Regulatory/Governmental

Fire, Police, Ambulance	911
Tampa Port Authority	
Main Number	813-905-7678
24 Hour Operations	813-241-1886
CVTS	813-241-1886
Manatee Port Authority	941-722-6455
USCG	
Sector St. Petersburg	727-824-7534
Prevention - Tampa Office	813-228-2191
Search & Rescue Command Ctr. - St. Petersburg	727-824-7506
COTP	727-824-7534
ATON	727-824-7634
Documents and Licensing	888-427-5662
Homeland Security, Office of Investigations	813-357-7000
U.S. Immigration & Customs	813-357-7000
U.S. Department of Environmental Services	850-617-7900
Federal Bureau of Investigation	813-253-1000
Florida Department of Business and Professional Regulation	850-487-1395
Florida Fish and Wildlife	813-348-1500
National Weather Service - Tampa	813-645-2323

Transportation

Taxi Service	
10 Knot Transportation	813-221-8294
Red Top Cab	813-888-5008
United Cab	813-777-7777
Yellow Cab	813-253-0121
Airport Shuttle	
Super Shuttle	800-258-3826

Marine Telephone Directory

Launches and Water Transportation

Sea Sub Systems	727-541-0610
Sea Tow	727-547-1868
Tampa Water Taxi	888-665-8687

Rental Cars

Rental Cars - On Airport	
Avis	800-831-2847
	813-396-3500
Budget	800-800-4000
	813-396-3640
Dollar	866-434-2226
Hertz	800-654-3131
	813-874-3232
Enterprise	800-566-9249
	813-396-4000
Thrifty	813-348-0607
Alamo	813-396-4140
National	813-396-4140

Airlines Serving Tampa Bay

Air Canada	888-247-2262
American	800-433-7300
British Airways	800-247-9297
United	800-241-6522
Delta	800-221-1212
Frontier	800-401-9000
Jet Blue	800-538-2583
Southwest	800-435-9792

Marine Telephone Directory

Area Attractions

Tampa/St. Petersburg Area

Busch Gardens	813-884-4386
Lowry Park Zoo	813-935-8552
Museum of Science and Industry	813-987-6000
Glazer Childrens Museum	813-443-3861
Florida Aquarium	813-273-4000
Tampa Bay History Center	813-228-0097
Salvadore Dali Museum	727-823-3767
St. Pete Museum of Fine Arts	727-896-2667
American Victory Mariner's Museum	813-228-7766

Orlando

Disney's Epcot, Hollywood Studios & Animal Kingdom	407-824-4321
Walt Disney World	407-939-1289
Universal Studios Orlando	407-363-8000
Sea World	407-351-3600
Legoland	877-350-5346

Area Attractions - General Information

Tampa's Channelside District

Home to Florida Aquarium, several shops and restaurants including Hooters and Splitsville. The Victory Ship Museum "American Victory" is docked adjacent to the aquarium.

Distance From Port of Tampa Gate: 3.1 miles

Ybor City

Known as Tampa's Latin District. Founded by Vicente Martinez-Ybor as a cigar-manufacturing center, Ybor City today is one of only two National Historic Landmark Districts in Florida. There are many restaurants, and clubs in this area.

Distance From Port of Tampa Gate: 2.5 miles

Brandon Mall

Dick's Sporting Goods, Dillards, JC Penney, and Macy's.

Walmart, Sam's Club, Costco and Best Buy stores are all within 2 miles of the mall.

Distance From Port of Tampa Gate: 7.5 miles
459 Brandon Town Center Dr
Brandon, FL 33511

Westshore Plaza

Macy's, Dick's Sporting Goods and Old Navy.
Movie theatre and dining at Mitchells, Maggiano's, Besito's and PF Chang's.

Distance From Port of Tampa Gate: 8.0 miles
250 Westshore Plaza
Tampa, FL 33609-1811

Area Attractions - General Information

International Plaza

Dillard's, Neiman Marcus and Nordstrom. Apple Computer Store and 15 restaurants including Cheesecake Factory, The Capital Grille, Ocean Prime and TAPS.

Distance From Port of Tampa Gate: 8.8 Miles
2223 N. West Shore Blvd.
Tampa, FL 33607

Busch Gardens Tampa

Admission (as of Oct. 2019): $109.99 Any day
Distance From Port of Tampa Gate: 11.0 Miles
10165 N McKinley Dr
Tampa, FL 33612

Walmart

Distance from Port of Tampa Gate: 7.0 Miles
11110 Causeway Blvd
Brandon, FL 33511-2900

Distance from Port of Tampa Gate: 9.5 Miles
9205 Gibsonton Ave
Gibsonton, Fl 33534

Walmart Super Center - Port Manatee Area

Distance From Port Manatee Gate: 9.8 Miles
508 10th St E,
Palmetto, FL 34221-4062

Ellenton Outlet Mall - Port Manatee Area

Large outdoor shopping mall with over 100 factory outlet stores.

Distance from Port of Tampa Gate: 41 miles
Distance from Port Manatee Gate: 10.3 Miles

5461 Factory Shops Blvd.
Ellenton, FL 34222

Driving Distances (Miles)		
Destination	Distance from Port of Tampa Gate	Distance from Port Manatee Gate
Tampa International Airport	11	44
Sarasota/Bradenton Airport	60	22
St. Pete International Airport	21	36
Downtown Tampa	3	43
Downtown St. Petersburg	29	25
Walt Disney World	73	102
Clearwater Beach	25	29
St. Pete Beach	35	25

Addresses of Port Gates

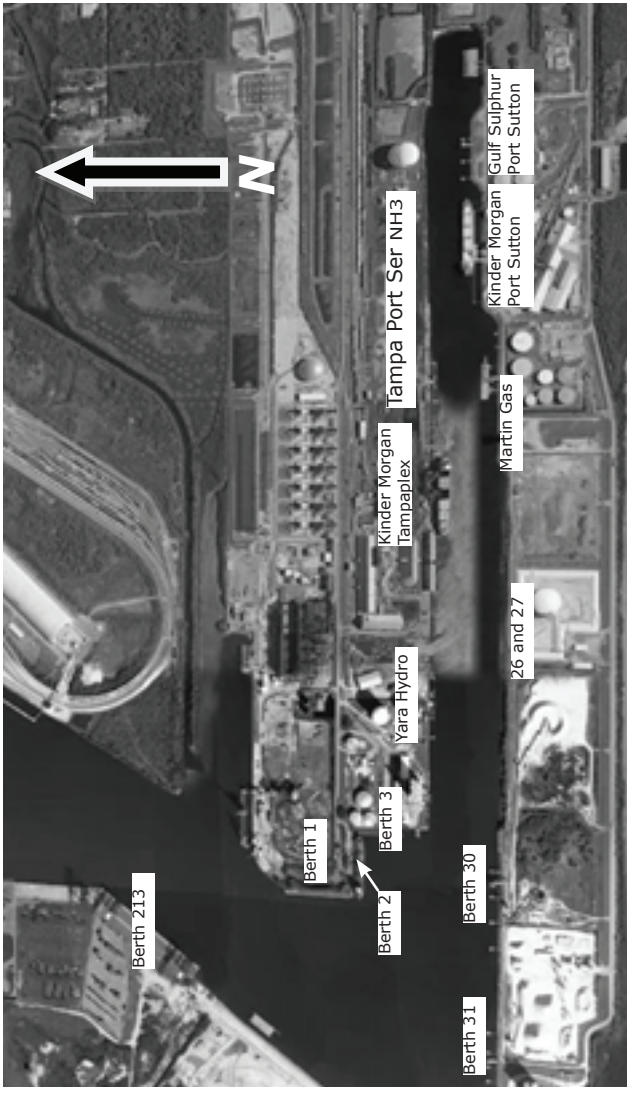
Port of Tampa
2002 Guy N Verger Blvd
Tampa, FL 33605

Port Manatee
13604 Reeder Rd.
Palmetto, FL 34221

Port of St. Petersburg
250 8th Ave. S.E.
St. Petersburg, FL 33701

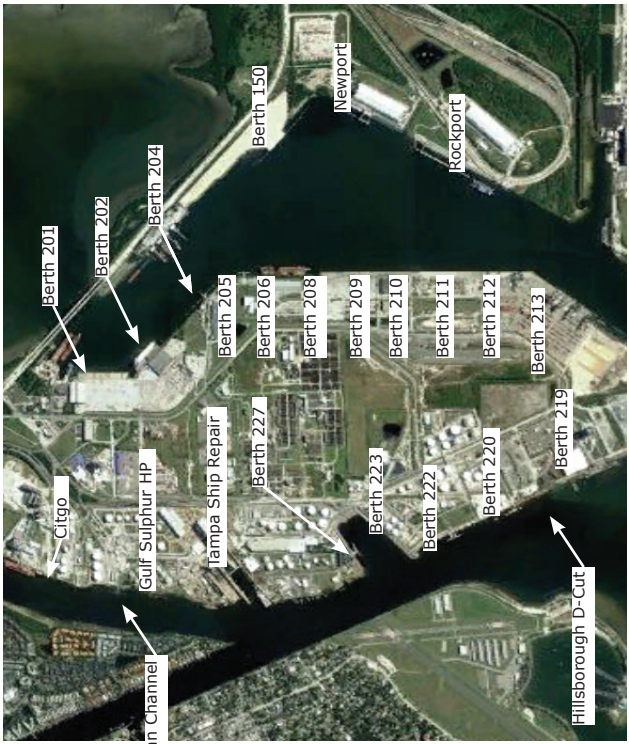
Port Maps

Port Sutton - Lower East Bay



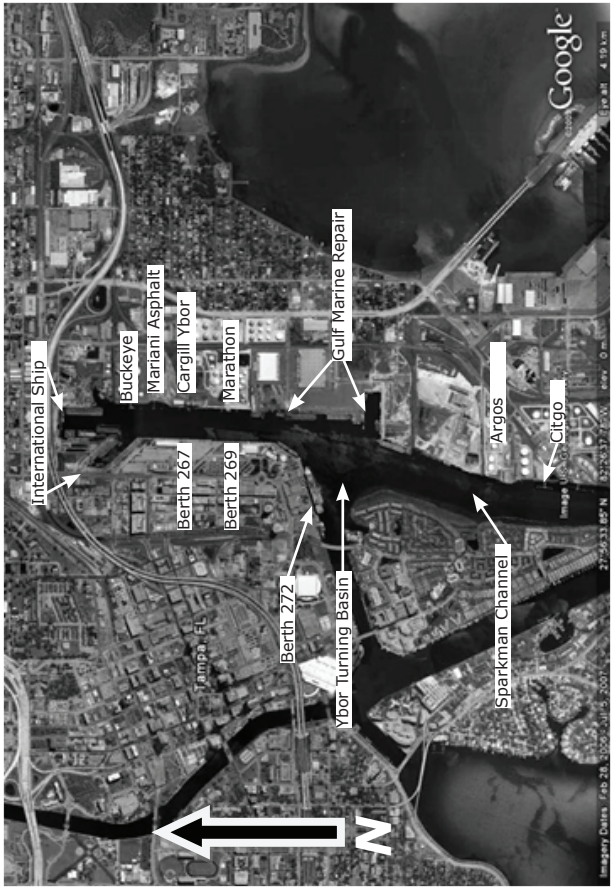
Port Maps

East Bay, Hillsborough D-Cut and Southern Sparkman Channel



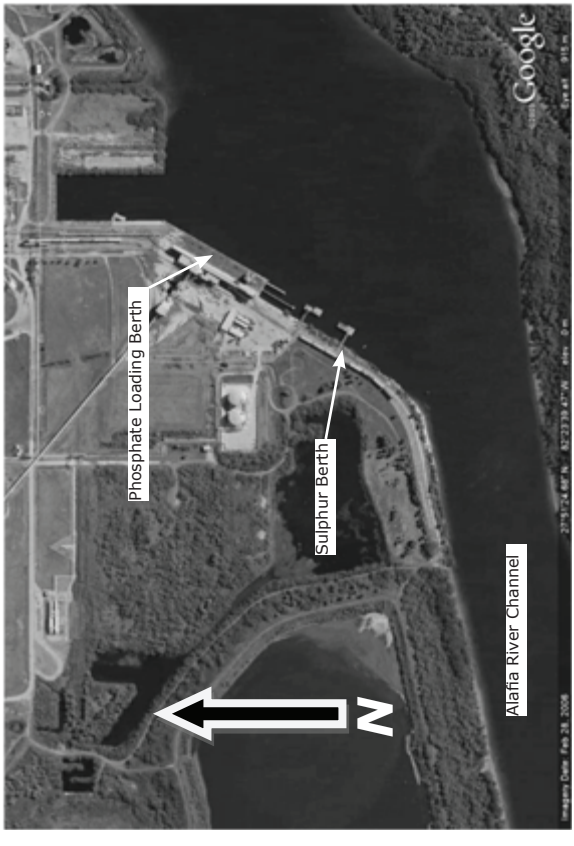
Port Maps

Northern Sparkman Channel, Ybor Turning Basing and Ybor Channel



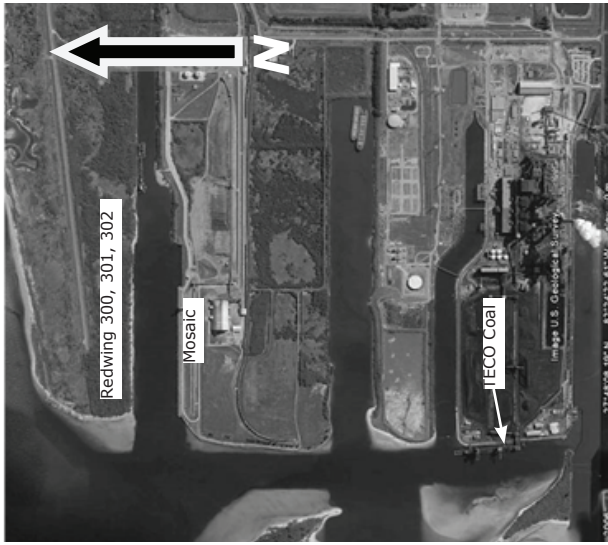
Port Maps

East Tampa

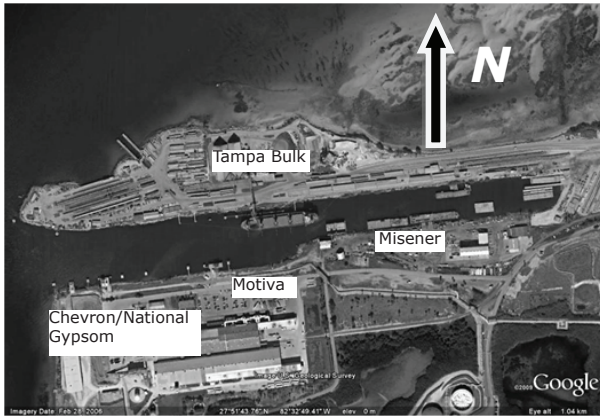


Port Maps

Big Bend / Port Redwing

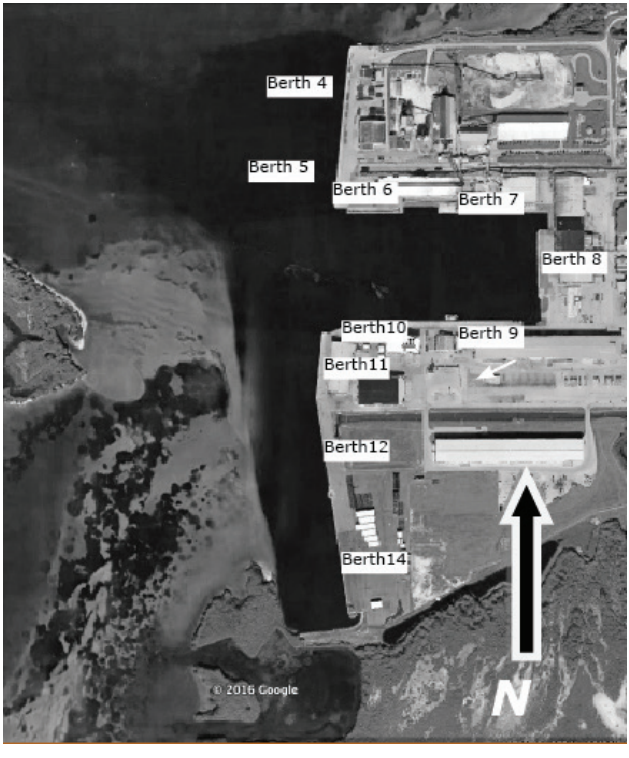


Old Port Tampa

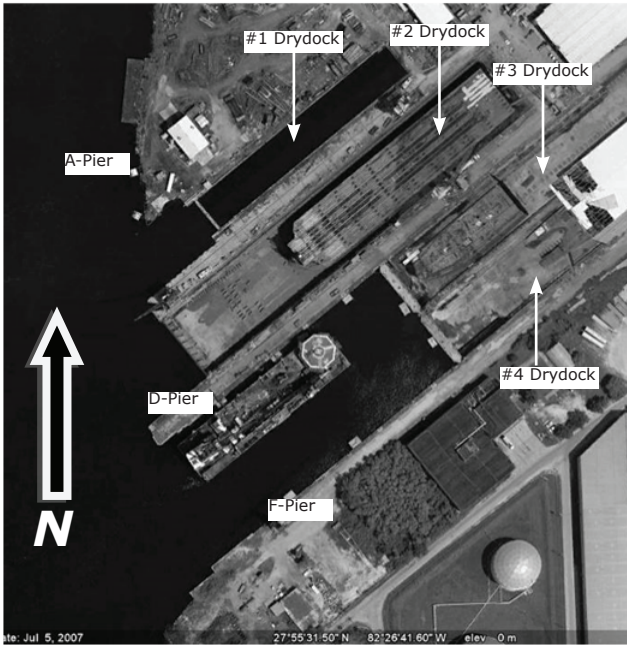


Port Maps

Port Manatee



Tampa Ship Repair
Drydocks and Berths

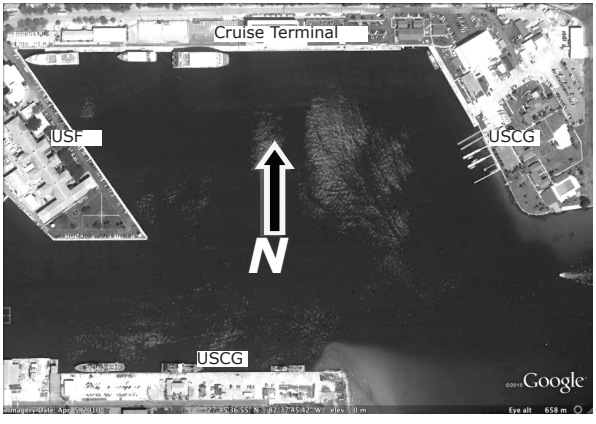


Tampa Ship Repair Drydock Dimensions			
Drydock	Length	Width	Depth of Water
1	548′	79′	17′-00″
2	900′	150′	21′-04″
3	740′	110′	24′-00″
4	740′	124′	24′-00″

Refer to Tampa Bay Pilot handling guidelines for berthing/dry-docking at Tampa Ship Repair.

Port Maps

Bayboro



Port Maps

Rattlesnake

Port Authorities of Tampa Bay

Manatee Port Authority

300 Regal Cruise Way
Palmetto, FL 34221
941-722-6621

St. Petersburg Port Authority

250 8th Ave Southeast
St. Petersburg, FL 33701
727-893-7820

Tampa Port Authority

1101 Channelside Drive
Tampa, FL 33602
813-905-7678

Tampa Bay Assist Tugs

Marine Towing of Tampa
813-242-4116

Name	H.P.	B.P.	LOA	Beam	Draft
Endeavor	4200	55	90′	50′	16.5′
Independent	5000	75	93′	38′	16.5′
Patriot	5000	75	93′	38′	16.5′
Liberty	5000	60	92′	32′	13.5′

Seabulk Towing
813-247-3187 813-248-1123

Name	H.P.	B.P.	LOA	Beam	Draft
Trinity	5000	64	100′	43′	18.5′
Aura	4600	63	92′	38′	18.0′
Suwanee River	4200	60	90′	50′	16.5′
Atlas	4600	63	92′	38′	18.0′

Channel and Facility Guidelines

Handling Guidelines for Vessel Movement

Tampa Bay Main Channel

Draft of 39'-08" plus/minus tide at any time. Drafts of 41' or greater must have minimum UKC of 1 Meter.

- Drafts of over 39'-00" feet must be started in at least 4 hours before appropriate tide window.
- Maximum draft vessels should transit with less than 6 foot seas. If seas are greater than 6 feet, apply formula for increased draft due to heel or proceed at appropriate reduced speed.

Sunshine Skyway Bridge

- Maximum allowable air draft for bridge transit is 180 feet at MHW. Any air draft exceeding 180 feet must have appropriate tide window and approval from pilots.

Southwest Channel

Maximum draft of 14 feet plus tide.

Handling Guidelines for Vessel Movement

Port Manatee

Draft and Current Restrictions

- Draft of 38’-00” plus tide to a maximum of 40’-00”.

To or From Sea

- Less than 30 foot draft; anytime.
- Draft from 30 to 35 feet; current 0.5 kt or less.
- Greater than 35 foot draft; slack water.

Shifts to or From the North:

- Less than 27 foot draft; anytime.
- Draft from 27 to 33 feet; current 0.3 kt or less.
- Greater than 33 foot draft; slack water.

Vessel Length Restrictions

- LOA from 700 to 799 feet; 0.5 kt of current or less.
- LOA 800 and greater; Slack Water for all drafts.
- Maximum LOA; 900 feet.

Vessel Movement Restrictions

- Maximum two vessel movements per slack water.
- Only one vessel with draft greater than 36 feet per slack water.
- LOA over 700’ and draft over 34’ requires 2 class A tugs for turnaround.

Handling Guidelines for Vessel Movement

Old Port Tampa

Draft Restriction

- Maximum draft of 31'-00" plus tide to a maximum of 33'00" due to G-Cut restriction.
- Maximum 2 moves per tide.

Current Restrictions

Outbound

- Draft of less than 25 feet, current less than 1 kt.
- Draft 25 feet or greater, head out, current less than 0.5 kt.
- Draft of 25 feet or greater, head in, slack water.

Inbound

- Draft of less than 25 feet; current 1.0 kt or less.
- Tank vessel with draft less than 25 feet requires current less than 1.0 kt flood or 0.5 kt ebb.
- Draft of 25 feet or greater; slack water. 1 Class-A tug required.

Vessel Length Restrictions

- LOA of greatwer than 700'; current less than 0.5 kt. inbound or outbound.
- Maximum LOA of 750 feet.

Additional Restrictions

- One way traffic in G-Cut for drafts greater than 27 feet.
- Maximum combined beam of 196 feet for meeting in Old Tampa Bay.
- No passing in Old Port Tampa.
    1. A vessel moored at Tampa Bulk will shift as far to the East as neccessary so that a vessel maneuvering **to/from** Motiva will have adequate clearance for assist tug use.
    2. A vessels will not berth or unberth at Tampa Bulk with a vessel at Motiva.
    3. With a vessel at Chevron, no vessels may pass in or out of Old Port Tampa.
- No split tides if winds are greater than 20 kts. as measured at Port Tampa PORTS.

Handling Guidelines for Vessel Movement

Bayboro

Draft Restriction

- Maximum draft of 21’-01” feet plus tide. This includes Entrance Channel Approach from the North.

Point Pinellas Channel

Draft Restriction

- Maximum draft of 18’-08” feet plus tide.

Rattlesnake

Draft Restrictions

- Maximum draft of 12 feet plus tide.
- Maximum draft of 14 feet plus tide to Misener berth.

Big Bend

- Maximum Draft of 39’-00” plus tide to max 41’.00” in East/West Entrance Channel and Turning Basin.
- Maximum Draft of 31’-10” plus tide in North/South
- Channel.
- Maximum LOA 750’ LOA and 39’.00” draft in turning basin.
- All vessels transiting the E/W channel with a beam of greater than 106’ are restricted to daylight transit.

Handling Guidelines for Vessel Movement

East Tampa

- Maximum draft of 31'-05" plus tide in entrance channel and turning basin.
- Maximum LOA of 675'.
- LOA of 650 or greater; daylight and high water slack only for turnarounds.
- Combination of **LOA** of phosphate vessel and **beam** of sulphur vessel not to exceed 650 feet for phosphate vessel to sail.

Port Sutton Entrance Channel and Port Sutton to Berth 31

Maximum Draft 38'-01" plus tide.

Maximum draft of 40'-01" plus tide in Port Sutton Turning Basin.

Port Sutton

Maximum Draft of 34'-00" plus tide East of Berth #3.

Three vessel combined maximum beam of 212 feet for vessels transiting to or from Berths 21, 22, 23, 24, Kinder Morgan Waiting Berth and TPS Ammonia.

Gadsden Anchorage

Draft Restrictions

- Maximum draft of 27 feet.

Vessel Length Restriction

- Maximum LOA of 675 feet or up to 685 feet with 1 stand-by tug.

Handling Guidelines for Vessel Movement

East Bay Channel - Northeast Channel - East Bay Turning Basin to Berth #211

Maximum draft of 38'-01" plus tide.

East Bay - Upper Basin Channel

Maximum draft of 35'-06" plus tide to Berth #210.
Maximum draft of 34'-10" plus tide to Berth #209.
Maximum draft of 34'-00" plus tide to Berth #208.

East Bay - Upper Basin Channel North of Berth #208 and Upper Turning Basin

Maximum draft of 32'-07" plus tide.

East Bay Anchorage

Maximum draft 30'-00" plus tide.
Anchorage not for general purpose, contact Tampa Port Authority.

Hillsborough D Cut to Sta 60-00

Maximum draft of 39'-08" plus tide.

One way traffic for vessels with a draft greater than 36'-00".

Hillsborough D Cut, Sparkman Channel and Ybor Channel

Maximum Draft of 35'-01" plus tide.

Underkeel Clearance Allowances

10% to a minimum of 1 Meter underkeel clearance in main ship channels.

5% underkeel clearance in auxiliary channels.

6" underkeel clearance alongside petroleum and hazardous materials berths.

4"underkeel clearance alongside General & Bulk cargo berths.

Port Sutton Beam Restrictions

Ammonia Beam and Distance Table

Vessels that wish to transit to or from berths 22 and 23 while there is a vessel at the Ammonia Berth should refer to the table below. The maximim LOA for all transits to/from 22 and 23 with a vessel at the ammonia berth is 600'.

Use the Manifold to stern distance of the ammonia vessel along with the beam of the ammonia vessel to determine the beam of any vessel that can make the transit to Berth 22 or 23.

Beam of Ammonia Vessel		**Manifold to Stern of Ammonia Vessel**				
	85	90	84	78	71	68
	90	84	81	75	68	62
	95	81	75	68	62	59
	100	75	68	62	59	52
	106	68	62	56	50	46

Port Sutton Beam Restrictions

Additional Restrictions

- Vessels transiting to/from Berth #22 with a vessel at Berth #23, the combined beams cannot exceed 120'
- Ammonia Vessel and vessel at Berth #23, three vessel maximum beam of 212' for vessels to/from #21 or #22.
- Ammonia Vessel and vessel at Berth #24, three vessel maximum beam of 212' for vessels to/from #21 or #22.
- Vessel at Waiting Berth and vessel at Berth #24, three vessel maximum beam of 212' for vessels to/from #21 or #22.
- Vessel at Loading Berth and Berth #26, three vessel maximum combined beam of 282' for vessels to/from berths East of #26.
- Vessel at Waiting Berth and Berth #26, three vessel maximum combined beam 282' for vessels to/from berths East of #26.

Notes

Tampa Bay Navigational Guidelines

The Tampa Bay Harbor Safety Committee and the Coast Guard Captain of the Port recommend that the following guidelines regarding the movement of vessels in and out of port be adopted and practiced by pilots, masters, and persons in charge of vessels. Nothing in these guidelines shall supersede or alter any applicable laws or regulations. In construing and complying with these guidelines, regard shall be had to all dangers to navigation and collision and to any special circumstances, including the limitations of the vessel involved, which may make a departure from the guidelines necessary to avoid immediate danger.

A Ship draft of 39'-08" (12.09 M) is considered reasonable in and out of Tampa Bay at mean low water (MLW) and higher conditions of tide to a maximum of 41'-08" (12.70M).

B During periods of restricted visibility, vessels should not transit the bay unless two sets of channel buoys are visible ahead. Vessels should proceed at speeds that are considered safe for existing conditions. *Please note that the Tampa Bay Pilots Association utilize the following guideline: "During periods of restricted visibility (less than one nautical mile visibility on the intended route of transit) vessels should not commence an inbound transit (COLREGS Demarcation Line to Berth or safe alternative) or outbound transit (Berth to COLREGS Demarcation Line or safe alternative). Vessels should proceed at speeds which are considered safe for existing conditions."*

C Whenever possible, vessel movement arrangements should be made via landline through the local agents. If time is of the essence, arrangements may be made via radiotelephone.

D When arranging a movement between a vessel in port and a vessel which has not yet entered the port (at the sea buoy), a general rule of precedence is that under normal circumstances outbound vessels have priority with the following exceptions:

1. Within the port area, incoming and outgoing vessels restricted by tide should split time, with no more than two vessels trying to make the tide.
2. If a vessel having priority is unable to clear the berth or enter the port within 30 minutes of the time agreed upon, that vessel loses priority.
3. All meeting and passing situations should be made at the safest possible locations, with due regard to the size of the vessels, width of the channel, and existing conditions. Both vessels should adjust speed to accomplish this safely. Vessels least affected by existing conditions (current and wind) should give way to the other. Light draft vessels should give way to deep draft vessels if conditions permit.
4. When one vessel is underway inbound and the other vessel is safely moored at berth, the vessel at the berth should remain alongside if no safe passing area can be agreed upon.

Tampa Bay Navigational Guidelines

Draft recommendations for all of the commercial channels of Tampa Bay, Old Tampa Bay and Hillsborough Bay have been established. For maximum usage and the maintenance of reasonable safety standards, certain restrictions on movements are also recommended. The following data represents the most recent review and analysis of the soundings of these channels.

If vessels are entering the port at maximum recommended draft, the following are ship-handling procedures that should be adhered to for safely transiting these areas.

Egmont Channel

Maximum draft vessels shall transit in 4 to 6 foot seas or less. If greater than 6-foot seas, apply formula for increased draft due to heavy sea conditions or proceed at appropriate reduced speed.

Vessels intending to transit Tampa Bay are subject to two general Constraints:

1. The navigability of the shipping channel in terms of depth and current restrictions.

2. The depth of water at the berthing facility.

The handling and draft constraints for the shipping channels and berths have been established by the Tampa Bay Pilots Association and are disseminated through the Recommended Handling Guidelines.

Drafts shown are mean lower low water (MLLW). Users should apply tidal water level difference to figure shown.

PORTS will be used for determining tide height, current direction & velocity and wind direction and velocity. The accurate measurement of the physical conditions provided by PORTS versus working with predicted conditions greatly enhances the safety of all critical movements throughout the port.

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
TPA #1	Smorgon Steel - Scrap	36'-10"	01/2019	650	530 x 7.5	
TPA #2	Pasco - Liquid Sulphur	35'-03"	11/2020	650	500 x 7.5	
TPA #3	Cemex - Cement	35'-04"	11/2020	553	553 x 7.5	
TPA #4	Holcim - Cement	18'-05"	05/1997	550	550 x 7	
	Yara Hydro - Ammonia	33'-03"	08/2021	700	500 x 7.5	Soundings good to 300' West of Chiksan
TPA #5	Scrap Steel	33'-03"	08/2021			
TPA #6	Kinder Morgan Tampaplex Loading Berth - PS Berth 6	34'-05"	11/2018	800	730 x 10	
TPA #7	Kinder Morgan Tampaplex Waiting Berth - PS Berth 7	34'-03"	02/2021	800	800 x 6	
	Tampa Port Service Ammonia	34'-01"	03/2020	750	315	Soundings good for 360' East of Chicksan
TPA #21		19'-03"	01/2001	450	200 x 8	Draft for 400' LOA centered on dock. Extends 150' North.

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
TPA #22	Gulf Sulphur Port Sutton	34'-08"	10/2020	700	254 x 10	
TPA #23	Kinder Morgan Port Sutton	34'-03"	11/2018	900	700 x 12	
TPA #24	Martin Gas	34'-08"	10/2018	715	200 x 8	Fendering not in line.
TPA #24B	Central Oil	14'-00"	05/1997	225	120 x 6.3	
TPA #26	Cacciatore Cement	34'-10"	10/2020	800	485 x 11	
TPA #27	Targa - LPG	34'-07"	10/2020	400		400' LOA with Berth 26. 300' offset to W. Center E, 85' and W 215'
TPA #30	LPG / Aggregates	43'-09"	10/2018	1400	400 x 8.5	4 dolphins. 1000' Centered on berth.
TPA #31	Cement / Aggregates	41'-10"	11/2018	1000	370 x 8.5	1000' centered on berth.
TPA #200	International Ship Repair	Var				
TPA #201	General Cargo	34'-01"	01/2020	904	904 x 11.5	
TPA #202	General Cargo	34'-11"	12/2017	650	600 x 11.5	

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
TPA #204	CFI - Phosphate	34'-10"	12/2017	920	920 x 10	Shore wires.
TPA #205	Tampa Juice	34'-10"	3/2016	580	206 x 8.5	Good for 290' S of Manifold
TPA #206	Open	26'-05"	1/2020			
TPA #208	General Cargo	34'-08"	1/2018	900	900 x 11.5	
TPA #209	General Cargo	34'-10"	12/2020	600	600 x 11.5	
TPA #210	General Cargo	36'-03"	2/2021	600	600 x 11.5	
TPA #211	General Cargo	44'-02"	2/2021	600	600 x 11.5	
TPA #212	General Cargo / Containers	44'-03"	12/2020	750	750 x 11.5	
TPA #213	General Cargo / Containers	43'-05"	11/2020	1450	1290 x 11.5	
TPA #145	Newport - Phosphate	38'-03"	3/2021	1000	555 x 10	
TPA #143	Rockport North - Phosphate	41'-08"	3/2019	1460	1490 x 12	53' freeboard required for loader.
TPA #142	Rockport South - Phosphate	31'-08"	6/2018			
TPA #150	General Cargo	42'-08"	5/2017	1440		

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
	Shrimp Docks	15′-00″	4/1989			
TPA #219	General Cargo	43′-05″	11/2020	1434	400 x 11	
TPA #220	Aggregates, Acid	41′-08″	2/2017	900	480 x 11	
TBA #222	Petroleum	45′-04″	02/2021	1,020	270 x 11	Max LOA 750′ Beam 120′
TPA #223	Petroleum / Ammonia	41′-04″	3/2020	750	865 x 8	
TPA #227	Petroleum	40′-09″	3/2020	800	270 x 11	Soundings good to 420′ East of manifold center.

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
DD #4	TSR - Graving Dock	24′-00″	07/1989	740′ x 124′-09″ x 28′		Contact Pilot Office for restrictions.
DD #3	TSR - Graving Dock	24′-00″	07/1989	740′ x 110′-03″ x 28′		
DD #2	TSR - Graving Dock	21′-04″	07/1989	900′ x 150′ x 22′-04″		
DD #1	TSR - Graving Dock	17′-00″	07/1989	448′ x 79′ x 20′		
Pier D	TSR - Lay Berth	25′-04″	04/2013	595	595	
Pier F	TSR - Lay Berth	25′-07″	04/2013	675	675	
Pier A	TSR - Lay Berth	7′-07″	04/2013	700	700	
	Gulf Sulphur	34′-04″	01/2017	650	305 x 8	*Sulphur Enterprise* turn off of TSR, Max 24′ fwd, 31′ Aft. Left wheel only.
TPA #243	BP - Petroleum	31′-09″	01/2018	700	275 x 7	need recert. bollards/fender
TPA #244	Citgo - Petroleum	34′-02″	08/2018	700	240 x 10	
TPA #245	Argos	N 28′-08″ S 34′-02″	01/2021 03/2021	1040	1040 x 9	

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
TPA #247	Tampa Marine Terminal	34′-07″	03/2013	650	575 x 8	
TPA #248	GMR - Layberth	See Note	12/2008	830	830 x 5	Max draft 17′ W 400′. Max draft 16′-06″ E of 400′.
TPA #250	GMR - Layberth	14′ to 25′	12/2000	700	700 x 5	
TPA #251	Port Ybor South/GMR	28′-04″	04/2016	860	920 x 8	RO-RO ramp height 6.2′
TPA #252	Port Ybor North/GMR	23′-04″	04/2016			
	GMR - Shipyard	15′-00″	01/2009	880	880 x 5	
TPA #254	Marathon Petroleum	35′-01″	02/2020	786	280 x 6	Manifold to GMR 420′ Manifold to Cargill 360′
TPA #256	Cargill - Citrus Pellets	34′-04″	11/2018	700	320 x 10	Fenders not in line.
	Mariani Asphalt	34′-00″	01/2017	410	250 x 8	Conflict with Buckeye and Cargill.
TPA #258	Buckeye Tampa Petroleum	32′-11″	07/2019	600	310 x 9.5	Good for 300′ N of Manifold. Drafts greater than 31′-07″ require approval.

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
	Sahlman Shrimp Docks	15′ to 32′	1984	360	360 x 6	Not used until surveyed
	ISR - Shipyard	25′-00″	11/2008	750	600 x 10	Not used until surveyed
	ISR - Layberth	19′-05″	11/2008	600	380	Not used until surveyed
TPA #263	ISR - Metroport - Shipyard	14′ - 19′ W 19′ - 26′ E	5/2016	700 w/264	575 x 10	Decommisioned - Not in use
TPA #264	ISR - Metroport - Shipyard	10′-17′ N-S	11/2008	350	350 x 10	Decommisioned - Not in use
TPA #265	ISR - Metroport - Shipyard	18′ - 22′ W 21′6″-27 E	11/2008	750	750 x 10	Decommisioned - Not in use
TPA #266	Cruise Terminal 6	31′-02″	1/2017	275	275 x 10	
TPA #267	Cruise Terminal 6	31′-09″	11/2017	600	1200 x 10	
TPA #268	Cruise Terminal 6	32′-01″	7/2017	700		
TPA #269	Cruise Terminal 3	34′-10″	11/2011	960	1050 x 7.5	
TPA #271	Aquarium - American Victory	31′-03″	3/2000	548	548 x 7.5	

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
TPA #272	Cruise Terminal 2	34'-07"	9/2013	600	1221 x 7.5	
TPA #273	Cruise Terminal 2	34'-06"	3/2016	621		
	Harbour Island	27'-00"	9/1989	450		Seddon Ch. 18' plus tide.
East Tampa						
	Mosaic - Phosphate Loading	33'03"	1/2019	675	500 x 8	See channel restrictions under Channel Guidlines
	Mosaic - Sulphur	30'-03"	1/2019	675	230 x 8	

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
Big Bend						
TPA #400	Mosaic Phosphate West	43'-03"	3/2020	1500	1500 x 10	See channel restrictions under Channel Guidelines.
TPA #401	Mosaic Phosphate East	43'-10"	3/2020			
	TECO Coal	34'-02"	5/2017	788	788 x 9.5	Dravo Ht 53.6' above MLW
TPA #300	Port Redwing	42'-08"	4/2019	1500	500 X 10	See channel restrictions
TPA #301	Port Redwing	42'-08"	4/2019			
TPA #302	Port Redwing	43'-10"	3/2019		1000'	

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
Port Manatee						
Berth #4	General Cargo	39'-07"	11/2020	600	600 x 8	
Berth #5	General Cargo	39'-08"	11/2020	600	600 x 8	
Berth #6	General Cargo	39'-07"	11/2020	645	415 x 8	Stbd. side to over 37' draft with approval from pilot.
Berth #7	Phosphate, Petroleum	37'-09"	06/2021	840	724 x 8	Stbd. side to only over 37' draft.
Berth #8	General Cargo, Petroleum	37'-11"	06/2021	670	500 x 8	Check channel guidelines for all Port Manatee berths.
Berth #9	General Cargo, Petroleum	39'-03"	06/2021	808	708 x 8	
Berth #10	General Cargo, Petroleum	39'-08"	11/2020	780	595 x 8	
Berth #11	Delmonte - Refrigerated Cargo	34'-00"	7/2020	681	581 x 8	
Berth #12	General Cargo	37'-03"	6/2017	1250	950 x 8	
Berth #14	General Cargo	37'-10"	7/2020	790	790 x 8	37'-03" S of 900' mark.

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
St. Petersburg / Bayboro						
	Cruise Terminal	21'-02"	1/2018	1500	1500 x 8	
	USF East Wharf	15'-11"	1/2018	970	970 x 8	
	USCG South Wharf	13'-00"	6/2003	1200	1200 x 8	
Weedon Island						
	North Berth	See Note	12/2010	675	800 x 8	Facility No Longer in Service as of 2017. New surveys required.
	South Berth	See Note	12/2010	675	1060 x 8	
	Barge Berth				800 x 8	
Old Port Tampa						
	Chevron - Petroleum	31'-01"	7/2017	750	545 x 10	See channel restrictions for Old Tampa Bay.
	Motiva - Petroleum	31'-06"	1/2018	750	650 x 8	
	Tampa Bulk - Citrus Pellets	31'-09"	1/2017	730	730 x 7	

Facility Guidelines

Berth Number	Name	Maximum Draft A/S	Date of Last Soundings	Berth Length	Dock Face Dimensions	Notes
Rattlesnake						
	Misener - General Cargo	14'-00"	10/1995	600	600 x 7	
	U.S. Army Covered Dock	10'-00"	3/1994	150	150 x 5	
	Targa - LPG	11'-00"	11/2002	325	325 x 5	

Channel Distances

Sea Buoy to Egmont Channel Buoys 9 and 10	7.7
Sea Buoy to Egmont Lighthouse	13.7
Sea Buoy to Sunshine Skyway	19.2
Sea Buoy to Buoys 3B and 4B	22.2
Egmont Lighthouse to Hillsborough C Buoys 25 and 26	27.3
Egmont Lighthouse to Port Manatee Entrance	9.5
Egmont Lighthouse to Bayboro via Point Pinellas Channel	16.2
Skyway Bridge to Hillsborough C Buoys 25 and 26	21.8
Skyway Bridge to Old Port Tampa	20.0
Skyway Bridge to North End Hillsborough D	24.0
Port Manatee to Berth 227	22.6
Port Manatee to Old Port Tampa	17.2

Egmont Channel Buoys 9 and 10 to Lighthouse	6.0
Lighthouse to Skyway Bridge	5.5
Skyway Bridge to Buoy 1C	5.5
Buoy 1C to Buoy 1F	6.0
Total Distance Buoys 9 and 10 to Buoy 1F	**23.0**
Buoy 1F to St. Pete Turn	4.0
Buoy 1F to Big Bend Channel Entrance	5.6
Buoy 1F to Hillsborough C Buoys 25 and 26	10.3
Buoy 1F to North End Hillsborough D	12.6

Hillsborough C Buoys 25 and 26 to:		
Skyway Bridge - 21.8 Miles	Speeds	Sea Buoy - 41.0 Miles
3.6 hr.	6 kt	6.8 hr.
2.7 hr.	8 kt	5.1 hr.
2.2 hr.	10 kt	4.1 hr.
1.8 hr.	12 kt	3.4 hr.
1.6 hr.	14 kt	2.9 hr.

Channel Cuts

Channel	Heading	Length	Width	Tidal Restrn
Egmont Channel	083.5/263.5	12.3′	700	39′-08″
Lighthouse Reach	101/281	3.0′	1000	
Southwest Ch.			Var.	14′
Mullet Key Ch.	081/261	3.4′	600	39′-08″
Cut A	063/243	2.7′	500	39′-08″
Cut B	038/218	3.5′	500	39′-08″
Port Manatee Ch.	128/308	2.7′	400	38′-00″
Cut C	061/241	1.7′	500	39′-08″
Cut D	033/213	2.1′	500	39′-08″
Cut E	018/198	2.1′	500	39′-08″
Cut F	179.5/359.5	1.3′	500	39′-08″
Gadsden Point Cut	069/249	3.3′	500	39′-08″
Hillsborough A Cut	061/241	1.1′	500	39′-08″
Hillsborough C Cut	005/185	5.7′	500	39′-08″
Big Bend Ch. E/W	096/276	1.9′	200	39′-00″
Big Bend Ch. N/S			200	31′-10″
East Tampa Ch.	078/258	3.0	200	31′-05″
Hill.D Cut to Sta 60	334/154	1.0	400	39′-08″
Hill.D Cut N of Sta 60	334/154		400	35′-01″
Cut G	279/099	2.7	400	31′
Cut J	358/178	1.1	400	33′
Cut J-2	010/190	1.0	400	33′
Cut K	022/202	2.4	400	33′
Point Pinellas Ch.	000/180	4.95	200	18′-08″

Metric Conversion to Feet and Inches

Meters and Cm.		Feet and Inches	
3	0	9	10
3	5	10	0
3	10	10	2
3	15	10	4
3	20	10	6
3	25	10	8
3	30	10	10
3	35	11	0
3	40	11	2
3	45	11	4
3	50	11	6
3	55	11	8
3	60	11	10
3	65	12	0
3	70	12	2
3	75	12	4
3	80	12	6
3	85	12	8
3	90	12	10
3	95	13	0
4	0	13	1
4	5	13	3
4	10	13	5
4	15	13	7
4	20	13	9
4	25	13	11
4	30	14	1
4	35	14	3
4	40	14	5
4	45	14	7
4	50	14	9
4	55	14	11
4	60	15	1
4	65	15	3
4	70	15	5
4	75	15	7
4	80	15	9

Meters and Cm.		Feet and Inches	
4	85	15	11
4	90	16	1
4	95	16	3
5	0	16	5
5	5	16	7
5	10	16	9
5	15	16	11
5	20	17	1
5	25	17	3
5	30	17	5
5	35	17	7
5	40	17	9
5	45	17	11
5	50	18	1
5	55	18	3
5	60	18	4
5	65	18	6
5	70	18	8
5	75	18	10
5	80	19	0
5	85	19	2
5	90	19	4
5	95	19	6
6	0	19	8
6	5	19	10
6	10	20	0
6	15	20	2
6	20	20	4
6	25	20	6
6	30	20	8
6	35	20	10
6	40	21	0
6	45	21	2
6	50	21	4
6	55	21	6
6	60	21	8
6	65	21	10

Meters and Cm.		Feet and Inches	
6	70	22	0
6	75	22	2
6	80	22	4
6	85	22	6
6	90	22	8
6	95	22	10
7	0	23	0
7	5	23	2
7	10	23	4
7	15	23	5
7	20	23	7
7	25	23	9
7	30	23	11
7	35	24	1
7	40	24	3
7	45	24	5
7	50	24	7
7	55	24	9
7	60	24	11
7	65	25	1
7	70	25	3
7	75	25	5
7	80	25	7
7	85	25	9
7	90	25	11
7	95	26	1
8	0	26	3
8	5	26	5
8	10	26	7
8	15	26	9
8	20	26	11
8	25	27	1
8	30	27	3
8	35	27	5
8	40	27	7
8	45	27	9
8	50	27	11

Metric Conversion to Feet and Inches

Meters and Cm.		Feet and Inches	
8	55	28	1
8	60	28	3
8	65	28	5
8	70	28	7
8	75	28	8
8	80	28	10
8	85	29	0
8	90	29	2
8	95	29	4
9	0	29	6
9	5	29	8
9	10	29	10
9	15	30	0
9	20	30	2
9	25	30	4
9	30	30	6
9	35	30	8
9	40	30	10
9	45	31	0
9	50	31	2
9	55	31	4
9	60	31	6
9	65	31	8
9	70	31	10
9	75	32	0
9	80	32	2
9	85	32	4
9	90	32	6
9	95	32	8
10	0	32	10
10	5	33	0
10	10	33	2
10	15	33	4
10	20	33	6
10	25	33	8
10	30	33	10
10	35	33	11

Meters and Cm.		Feet and Inches	
10	40	34	1
10	45	34	3
10	50	34	5
10	55	34	7
10	60	34	9
10	65	34	11
10	70	35	1
10	75	35	3
10	80	35	5
10	85	35	7
10	90	35	9
10	95	35	11
11	0	36	1
11	5	36	3
11	10	36	5
11	15	36	7
11	20	36	9
11	25	36	11
11	30	37	1
11	35	37	3
11	40	37	5
11	45	37	7
11	50	37	9
11	55	37	11
11	60	38	1
11	65	38	3
11	70	38	5
11	75	38	7
11	80	38	9
11	85	38	11
11	90	39	0
11	95	39	2
12	0	39	4
12	5	39	6
12	10	39	8
12	15	39	10
12	20	40	0

Meters and Cm.		Feet and Inches	
12	25	40	2
12	30	40	4
12	35	40	6
12	40	40	8
12	45	40	10
12	50	41	0
12	55	41	2
12	60	41	4
12	65	41	6
12	70	41	8
12	75	41	10
12	80	42	0
12	85	42	2
12	90	42	4
12	95	42	6
13	0	42	8
13	5	42	10
13	10	43	0
13	15	43	2
13	20	43	4
13	25	43	6
13	30	43	8
13	35	43	10
13	40	44	0
13	45	44	2
13	50	44	3
13	55	44	5
13	60	44	7
13	65	44	9
13	70	44	11
13	75	45	1
13	80	45	3
13	85	45	5
13	90	45	7
13	95	45	9
14	0	45	11
14	5	46	1

Metric Conversion to Feet and Inches

Meters	Feet	Inches
15	49	3
16	52	6
17	55	9
18	59	1
19	62	4
20	65	7
21	68	11
22	72	2
23	75	6
24	78	9
25	82	0
26	85	4
27	88	7
28	91	10
29	95	2
30	98	5
31	101	8
32	105	0
33	108	3
34	111	7
35	114	10
36	118	1
37	121	5
38	124	8
39	127	11
40	131	3
41	134	6
42	137	10
43	141	1
44	144	4
45	147	8
46	150	11
47	154	2
48	157	6
49	160	9
50	164	0
51	167	4
52	170	7
53	173	11
54	177	2
55	180	5
56	183	9
57	187	0
58	190	3
59	193	7
60	196	10
61	200	2
62	203	5
63	206	8
64	210	0
65	213	3
66	216	6
67	219	10
68	223	1
69	226	5
70	229	8
71	232	11
72	236	3
73	239	6
74	242	9
75	246	1
76	249	4
77	252	7
78	255	11
79	259	2
80	262	6
81	265	9
82	269	0
83	272	4
84	275	7
85	278	10
86	282	2
87	285	5
88	288	9
89	292	0
90	295	3
91	298	7
92	301	10
93	305	1
94	308	5
95	311	8
96	314	11
97	318	3
98	321	6
99	324	10
100	328	1
101	331	4
102	334	8
103	337	11
104	341	2
105	344	6
106	347	9
107	351	1
108	354	4
109	357	7
110	360	11
111	364	2
112	367	5
113	370	9
114	374	0
115	377	4
116	380	7
117	383	10
118	387	2
119	390	5
120	393	8
121	397	0
122	400	3
123	403	6
124	406	10
125	410	1
126	413	5
127	416	8
128	419	11
129	423	3
130	426	6
131	429	9
132	433	1
133	436	4
134	439	8
135	442	11
136	446	2
137	449	6
138	452	9
139	456	0
140	459	4
141	462	7
142	465	10
143	469	2
144	472	5
145	475	9
146	479	0
147	482	3
148	485	7
149	488	10
150	492	1
151	495	5
152	498	8
153	502	0
154	505	3
155	508	6
156	511	10
157	515	1
158	518	4

Metric Conversion to Feet and Inches

Meters	Feet	Inches
159	521	8
160	524	11
161	528	3
162	531	6
163	534	9
164	538	1
165	541	4
166	544	7
167	547	11
168	551	2
169	554	5
170	557	9
171	561	0
172	564	4
173	567	7
174	570	10
175	574	2
176	577	5
177	580	8
178	584	0
179	587	3
180	590	7
181	593	10
182	597	1
183	600	5
184	603	8
185	606	11
186	610	3
187	613	6
188	616	9
189	620	1
190	623	4
191	626	8
192	629	11
193	633	2
194	636	6

Meters	Feet	Inches
195	639	9
196	643	0
197	646	4
198	649	7
199	652	11
200	656	2
201	659	5
202	662	9
203	666	0
204	669	3
205	672	7
206	675	10
207	679	2
208	682	5
209	685	8
210	689	0
211	692	3
212	695	6
213	698	10
214	702	1
215	705	4
216	708	8
217	711	11
218	715	3
219	718	6
220	721	9
221	725	1
222	728	4
223	731	7
224	734	11
225	738	2
226	741	6
227	744	9
228	748	0
229	751	4
230	754	7

Meters	Feet	Inches
231	757	10
232	761	2
233	764	5
234	767	8
235	771	0
236	774	3
237	777	7
238	780	10
239	784	1
240	787	5
241	790	8
242	793	11
243	797	3
244	800	6
245	803	10
246	807	1
247	810	4
248	813	8
249	816	11
250	820	2
251	823	6
252	826	9
253	830	1
254	833	4
255	836	7
256	839	11
257	843	2
258	846	5
259	849	9
260	853	0
261	856	3
262	859	7
263	862	10
264	866	2
265	869	5
266	872	8

Meters	Feet	Inches
267	875	12
268	879	3
269	882	6
270	885	10
271	889	1
272	892	5
273	895	8
274	898	11
275	902	3
276	905	6
277	908	9
278	912	1
279	915	4
280	918	7
281	921	11
282	925	2
283	928	6
284	931	9
285	935	0
286	938	4
287	941	7
288	944	10
289	948	2
290	951	5
291	954	9
292	958	0
293	961	3
294	964	7
295	967	10
296	971	1
297	974	5
298	977	8
299	981	0
300	984	3
301	987	6
302	990	10

Increase In Draft Due to Pitch - In Feet

LOA	0.5°	1.0°	2.0°
500	2.18	4.36	8.72
600	2.62	5.23	10.46
700	3.05	6.10	12.21
800	3.49	6.98	13.96
900	3.92	7.85	15.70
1000	4.36	8.73	17.45

Increase In Draft Due to Heel - In Feet

Beam	5°	10°
40	1.74	3.47
60	2.61	5.21
80	3.48	6.95
100	4.35	8.68
150	6.54	13.02
200	8.72	17.36

Swept Path - In Feet
Vessel 960 x 106 in 400 channel

Crab Angle	Swept Path	Channel Space
1.0°	122.74	277.26
2.0°	139.44	260.56
3.0°	156.10	243.90
4.0°	172.71	227.29
5.0°	189.27	210.73
6.0°	205.77	194.23
7.0°	222.20	177.80
8.0°	238.57	161.43
9.0°	254.87	145.13
10.0°	271.09	128.91

Squat in Confined Water

Nora Maersk		Speed	Squat
DWT	*68,800*	2 kt	.2 ft
LOA	*811*	5 kt	1.3 ft
Beam	*101.5*	7 kt	2.6 ft
Draft	*43.25*	10 kt	5.3 ft

Simple Formula for Squat Calculations

In Open Water

$$S = C \times (V^2 / 30)$$

C = Vessel's Block Coefficient
V = Vessel's Speed in Knots

In Confined Waters, multiply S by 2.

Common Conversion Factors

1 Meter	3.2802 Feet
1 Nautical Mile	6,076 Feet
1 Nautical Mile	1,853.18 Meters
1 Nautical Mile	1.152 Statute Miles
1 Statute Mile	5,280 Feet
1 Metric Ton	1,000 Kilograms / 2,204.623 Pounds
1 Metric Ton	0.984 Long Tons / 1.102 Short Tons
1 Long Ton	2,240 Pounds
1 Short Ton	2,000 Pounds
1 Kilogram	2.205 Pounds
1 Kilowatt	1.341 Horsepower
1 Square Meter	10.764 Square Feet

Notes

Tides and Currents

All times adjusted for Daylight Savings Time where applicable.

Notes

St. Petersburg Tide Tables

Tampa Bay Entrance Current Tables

All times adjusted for Daylight Savings Time where applicable.

St. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

January

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1 Sa	07:22		-1.0	-30	**12** W	04:57		-0.3	-9	**23** Su	04:48		1.6	49
	23:48		2.6	79		12:31		1.0	30		11:32		0.0	0
						14:49		1.0	30		17:51		1.5	46
						21:28		1.9	58					
2 Su ●	08:14		-1.1	-34	**13** Th	05:48		-0.5	-15	**24** M	00:09		0.3	9
						22:08		2.0	61		06:00		1.3	40
											12:04		0.3	9
											18:24		1.7	52
3 M	00:39		2.6	79	**14** F	06:33		-0.6	-18	**25** Tu ◑	01:30		0.1	3
	09:04		-1.1	-34		22:50		2.0	61		07:39		1.0	30
											12:34		0.6	18
											19:02		1.8	55
4 Tu	01:32		2.6	79	**15** Sa	07:14		-0.7	-21	**26** W	02:56		-0.2	-6
	09:52		-1.0	-30		23:32		2.1	64		10:04		0.9	27
											12:59		0.8	24
											19:48		2.0	61
5 W	02:26		2.4	73	**16** Su	07:52		-0.7	-21	**27** Th	04:18		-0.5	-15
	10:36		-0.8	-24							20:43		2.1	64
	17:59		1.1	34										
	20:50		1.0	30										
6 Th	03:21		2.2	67	**17** M ○	00:13		2.1	64	**28** F	05:28		-0.7	-21
	11:16		-0.5	-15		08:26		-0.8	-24		21:46		2.2	67
	18:20		1.2	37		16:07		1.1	34					
	22:14		0.9	27		18:22		1.0	30					
7 F	04:21		1.8	55	**18** Tu	00:53		2.2	67	**29** Sa	06:30		-0.9	-27
	11:54		-0.3	-9		08:59		-0.7	-21		22:51		2.3	70
	18:43		1.3	40		16:17		1.1	34					
	23:45		0.7	21		19:07		0.9	27					
8 Sa	05:31		1.5	46	**19** W	01:34		2.2	67	**30** Su	07:23		-1.1	-34
	12:29		0.0	0		09:29		-0.7	-21		23:54		2.4	73
	19:10		1.4	43		16:26		1.1	34					
						19:57		0.8	24					
9 Su ◐	01:18		0.5	15	**20** Th	02:16		2.1	64	**31** M	08:10		-1.1	-34
	06:59		1.2	37		09:59		-0.6	-18		15:50		1.1	34
	13:02		0.3	9		16:40		1.1	34		18:11		1.0	30
	19:41		1.6	49		20:50		0.7	21					
10 M	02:45		0.3	9	**21** F	03:00		2.0	61					
	08:50		1.0	30		10:30		-0.5	-15					
	13:36		0.6	18		16:59		1.2	37					
	20:14		1.7	52		21:49		0.6	18					
11 Tu	03:58		0.0	0	**22** Sa	03:50		1.8	55					
	10:48		1.0	30		11:01		-0.3	-9					
	14:11		0.8	24		17:23		1.4	43					
	20:49		1.8	55		22:55		0.5	15					

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

January

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots	
1 Sa	08:00	03:24 11:24 16:36 21:42	-2.7E 2.1F 0.2F 1.3F	**12** W	05:54 22:00	01:30 09:18 14:00 18:48	-1.4E 1.1F 0.2F 0.8F	**23** Su	05:30 11:54 18:30	02:48 08:42 15:18 21:18	1.0F -1.3E 1.5F -1.1E
2 Su ●	00:18 08:54	04:18 12:06 17:24 22:24	-2.8E 2.1F 0.2F 1.4F	**13** Th	06:42 22:42	02:12 10:06 15:00 19:54	-1.6E 1.3F 0.2F 0.8F	**24** M	00:54 06:54 12:18 18:54	03:54 09:30 15:54 22:12	0.9F -0.8E 1.3F -1.4E
3 M	01:06 09:42	05:06 12:54 18:18 23:12	-2.8E 1.9F 0.1F 1.4F	**14** F	07:24 23:18	02:54 10:42 15:54 20:42	-1.8E 1.5F 0.2F 0.8F	**25** Tu ◑	02:18 08:54 12:30 19:30	05:24 10:42 16:30 23:18	0.9F -0.3E 1.2F -1.6E
4 Tu	02:00 10:24 19:06	06:00 13:42	-2.6E 1.8F	**15** Sa	08:00	03:30 11:12 16:36 21:24	-1.9E 1.6F 0.1F 0.9F	**26** W	03:48 20:18	07:18 12:12 17:12	1.0F 0.1F 1.0F
5 W	02:54 11:12 18:48 21:12	00:06 06:54 14:30 19:54	1.3F -2.3E 1.7F -0.2E	**16** Su	00:00 08:30	04:06 11:42 17:12 22:00	-2.0E 1.6F 0.1F 1.1F	**27** Th	05:06 21:12	00:24 08:48 13:36 18:12	-1.9E 1.3F 0.3F 0.9F
6 Th	03:54 11:48 19:00 22:48	01:06 07:42 15:06 20:48	1.1F -2.0E 1.5F -0.4E	**17** M ○	00:36 09:00 17:42	04:42 12:12 22:36	-2.1E 1.6F 1.1F	**28** F	06:18 22:18	01:30 09:54 14:48 19:36	-2.1E 1.7F 0.3F 1.0F
7 F	04:54 12:18 19:18	02:12 08:30 15:42 21:42	0.9F -1.6E 1.4F -0.6E	**18** Tu	01:18 09:30 17:30 19:00	05:18 12:42 23:18	-2.1E 1.6F 1.2F	**29** Sa	07:18 23:18	02:30 10:42 15:54 20:42	-2.4E 1.9F 0.3F 1.1F
8 Sa	00:24 06:00 12:48 19:42	03:24 09:18 16:12 22:36	0.8F -1.1E 1.3F -0.8E	**19** W	02:00 10:00 17:30 20:12	05:54 13:12 18:48	-2.1E 1.6F -0.2E	**30** Su	08:06	03:24 11:18 16:42 21:42	-2.5E 2.0F 0.1F 1.3F
9 Su ◐	02:00 07:30 13:06 20:12	04:42 10:18 16:48 23:36	0.6F -0.6E 1.1F -1.0E	**20** Th	02:42 10:30 17:36 21:12	00:00 06:30 13:48 19:18	1.2F -2.1E 1.6F -0.4E	**31** M	00:18 08:48 16:54 18:00	04:18 11:54 22:30	-2.6E 2.0F 1.4F
10 M	03:30 09:42 13:18 20:42	06:18 11:30 17:18	0.6F -0.2E 1.0F	**21** F	03:36 11:00 17:54 22:18	00:48 07:12 14:18 19:54	1.1F -1.9E 1.6F -0.6E				
11 Tu	04:48 12:48 21:18	00:36 08:06 17:54	-1.2E 0.8F 0.8F	**22** Sa	04:30 11:30 18:06 23:30	01:42 07:54 14:48 20:36	1.1F -1.7E 1.6F -0.9E				

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

February

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1	00:51		2.4	73	**12**	06:12		-0.6	-18	**23**	01:10		-0.2	-6
	08:51		-1.0	-30		22:34		1.9	58		08:23		0.9	27
Tu	16:02		1.1	34	Sa					W	10:49		0.9	27
●	19:16		0.9	27						◑	17:58		2.1	64
2	01:45		2.3	70	**13**	06:56		-0.6	-18	**24**	02:42		-0.4	-12
	09:27		-0.8	-24		14:51		1.2	37		18:54		2.1	64
W	16:14		1.1	34	Su	17:14		1.1	34	Th				
	20:17		0.7	21		23:29		2.0	61					
3	02:36		2.1	64	**14**	07:32		-0.7	-21	**25**	04:12		-0.5	-15
	09:59		-0.5	-15		15:00		1.2	37		20:12		2.1	64
Th	16:28		1.2	37	M	18:04		1.0	30	F				
	21:17		0.5	15										
4	03:26		1.9	58	**15**	00:16		2.1	64	**26**	05:26		-0.7	-21
	10:26		-0.3	-9		08:04		-0.6	-18		21:43		2.2	67
F	16:45		1.4	43	Tu	15:07		1.2	37	Sa				
	22:18		0.4	12		18:47		0.9	27					
5	04:19		1.6	49	**16**	00:58		2.1	64	**27**	06:24		-0.8	-24
	10:51		0.0	0		08:32		-0.6	-18		23:04		2.2	67
Sa	17:06		1.5	46	W	15:12		1.2	37	Su				
	23:22		0.3	9	○	19:29		0.7	21					
6	05:19		1.3	40	**17**	01:39		2.1	64	**28**	07:11		-0.8	-24
	11:15		0.3	9		08:57		-0.5	-15		14:36		1.2	37
Su	17:32		1.6	49	Th	15:20		1.3	40	M	17:50		1.0	30
						20:13		0.5	15					
7	00:32		0.1	3	**18**	02:21		2.0	61					
	06:36		1.0	30		09:22		-0.3	-9					
M	11:36		0.5	15	F	15:33		1.4	43					
	18:02		1.7	52		20:59		0.4	12					
8	01:47		0.0	0	**19**	03:06		1.9	58					
	08:35		0.9	27		09:47		-0.1	-3					
Tu	11:51		0.8	24	Sa	15:50		1.6	49					
◐	18:38		1.8	55		21:49		0.2	6					
9	03:06		-0.1	-3	**20**	03:56		1.7	52					
	19:23		1.8	55		10:11		0.1	3					
W					Su	16:13		1.7	52					
						22:46		0.0	0					
10	04:19		-0.3	-9	**21**	04:55		1.4	43					
	20:21		1.8	55		10:34		0.4	12					
Th					M	16:41		1.9	58					
						23:51		-0.1	-3					
11	05:21		-0.4	-12	**22**	06:12		1.1	34					
	21:29		1.9	58		10:53		0.7	21					
F					Tu	17:15		2.0	61					

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

February

	Slack	Maximum	
	h m	h m	knots
1 Tu ●	01:12	05:12	-2.5E
	09:24	12:30	1.9F
	16:42	18:06	-0.2E
	19:30	23:18	1.5F
2 W	02:06	05:54	-2.4E
	10:00	13:06	1.8F
	16:54	18:48	-0.5E
	20:36		
3 Th		00:12	1.4F
	03:00	06:36	-2.1E
	10:30	13:36	1.6F
	17:06	19:24	-0.7E
	21:42		
4 F		01:00	1.3F
	03:54	07:18	-1.7E
	10:54	14:06	1.5F
	17:30	20:00	-0.9E
	22:54		
5 Sa		02:00	1.1F
	04:54	08:00	-1.3E
	11:12	14:36	1.4F
	17:48	20:36	-1.1E
6 Su	00:00	03:00	0.9F
	05:54	08:36	-0.9E
	11:30	15:00	1.3F
	18:12	21:24	-1.2E
7 M	01:12	04:06	0.8F
	07:18	09:24	-0.4E
	11:30	15:24	1.1F
	18:36	22:18	-1.3E
8 Tu ◐	02:36	05:30	0.7F
	10:24	15:54	0.9F
	19:06	23:18	-1.3E
9 W	04:00	07:36	0.7F
		12:00	0.3F
		16:24	0.8F
	19:48		
10 Th		00:30	-1.3E
	05:18	09:06	1.0F
		13:42	0.4F
		17:18	0.6F
	20:48		
11 F		01:36	-1.4E
	06:18	09:54	1.3F
		15:00	0.3F
		18:54	0.6F
	22:00		

	Slack	Maximum	
	h m	h m	knots
12 Sa	07:06	02:42	-1.6E
		10:30	1.5F
		15:54	0.2F
		20:24	0.7F
	23:00		
13 Su	07:42	03:24	-1.8E
	16:24	10:54	1.6F
	23:48	21:18	0.9F
14 M	08:12	04:00	-1.9E
	16:06	11:24	1.6F
	17:54	22:00	1.1F
15 Tu	00:36	04:30	-2.0E
	08:36	11:42	1.7F
	15:54	17:24	-0.2E
	18:54	22:36	1.2F
16 W ○	01:18	05:06	-2.1E
	09:06	12:06	1.7F
	15:54	17:42	-0.4E
	19:42	23:18	1.3F
17 Th	02:00	05:42	-2.0E
	09:30	12:30	1.7F
	16:00	18:12	-0.7E
	20:36		
18 F		00:00	1.4F
	02:48	06:18	-1.9E
	09:54	12:54	1.7F
	16:12	18:42	-1.0E
	21:24		
19 Sa		00:48	1.4F
	03:42	06:54	-1.7E
	10:12	13:24	1.6F
	16:30	19:18	-1.3E
	22:24		
20 Su		01:42	1.3F
	04:42	07:30	-1.3E
	10:36	13:54	1.5F
	16:54	19:54	-1.6E
	23:24		
21 M		02:36	1.2F
	05:48	08:12	-0.9E
	10:54	14:24	1.4F
	17:18	20:36	-1.7E
22 Tu	00:36	03:48	1.1F
	07:24	09:06	-0.3E
	10:54	14:54	1.3F
	17:54	21:24	-1.8E

	Slack	Maximum	
	h m	h m	knots
23 W ◑	02:00	05:18	1.0F
		10:12	0.2F
		15:30	1.1F
	18:30	22:30	-1.8E
24 Th	03:30	07:18	1.1F
		12:06	0.5F
		16:18	0.9F
	19:24		
25 F		00:00	-1.8E
	05:06	08:54	1.4F
		13:54	0.5F
		17:36	0.8F
	20:48		
26 Sa		01:24	-2.0E
	06:18	09:48	1.7F
		15:12	0.3F
		19:30	0.8F
	22:12		
27 Su		02:42	-2.1E
	07:06	10:30	1.9F
	16:00	20:54	1.0F
	23:30		
28 M		03:36	-2.3E
	07:54	11:00	2.0F
	15:12	16:36	-0.2E
	18:06	21:54	1.3F

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

March

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1	00:10		2.3	70	**12**	04:44		-0.3	-9	**23**	00:43		-0.4	-12
	07:49		-0.7	-21		20:55		1.8	55		08:03		1.1	34
Tu	14:43		1.3	40	Sa					W	10:21		1.0	30
	18:50		0.8	24							17:25		2.4	73
2	01:05		2.2	67	**13**	06:38		-0.3	-9	**24**	02:04		-0.4	-12
	08:21		-0.5	-15		14:48		1.4	43		18:14		2.4	73
W	14:52		1.3	40	Su	17:22		1.3	40	Th				
●	19:42		0.6	18		23:20		1.9	58					
3	01:55		2.1	64	**14**	07:21		-0.4	-12	**25**	03:37		-0.4	-12
	08:47		-0.3	-9		14:48		1.4	43		19:23		2.2	67
Th	15:02		1.5	46	M	18:27		1.1	34	F				
	20:30		0.4	12						◑				
4	02:41		1.9	58	**15**	00:22		2.0	61	**26**	05:04		-0.4	-12
	09:10		0.0	0		07:56		-0.4	-12		21:09		2.1	64
F	15:14		1.6	49	Tu	14:53		1.4	43	Sa				
	21:17		0.2	6		19:13		0.9	27					
5	03:27		1.7	52	**16**	01:12		2.0	61	**27**	06:10		-0.5	-15
	09:29		0.2	6		08:25		-0.3	-9		14:38		1.4	43
Sa	15:30		1.8	55	W	14:58		1.4	43	Su	16:41		1.4	43
	22:04		0.0	0		19:53		0.7	21		22:59		2.1	64
6	04:15		1.5	46	**17**	01:57		2.1	64	**28**	07:01		-0.4	-12
	09:47		0.4	12		08:51		-0.2	-6		14:24		1.5	46
Su	15:50		1.9	58	Th	15:05		1.5	46	M	18:18		1.1	34
	22:53		0.0	0		20:32		0.5	15					
7	05:11		1.2	37	**18**	02:40		2.0	61	**29**	00:20		2.1	64
	10:03		0.7	21		09:14		0.0	0		07:40		-0.3	-9
M	16:14		2.0	61	F	15:15		1.7	52	Tu	14:28		1.5	46
	23:48		-0.1	-3	○	21:13		0.2	6		19:17		0.8	24
8	06:25		1.1	34	**19**	03:25		1.9	58	**30**	01:21		2.1	64
	10:13		0.8	24		09:37		0.2	6		08:11		-0.1	-3
Tu	16:43		2.0	61	Sa	15:30		1.9	58	W	14:37		1.6	49
						21:56		0.0	0		20:05		0.5	15
9	00:53		-0.1	-3	**20**	04:14		1.8	55	**31**	02:14		2.0	61
	17:19		2.0	61		09:58		0.4	12		08:36		0.1	3
W					Su	15:51		2.1	64	Th	14:46		1.8	55
						22:44		-0.2	-6		20:48		0.3	9
10	02:11		-0.1	-3	**21**	05:09		1.6	49					
	18:06		1.9	58		10:17		0.7	21					
Th					M	16:16		2.2	67					
◐						23:38		-0.3	-9					
11	03:34		-0.2	-6	**22**	06:17		1.3	40					
	19:17		1.9	58		10:31		0.9	27					
F					Tu	16:47		2.3	70					

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

March

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Tu	00:30	04:24	-2.3E	**12** Sa	05:42	01:00	-1.3E	**23** W	01:30	04:54	1.3F
	08:24	11:30	1.9F			09:30	1.2F			09:48	0.1F
	15:12	17:06	-0.5E			14:54	0.3F			15:06	1.2F
	19:12	22:42	1.5F		21:24	18:30	0.4F		18:06	21:54	-2.1E
2 W ●	01:24	05:00	-2.1E	**13** Su	07:30	03:12	-1.5E	**24** Th	02:54	06:30	1.2F
	08:54	11:54	1.8F		16:36	11:00	1.4F			11:12	0.5F
	15:18	17:36	-0.8E		23:42	21:18	0.6F			15:48	1.0F
	20:06	23:24	1.6F						18:54	23:06	-1.9E
3 Th	02:12	05:36	-1.9E	**14** M	08:06	04:00	-1.6E	**25** F ◑	04:24	08:24	1.3F
	09:18	12:18	1.7F		15:42	11:24	1.5F			13:36	0.6F
	15:36	18:12	-1.1E		18:30	17:06	-0.2E			16:48	0.7F
	21:00					22:12	0.9F		20:00		
4 F		00:06	1.5F	**15** Tu	00:42	04:36	-1.8E	**26** Sa		00:48	-1.7E
	03:06	06:18	-1.6E		08:36	11:42	1.6F		05:48	09:36	1.5F
	09:36	12:42	1.6F		15:30	17:24	-0.4E			15:12	0.3F
	15:48	18:42	-1.3E		19:30	22:54	1.2F			18:48	0.6F
	21:48								21:36		
5 Sa		00:54	1.4F	**16** W	01:30	05:06	-1.8E	**27** Su		02:24	-1.8E
	04:00	06:54	-1.3E		09:00	12:00	1.7F		06:54	10:24	1.7F
	09:54	13:06	1.5F		15:24	17:42	-0.7E		16:00	20:54	0.7F
	16:06	19:12	-1.5E		20:12	23:30	1.4F		23:24		
	22:36										
6 Su		01:42	1.3F	**17** Th	02:18	05:42	-1.8E	**28** M		03:36	-1.8E
	04:54	07:30	-0.9E		09:18	12:24	1.7F		07:42	11:00	1.8F
	10:06	13:24	1.4F		15:30	18:06	-1.0E		14:54	16:42	-0.4E
	16:30	19:48	-1.6E		20:54				18:42	22:06	1.1F
	23:30										
7 M		02:36	1.1F	**18** F ○	03:06	00:12	1.5F	**29** Tu		04:24	-1.9E
	06:00	08:06	-0.6E		09:42	06:18	-1.7E		00:42	11:30	1.8F
	10:18	13:48	1.2F		15:42	12:42	1.7F		08:18	17:12	-0.7E
	16:54	20:24	-1.6E		21:42	18:30	-1.3E		14:54	23:00	1.3F
									19:48		
8 Tu	00:30	03:36	1.0F	**19** Sa	03:54	00:54	1.6F	**30** W	01:42	05:06	-1.8E
	07:24	08:42	-0.2E		10:00	06:54	-1.5E		08:48	11:48	1.8F
	10:12	14:18	1.1F		16:00	13:06	1.6F		15:00	17:42	-1.1E
	17:24	21:00	-1.5E		22:24	19:00	-1.7E		20:36	23:42	1.5F
9 W	01:36	04:54	0.8F	**20** Su	04:54	01:42	1.6F	**31** Th	02:30	05:42	-1.6E
		09:42	0.2F		10:18	07:30	-1.1E		09:06	12:12	1.7F
		14:48	0.9F		16:24	13:30	1.6F		15:12	18:06	-1.4E
	17:54	21:54	-1.4E		23:18	19:36	-2.0E		21:18		
10 Th ◐	03:00	06:48	0.8F	**21** M	06:06	02:36	1.5F				
		11:30	0.4F		10:30	08:12	-0.7E				
		15:24	0.7F		16:48	14:00	1.5F				
	18:36	23:24	-1.2E			20:18	-2.1E				
11 F	04:30	08:42	1.0F	**22** Tu	00:18	03:42	1.4F				
		13:36	0.4F		07:30	09:00	-0.3E				
		16:24	0.5F		10:30	14:30	1.3F				
	19:42				17:24	21:00	-2.2E				

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

April

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1	03:01		1.9	58	**12**	06:28		-0.1	-3	**23**	03:26		-0.3	-9
	08:56		0.3	9		13:33		1.6	49		19:21		2.2	67
F	14:57		1.9	58	Tu	18:18		1.1	34	Sa				
●	21:28		0.1	3						◑				
2	03:45		1.7	52	**13**	00:03		1.9	58	**24**	04:37		-0.3	-9
	09:13		0.6	18		07:03		0.0	0		21:23		2.1	64
Sa	15:11		2.1	64	W	13:39		1.7	52	Su				
	22:06		-0.1	-3		19:03		0.8	24					
3	04:29		1.5	46	**14**	01:00		1.9	58	**25**	05:34		-0.2	-6
	09:29		0.7	21		07:33		0.1	3		13:05		1.6	49
Su	15:28		2.2	67	Th	13:48		1.8	55	M	17:25		1.3	40
	22:45		-0.2	-6		19:44		0.5	15		23:08		2.0	61
4	05:17		1.4	43	**15**	01:52		1.9	58	**26**	06:17		0.0	0
	09:43		0.9	27		07:59		0.3	9		13:11		1.7	52
M	15:50		2.3	70	F	13:59		2.0	61	Tu	18:32		0.9	27
	23:28		-0.2	-6		20:24		0.1	3					
5	06:13		1.3	40	**16**	02:42		1.9	58	**27**	00:25		1.9	58
	09:54		1.0	30		08:23		0.6	18		06:51		0.2	6
Tu	16:16		2.4	73	Sa	14:15		2.2	67	W	13:21		1.9	58
					○	21:06		-0.1	-3		19:23		0.5	15
6	00:16		-0.2	-6	**17**	03:35		1.8	55	**28**	01:27		1.8	55
	07:34		1.2	37		08:44		0.8	24		07:18		0.5	15
W	09:53		1.1	34	Su	14:36		2.4	73	Th	13:33		2.0	61
	16:47		2.3	70		21:51		-0.4	-12		20:06		0.2	6
7	01:14		-0.1	-3	**18**	04:32		1.6	49	**29**	02:21		1.7	52
	17:25		2.2	67		09:02		1.0	30		07:40		0.7	21
Th					M	15:02		2.5	76	F	13:46		2.2	67
						22:41		-0.5	-15		20:44		0.0	0
8	02:26		-0.1	-3	**19**	05:39		1.4	43	**30**	03:10		1.6	49
	18:15		2.1	64		09:14		1.2	37		07:58		0.9	27
F					Tu	15:33		2.7	82	Sa	14:00		2.3	70
						23:38		-0.5	-15	●	21:19		-0.2	-6
9	03:44		-0.1	-3	**20**	16:11		2.7	82					
	19:31		2.0	61	W									
Sa														
◐														
10	04:53		-0.1	-3	**21**	00:45		-0.5	-15					
	21:19		1.9	58		16:57		2.6	79					
Su					Th									
11	05:46		-0.1	-3	**22**	02:03		-0.4	-12					
	13:30		1.5	46		17:55		2.5	76					
M	17:19		1.3	40	F									
	22:54		1.9	58										

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

April

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 F ●	03:24 09:24 15:24 22:00	00:24 06:12 12:30 18:36	1.6F -1.3E 1.6F -1.6E	**12** Tu	07:06 14:12 18:42	03:18 10:30 16:18 22:00	-1.5E 1.5F -0.5E 0.9F	**23** Sa ◑	04:06 19:54	07:48 13:42 17:06	1.4F 0.4F 0.6F
2 Sa	04:12 09:36 15:42 22:36	01:00 06:48 12:48 19:06	1.6F -1.1E 1.5F -1.8E	**13** W	00:30 07:36 14:06 19:30	04:00 10:54 16:36 22:42	-1.5E 1.6F -0.8E 1.2F	**24** Su	05:18 14:36 21:42	00:42 09:00 19:12	-1.6E 1.5F 0.5F
3 Su	05:06 09:48 16:00 23:18	01:42 07:24 13:06 19:30	1.5F -0.8E 1.4F -1.9E	**14** Th	01:24 08:00 14:12 20:12	04:36 11:12 16:54 23:24	-1.5E 1.6F -1.2E 1.5F	**25** M	06:12 13:36 18:00 23:30	02:12 09:42 15:36 21:00	-1.5E 1.6F -0.4E 0.7F
4 M	06:06 10:00 16:24	02:30 08:00 13:30 20:00	1.4F -0.5E 1.3F -1.9E	**15** F	02:18 08:24 14:18 20:54	05:06 11:30 17:24	-1.3E 1.6F -1.6E	**26** Tu	06:54 13:42 19:12	03:12 10:18 16:12 22:12	-1.4E 1.6F -0.9E 1.1F
5 Tu	00:06 07:18 10:06 16:54	03:24 08:36 14:00 20:36	1.3F -0.2E 1.2F -1.9E	**16** Sa ○	03:12 08:42 14:36 21:36	00:06 05:48 11:54 17:54	1.7F -1.1E 1.6F -2.0E	**27** W	00:48 07:24 13:48 20:00	04:00 10:42 16:42 23:00	-1.3E 1.6F -1.3E 1.3F
6 W	00:54 09:24 17:30	04:18 14:30 21:18	1.1F 1.0F -1.7E	**17** Su	04:12 08:54 15:00 22:24	00:48 06:30 12:18 18:30	1.8F -0.8E 1.6F -2.3E	**28** Th	01:48 07:48 14:00 20:42	04:42 11:06 17:06 23:42	-1.1E 1.6F -1.6E 1.5F
7 Th	02:00 18:06	05:24 10:24 15:06 22:06	1.0F 0.3F 0.9F -1.5E	**18** M	05:24 09:06 15:30 23:18	01:42 07:12 12:42 19:06	1.8F -0.5E 1.5F -2.5E	**29** F	02:42 08:00 14:12 21:18	05:12 11:24 17:36	-0.9E 1.5F -1.8E
8 F	03:12 18:54	07:00 12:18 15:48 23:24	0.9F 0.4F 0.7F -1.3E	**19** Tu	07:00 09:06 16:06	02:42 07:54 13:12 19:54	1.7F -0.2E 1.4F -2.5E	**30** Sa ●	03:36 08:12 14:30 21:54	00:18 05:48 11:42 18:00	1.6F -0.7E 1.5F -2.0E
9 Sa ◐	04:30 20:00	08:36 14:18 17:06	1.0F 0.3F 0.5F	**20** W	00:18 16:48	03:48 08:48 13:48 20:42	1.5F 0.2F 1.3F -2.4E				
10 Su	05:36 21:42	01:12 09:36 15:12 19:06	-1.3E 1.2F 0.1F 0.4F	**21** Th	01:30 17:36	05:06 09:54 14:30 21:36	1.4F 0.4F 1.1F -2.1E				
11 M	06:30 14:30 17:30 23:18	02:30 10:06 15:48 20:54	-1.4E 1.4F -0.2E 0.6F	**22** F	02:48 18:36	06:30 11:36 15:30 23:00	1.4F 0.6F 0.8F -1.8E				

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

May

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1	03:57		1.5	46	**12**	05:59		0.4	12	**23**	03:52		0.0	0
	08:12		1.0	30		12:22		2.0	61		11:31		1.6	49
Su	14:18		2.5	76	Th	18:43		0.5	15	M	15:53		1.3	40
	21:54		-0.3	-9							21:26		1.9	58
2	04:43		1.4	43	**13**	00:47		1.8	55	**24**	04:39		0.2	6
	08:26		1.1	34		06:31		0.6	18		11:42		1.8	55
M	14:39		2.5	76	F	12:39		2.1	64	Tu	17:24		1.0	30
	22:30		-0.3	-9		19:28		0.2	6		23:04		1.7	52
3	05:34		1.4	43	**14**	01:51		1.7	52	**25**	05:17		0.5	15
	08:38		1.2	37		06:59		0.8	24		11:58		2.0	61
Tu	15:05		2.6	79	Sa	12:59		2.3	70	W	18:26		0.6	18
	23:10		-0.3	-9		20:13		-0.2	-6					
4	06:36		1.3	40	**15**	02:53		1.7	52	**26**	00:25		1.6	49
	08:45		1.2	37		07:24		1.0	30		05:49		0.7	21
W	15:36		2.6	79	Su	13:23		2.6	79	Th	12:16		2.2	67
	23:56		-0.2	-6		21:00		-0.4	-12		19:15		0.3	9
5	16:13		2.5	76	**16**	03:58		1.6	49	**27**	01:34		1.5	46
Th						07:43		1.2	37		06:15		0.9	27
					M	13:53		2.8	85	F	12:34		2.3	70
					○	21:49		-0.6	-18		19:56		0.0	0
6	00:50		-0.2	-6	**17**	05:10		1.5	46	**28**	02:36		1.5	46
	16:56		2.4	73		07:57		1.3	40		06:37		1.1	34
F					Tu	14:28		2.9	88	Sa	12:53		2.4	73
						22:44		-0.7	-21		20:34		-0.2	-6
7	01:50		-0.1	-3	**18**	15:09		2.9	88	**29**	03:32		1.5	46
	17:50		2.2	67		23:43		-0.6	-18		06:55		1.2	37
Sa					W					Su	13:14		2.5	76
											21:10		-0.3	-9
8	02:53		0.0	0	**19**	15:56		2.9	88	**30**	04:26		1.4	43
	19:05		2.0	61	Th						07:09		1.3	40
Su										M	13:37		2.6	79
										●	21:45		-0.3	-9
9	03:50		0.0	0	**20**	00:47		-0.5	-15	**31**	05:19		1.4	43
	11:55		1.6	49		16:52		2.7	82		07:20		1.3	40
M	15:19		1.5	46	F					Tu	14:05		2.7	82
◐	20:42		1.9	58							22:21		-0.3	-9
10	04:40		0.1	3	**21**	01:53		-0.4	-12					
	11:58		1.7	52		18:00		2.4	73					
Tu	16:53		1.2	37	Sa									
	22:18		1.8	55										
11	05:22		0.2	6	**22**	02:57		-0.2	-6					
	12:09		1.8	55		19:34		2.1	64					
W	17:54		0.9	27	Su									
	23:38		1.8	55	◑									

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

May

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Su	04:30 08:24 14:48 22:30	00:54 06:24 12:00 18:24	1.6F -0.5E 1.4F -2.1E	**12** Th	00:18 06:24 12:48 19:18	03:18 09:48 15:42 22:30	-1.1E 1.4F -1.3E 1.3F	**23** M	04:24 12:06 16:30 21:48	00:18 08:00 14:12 19:18	-1.4E 1.4F -0.4E 0.5F
2 M	05:30 08:30 15:12 23:06	01:36 07:00 12:18 18:54	1.5F -0.3E 1.3F -2.1E	**13** F	01:24 06:48 13:00 20:06	04:00 10:18 16:12 23:18	-1.0E 1.5F -1.8E 1.6F	**24** Tu	05:06 12:18 18:06 23:36	01:36 08:42 15:00 21:00	-1.2E 1.4F -0.8E 0.7F
3 Tu	06:42 08:36 15:36 23:48	02:18 07:36 12:48 19:30	1.4F -0.1E 1.3F -2.1E	**14** Sa	02:30 07:12 13:24 20:48	04:42 10:42 16:48	-0.8E 1.5F -2.2E	**25** W	05:42 12:30 19:12	02:36 09:18 15:36 22:06	-0.9E 1.4F -1.2E 1.0F
4 W	08:24 16:12	03:06 13:18 20:12	1.3F 1.1F -2.0E	**15** Su	03:36 07:24 13:48 21:36	00:06 05:24 11:06 17:18	1.8F -0.5E 1.5F -2.5E	**26** Th	01:00 06:06 12:48 20:00	03:24 09:48 16:06 22:54	-0.7E 1.4F -1.6E 1.3F
5 Th	00:36 16:54	04:06 09:12 13:54 20:54	1.2F 0.2F 1.0F -1.9E	**16** M ○	04:54 07:30 14:18 22:24	00:48 06:06 11:36 18:00	1.9F -0.2E 1.5F -2.7E	**27** F	02:12 06:24 13:06 20:42	04:06 10:12 16:36 23:36	-0.5E 1.3F -1.8E 1.4F
6 F	01:36 17:36	05:06 10:12 14:36 21:42	1.2F 0.3F 0.8F -1.7E	**17** Tu	07:00 14:54 23:24	01:42 12:06 18:48	1.8F 1.5F -2.8E	**28** Sa	03:12 06:36 13:24 21:12	04:48 10:36 17:00	-0.3E 1.3F -2.0E
7 Sa	02:30 18:24	06:06 11:54 15:48 22:48	1.1F 0.3F 0.6F -1.5E	**18** W	15:42	02:48 07:48 12:42 19:42	1.7F 0.3F 1.4F -2.7E	**29** Su	04:12 06:42 13:42 21:48	00:18 05:24 10:54 17:30	1.5F -0.2E 1.3F -2.1E
8 Su	03:30 19:30	07:12 13:24 16:54	1.2F 0.2F 0.5F	**19** Th	00:24 16:30	03:54 08:48 13:30 20:36	1.6F 0.4F 1.2F -2.5E	**30** M ●	05:24 06:48 14:06 22:24	00:54 11:18 18:00	1.5F 1.3F -2.2E
9 M ◐	04:24 13:12 15:36 21:06	00:18 08:12 18:42	-1.3E 1.2F 0.4F	**20** F	01:30 17:30	05:06 10:00 14:30 21:42	1.6F 0.5F 1.0F -2.1E	**31** Tu	06:42 14:36 23:00	01:30 11:48 18:30	1.5F 1.3F -2.2E
10 Tu	05:12 12:48 17:24 22:54	01:30 08:48 14:54 20:24	-1.3E 1.3F -0.4E 0.6F	**21** Sa	02:30 18:36	06:00 11:36 15:48 22:54	1.5F 0.3F 0.8F -1.8E				
11 W	05:54 12:48 18:30	02:30 09:24 15:18 21:36	-1.2E 1.4F -0.8E 0.9F	**22** Su ◑	03:30 13:06 19:54	07:00 17:30	1.4F 0.6F				

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

June

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1 W	14:38		2.7	82	**12** Su	02:05		1.5	46	**23** Th	04:06		0.9	27
	23:01		-0.3	-9		05:53		1.2	37		10:44		2.2	67
						12:09		2.6	79		18:05		0.4	12
2 Th	15:16		2.6	79		20:06		-0.4	-12	**24** F	00:31		1.4	43
	23:43		-0.3	-9	**13** M	03:24		1.5	46		04:37		1.1	34
						06:17		1.4	43		11:12		2.3	70
3 F	15:58		2.6	79		12:46		2.8	85		18:57		0.1	3
						20:58		-0.6	-18	**25** Sa	01:54		1.4	43
4 Sa	00:28		-0.2	-6	**14** Tu ○	13:28		3.0	91		05:06		1.2	37
	16:45		2.4	73		21:52		-0.7	-21		11:41		2.4	73
											19:42		-0.1	-3
5 Su	01:14		-0.1	-3	**15** W	14:15		3.1	94	**26** Su	03:06		1.4	43
	17:40		2.3	70		22:47		-0.7	-21		05:32		1.4	43
											12:11		2.5	76
6 M	02:01		0.0	0	**16** Th	15:06		3.0	91		20:23		-0.2	-6
	09:38		1.6	49		23:41		-0.6	-18	**27** M	12:43		2.6	79
	13:01		1.4	43							21:01		-0.3	-9
	18:48		2.0	61	**17** F	16:01		2.9	88					
7 Tu ◐	02:47		0.1	3						**28** Tu	13:16		2.6	79
	09:58		1.7	52	**18** Sa	00:34		-0.5	-15		21:38		-0.3	-9
	14:50		1.3	40		17:02		2.6	79					
	20:12		1.8	55						**29** W ●	13:52		2.7	82
					19 Su	01:25		-0.2	-6		22:14		-0.3	-9
8 W	03:30		0.3	9		09:15		1.5	46					
	10:20		1.8	55		11:42		1.4	43	**30** Th	14:31		2.7	82
	16:16		1.0	30		18:12		2.3	70		22:49		-0.2	-6
	21:46		1.7	52	**20** M	02:11		0.0	0					
9 Th	04:11		0.5	15		09:29		1.6	49					
	10:44		2.0	61		13:50		1.3	40					
	17:23		0.6	18		19:36		2.0	61					
	23:19		1.6	49	**21** Tu ◑	02:53		0.3	9					
10 F	04:49		0.8	24		09:51		1.8	55					
	11:09		2.2	67		15:38		1.0	30					
	18:21		0.3	9		21:16		1.7	52					
11 Sa	00:45		1.5	46	**22** W	03:31		0.6	18					
	05:23		1.0	30		10:17		2.0	61					
	11:37		2.4	73		17:01		0.7	21					
	19:14		-0.1	-3		22:58		1.5	46					

Heights are referred to mean lower low water which is the chart datum of soundings. All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

June

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 W	15:12 23:42	02:12 07:24 12:18 19:12	1.4F 0.1F 1.2F -2.1E	**12** Su	03:06 05:36 12:36 20:48	04:18 09:54 16:18	-0.2E 1.4F -2.5E	**23** Th	04:06 11:18 19:00	01:54 08:06 14:54 22:00	-0.4E 1.1F -1.4E 0.9F
2 Th	15:48	03:00 08:12 13:00 19:54	1.4F 0.2F 1.1F -2.1E	**13** M	05:06 13:12 21:36	00:06 10:30 17:00	1.8F 1.5F -2.8E	**24** F	01:30 04:18 11:48 19:54	02:48 08:48 15:36 22:54	-0.2E 1.1F -1.7E 1.2F
3 F	00:24 16:36	03:54 09:00 13:42 20:36	1.4F 0.2F 1.0F -2.0E	**14** Tu ○	13:54 22:30	00:54 05:54 11:06 17:48	1.9F 0.2F 1.5F -2.9E	**25** Sa	03:06 04:24 12:18 20:36	09:24 16:12 23:36	1.1F -1.8E 1.4F
4 Sa	01:12 17:24	04:36 09:54 14:30 21:24	1.4F 0.2F 0.8F -1.8E	**15** W	14:42 23:24	01:48 06:48 11:48 18:42	1.9F 0.3F 1.5F -2.8E	**26** Su	04:24 12:42 21:12	09:54 16:42	1.1F -2.0E
5 Su	01:54 18:12	05:24 11:00 15:42 22:24	1.4F 0.1F 0.7F -1.6E	**16** Th	15:30	02:42 07:48 12:36 19:36	1.8F 0.4F 1.4F -2.7E	**27** M	13:12 21:42	00:12 05:12 10:24 17:12	1.4F 0.1F 1.2F -2.1E
6 M	02:36 11:06 13:18 19:18	06:00 16:48 23:24	1.4F 0.6F -1.4E	**17** F	00:18 16:30	03:42 08:48 13:36 20:36	1.7F 0.3F 1.2F -2.4E	**28** Tu	13:48 22:18	00:48 05:54 10:54 17:48	1.5F 0.2F 1.2F -2.1E
7 Tu ◐	03:18 10:54 15:24 20:42	06:42 13:00 18:12	1.3F -0.4E 0.5F	**18** Sa	01:12 17:30	04:36 09:48 14:42 21:30	1.6F 0.2F 1.0F -2.0E	**29** W ●	14:18 22:54	01:24 06:30 11:30 18:24	1.5F 0.2F 1.2F -2.1E
8 W	03:54 11:06 17:00 22:36	00:36 07:24 13:48 19:54	-1.1E 1.3F -0.8E 0.6F	**19** Su	02:00 10:06 12:00 18:36	05:24 16:00 22:36	1.5F 0.8F -1.6E	**30** Th	15:00 23:24	02:00 07:18 12:06 19:06	1.4F 0.2F 1.2F -2.2E
9 Th	04:30 11:18 18:06	01:36 08:00 14:24 21:24	-0.9E 1.3F -1.2E 0.9F	**20** M	02:42 10:06 14:30 19:54	06:06 12:12 17:24 23:36	1.4F -0.4E 0.6F -1.2E				
10 F	00:18 05:00 11:42 19:06	02:36 08:42 15:00 22:24	-0.7E 1.3F -1.7E 1.3F	**21** Tu ◑	03:12 10:30 16:24 21:42	06:42 13:18 19:00	1.3F -0.7E 0.6F				
11 Sa	01:42 05:24 12:06 20:00	03:24 09:18 15:36 23:18	-0.4E 1.3F -2.1E 1.6F	**22** W	03:42 10:54 17:54 23:42	00:48 07:24 14:12 20:48	-0.8E 1.2F -1.1E 0.7F				

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

July

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	15:12	2.7	82	**12** Tu	12:30	3.0	91	**23** Sa	00:57	1.4	43
	23:24	-0.2	-6		20:59	-0.6	-18		03:16	1.4	43
									10:11	2.4	73
2 Sa	06:43	1.4	43	**13** W ○	13:24	3.1	94		18:33	0.2	6
	09:09	1.4	43		21:51	-0.6	-18	**24** Su	10:58	2.5	76
	15:55	2.6	79						19:24	0.0	0
	23:58	-0.1	-3								
3 Su	07:01	1.5	46	**14** Th	14:20	3.1	94	**25** M	11:46	2.5	76
	10:17	1.3	40		22:39	-0.5	-15		20:09	-0.1	-3
	16:42	2.5	76								
4 M	00:33	0.0	0	**15** F	15:15	3.0	91	**26** Tu	12:32	2.6	79
	07:23	1.6	49		23:23	-0.4	-12		20:49	-0.1	-3
	11:32	1.3	40								
	17:35	2.3	70								
5 Tu	01:09	0.2	6	**16** Sa	06:35	1.4	43	**27** W	13:15	2.7	82
	07:50	1.7	52		09:22	1.3	40		21:24	-0.1	-3
	12:52	1.2	37		16:12	2.8	85				
	18:37	2.0	61								
6 W	01:45	0.4	12	**17** Su	00:03	-0.1	-3	**28** Th ●	04:56	1.5	46
	08:19	1.9	58		06:53	1.5	46		07:10	1.5	46
	14:16	1.0	30		10:43	1.2	37		13:56	2.7	82
	19:54	1.8	55		17:10	2.5	76		21:56	-0.1	-3
7 Th ◐	02:22	0.6	18	**18** M	00:39	0.1	3	**29** F	05:04	1.5	46
	08:51	2.1	64		07:15	1.7	52		07:56	1.4	43
	15:38	0.7	21		12:07	1.1	34		14:35	2.7	82
	21:29	1.6	49		18:14	2.2	67		22:25	0.0	0
8 F	02:59	0.9	27	**19** Tu	01:13	0.4	12	**30** Sa	05:10	1.5	46
	09:26	2.2	67		07:42	1.9	58		08:44	1.3	40
	16:54	0.4	12		13:34	1.0	30		15:14	2.7	82
	23:19	1.5	46		19:29	1.8	55		22:52	0.1	3
9 Sa	03:34	1.1	34	**20** W ◑	01:44	0.7	21	**31** Su	05:21	1.6	49
	10:05	2.4	73		08:12	2.0	61		09:35	1.2	37
	18:02	0.1	3		15:01	0.8	24		15:55	2.6	79
					21:04	1.6	49		23:19	0.2	6
10 Su	01:12	1.4	43	**21** Th	02:14	1.0	30				
	04:07	1.3	40		08:47	2.2	67				
	10:49	2.6	79		16:23	0.6	18				
	19:05	-0.2	-6		22:59	1.4	43				
11 M	11:37	2.8	85	**22** F	02:44	1.2	37				
	20:04	-0.4	-12		09:27	2.3	70				
					17:34	0.3	9				

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

July

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 F		02:42	1.4F	**12** Tu		00:06	1.8F	**23** Sa		02:24	0.1F
		07:54	0.1F			05:00	0.3F			07:24	0.9F
		12:48	1.2F			10:12	1.4F		10:48	15:06	-1.5E
	15:42	19:42	-2.1E		13:00	17:00	-2.7E		19:36	22:48	1.1F
					21:42						
2 Sa	00:00	03:18	1.5F	**13** W ○		00:48	1.9F	**24** Su		03:30	0.2F
	08:36	13:36	1.1F			05:48	0.3F			08:30	0.8F
	16:24	20:24	-2.0E			11:00	1.5F		11:36	15:48	-1.7E
					13:48	17:48	-2.8E		20:24	23:30	1.3F
					22:30						
3 Su	00:36	03:54	1.5F	**14** Th		01:36	1.8F	**25** M		04:24	0.2F
	08:30					06:48	0.2F			09:30	0.9F
	10:18	14:30	1.0F			11:48	1.6F		12:18	16:30	-1.8E
	17:12	21:06	-1.9E		14:42	18:42	-2.7E		21:00		
					23:12						
4 M	01:12	04:30	1.5F	**15** F		02:24	1.7F	**26** Tu		00:06	1.4F
	08:30	10:06	-0.3E		07:36	12:42	1.5F			05:06	0.2F
	11:48	15:30	0.9F		15:36	19:36	-2.5E			10:18	1.0F
	18:06	21:48	-1.6E						13:00	17:12	-1.9E
				16 Sa	00:00	03:06	1.6F		21:36		
5 Tu	01:42	05:00	1.5F		07:30	08:24	-0.1E	**27** W		00:36	1.5F
	08:42	10:48	-0.5E		09:24	13:42	1.4F			05:48	0.1F
	13:24	16:36	0.8F		16:36	20:24	-2.2E			10:54	1.2F
	19:12	22:42	-1.3E						13:36	17:48	-2.0E
				17 Su	00:36	03:48	1.5F		22:06		
					07:42	09:18	-0.3E				
6 W	02:12	05:36	1.4F		11:00	14:42	1.2F	**28** Th ●		01:06	1.5F
	09:00	11:42	-0.8E		17:36	21:12	-1.8E		06:24	11:30	1.3F
	14:54	17:48	0.7F						14:18	18:18	-2.1E
	20:36	23:42	-0.9E						22:30		
				18 M	01:06	04:24	1.4F				
					08:00	10:06	-0.6E				
7 Th ◐	02:42	06:12	1.3F		12:36	15:54	1.0F	**29** F		01:30	1.5F
	09:30	12:36	-1.1E		18:42	22:00	-1.3E		06:24	12:06	1.3F
	16:24	19:24	0.7F						14:54	18:54	-2.1E
	22:36			**19** Tu	01:36	04:54	1.3F		23:00		
					08:24	11:06	-0.8E				
		00:54	-0.5E		14:18	17:12	0.8F	**30** Sa		02:00	1.5F
8 F	03:06	06:48	1.2F		19:54	22:54	-0.8E		06:12	07:30	-0.2E
	10:00	13:30	-1.5E						08:42	12:48	1.3F
	17:48	21:06	1.0F	**20** W ◑	01:54	05:30	1.2F		15:36	19:24	-2.1E
					08:48	12:06	-1.0E		23:24		
	00:48	02:06	-0.2E		15:54	18:36	0.6F	**31** Su		02:30	1.5F
9 Sa	03:24	07:30	1.2F		21:36	23:54	-0.4E		06:18	08:00	-0.3E
	10:36	14:24	-1.9E						09:42	13:30	1.3F
	18:54	22:18	1.3F	**21** Th	02:06	06:00	1.1F		16:24	20:06	-2.0E
					09:24	13:12	-1.2E		23:54		
	03:06	08:24	1.2F		17:24	20:24	0.7F				
10 Su	11:24	15:12	-2.3E	**22** F	00:24						
	19:54	23:18	1.6F		02:00	06:36	0.9F				
					10:06	14:12	-1.4E				
		04:06	0.2F		18:42	21:54	0.9F				
11 M		09:24	1.3F								
	12:12	16:06	-2.6E								
	20:48										

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

August

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1	05:36		1.7	52	**12**	04:35		1.6	49	**23**	11:36		2.5	76
	10:29		1.1	34		07:46		1.4	43		19:44		0.1	3
M	16:41		2.4	73	F	14:32		3.0	91	Tu				
	23:46		0.3	9	○	22:13		-0.1	-3					
2	05:58		1.9	58	**13**	04:48		1.6	49	**24**	03:18		1.8	55
	11:28		1.0	30		08:49		1.2	37		06:06		1.7	52
Tu	17:32		2.2	67	Sa	15:25		2.9	88	W	12:32		2.6	79
						22:46		0.1	3		20:22		0.1	3
3	00:15		0.5	15	**14**	05:02		1.7	52	**25**	03:31		1.7	52
	06:25		2.0	61		09:50		1.0	30		06:54		1.5	46
W	12:33		0.8	24	Su	16:17		2.6	79	Th	13:18		2.7	82
	18:33		2.0	61		23:15		0.4	12		20:54		0.2	6
4	00:45		0.8	24	**15**	05:20		1.9	58	**26**	03:40		1.7	52
	06:56		2.2	67		10:51		0.9	27		07:36		1.4	43
Th	13:46		0.7	21	M	17:11		2.4	73	F	13:58		2.7	82
	19:50		1.7	52		23:41		0.7	21		21:21		0.2	6
5	01:14		1.0	30	**16**	05:42		2.1	64	**27**	03:47		1.8	55
	07:34		2.4	73		11:54		0.8	24		08:16		1.2	37
F	15:08		0.5	15	Tu	18:09		2.1	64	Sa	14:36		2.7	82
◐	21:39		1.5	46						●	21:46		0.3	9
6	01:42		1.3	40	**17**	00:05		0.9	27	**28**	03:54		1.8	55
	08:19		2.5	76		06:08		2.2	67		08:56		1.1	34
Sa	16:34		0.3	9	W	13:01		0.7	21	Su	15:15		2.6	79
						19:20		1.8	55		22:08		0.5	15
7	09:14		2.6	79	**18**	00:28		1.2	37	**29**	04:06		2.0	61
	17:53		0.1	3		06:39		2.3	70		09:39		0.9	27
Su					Th	14:15		0.6	18	M	15:56		2.5	76
						21:00		1.6	49		22:31		0.6	18
8	10:19		2.8	85	**19**	00:49		1.4	43	**30**	04:23		2.1	64
	19:02		-0.2	-6		07:18		2.4	73		10:25		0.7	21
M					F	15:35		0.5	15	Tu	16:42		2.3	70
					◑						22:54		0.8	24
9	11:29		2.9	88	**20**	08:07		2.4	73	**31**	04:45		2.3	70
	20:01		-0.3	-9		16:55		0.4	12		11:16		0.6	18
Tu					Sa					W	17:35		2.1	64
											23:18		1.1	34
10	12:35		3.0	91	**21**	09:12		2.4	73					
	20:51		-0.3	-9		18:03		0.3	9					
W					Su									
11	04:23		1.6	49	**22**	10:27		2.4	73					
	06:37		1.5	46		18:59		0.2	6					
Th	13:36		3.1	94	M									
	21:35		-0.3	-9										

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

August

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 M	06:30 10:48 17:12	03:00 08:30 14:24 20:42	1.5F -0.6E 1.2F -1.7E	**12** F ○	05:12 07:48 14:54 22:48	01:12 06:24 12:00 18:42	1.8F -0.2E 1.7F -2.4E	**23** Tu	12:06 20:36	04:24 09:18 16:24 23:42	0.1F 0.8F -1.7E 1.4F
2 Tu	00:18 06:48 11:54 18:12	03:30 09:12 15:18 21:24	1.5F -0.8E 1.1F -1.4E	**13** Sa	05:24 09:00 15:48 23:18	01:42 07:06 12:48 19:24	1.7F -0.5E 1.6F -2.2E	**24** W	05:00 12:54 21:06	10:12 17:00	1.0F -1.8E
3 W	00:48 07:12 13:06 19:18	04:00 09:48 16:18 22:06	1.4F -1.0E 1.0F -1.0E	**14** Su	05:36 10:12 16:42 23:42	02:18 07:48 13:42 20:06	1.6F -0.7E 1.5F -1.8E	**25** Th	04:24 06:42 13:36 21:36	00:06 05:30 10:54 17:30	1.5F -0.1E 1.2F -1.9E
4 Th	01:06 07:36 14:30 20:48	04:36 10:36 17:36 23:06	1.3F -1.3E 0.9F -0.5E	**15** M	06:00 11:18 17:36	02:48 08:30 14:36 20:48	1.4F -0.9E 1.3F -1.4E	**26** F	04:18 07:36 14:18 22:00	00:30 05:54 11:24 18:00	1.5F -0.3E 1.4F -2.0E
5 F ◐	01:24 08:06 16:00 23:30	05:06 11:36 19:12	1.2F -1.5E 0.8F	**16** Tu	00:06 06:24 12:24 18:42	03:18 09:12 15:36 21:24	1.3F -1.1E 1.1F -1.0E	**27** Sa ●	04:24 08:24 14:54 22:18	00:48 06:18 12:06 18:30	1.5F -0.5E 1.5F -1.9E
6 Sa	01:18 08:54 17:30	05:48 12:48 21:12	1.1F -1.7E 1.1F	**17** W	00:24 06:48 13:42 19:54	03:42 09:54 16:48 22:06	1.2F -1.2E 0.9F -0.5E	**28** Su	04:30 09:06 15:36 22:42	01:12 06:48 12:42 19:00	1.5F -0.7E 1.5F -1.8E
7 Su	09:48 18:54	01:48 06:42 14:00 22:24	0.2F 1.0F -1.9E 1.4F	**18** Th	00:30 07:18 15:06 21:54	04:12 10:48 18:00 23:06	1.1F -1.2E 0.7F -0.1E	**29** M	04:42 09:54 16:24 23:00	01:36 07:12 13:24 19:42	1.5F -0.9E 1.5F -1.6E
8 M	11:00 19:54	03:06 08:00 15:06 23:12	0.3F 1.0F -2.2E 1.7F	**19** F ◑	00:24 07:54 16:36	04:42 11:54 19:54	0.9F -1.2E 0.7F	**30** Tu	05:00 10:48 17:18 23:24	02:00 07:48 14:12 20:18	1.5F -1.2E 1.4F -1.3E
9 Tu	12:00 20:48	04:06 09:18 16:06 23:54	0.3F 1.2F -2.4E 1.8F	**20** Sa	08:42 18:06	00:36 05:24 13:18 21:42	0.2F 0.8F -1.2E 0.9F	**31** W	05:24 11:42 18:24 23:42	02:30 08:24 15:06 20:54	1.4F -1.5E 1.3F -1.0E
10 W	13:00 21:30	05:00 10:18 17:00	0.2F 1.4F -2.6E	**21** Su	09:54 19:12	02:12 06:24 14:36 22:36	0.3F 0.7F -1.3E 1.1F				
11 Th	05:48 14:00 22:12	00:36 11:12 17:54	1.8F 1.6F -2.6E	**22** M	11:06 20:00	03:30 08:06 15:36 23:18	0.2F 0.6F -1.5E 1.3F				

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

September

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1	05:13		2.4	73	**12**	03:45		2.2	67	**23**	02:18		1.9	58
	12:15		0.5	15		09:52		0.6	18		07:01		1.3	40
Th	18:40		1.9	58	M	16:19		2.4	73	F	13:11		2.5	76
	23:40		1.3	40		22:16		1.0	30		20:08		0.4	12
2	05:47		2.6	79	**13**	04:02		2.3	70	**24**	02:26		2.0	61
	13:25		0.4	12		10:41		0.5	15		07:38		1.1	34
F	20:14		1.7	52	Tu	17:09		2.2	67	Sa	13:53		2.6	79
	23:56		1.5	46		22:35		1.2	37		20:33		0.6	18
3	06:30		2.6	79	**14**	04:24		2.5	76	**25**	02:34		2.1	64
	14:52		0.4	12		11:31		0.5	15		08:15		0.9	27
Sa					W	18:06		1.9	58	Su	14:34		2.5	76
◐						22:53		1.4	43	●	20:55		0.7	21
4	07:26		2.7	82	**15**	04:50		2.5	76	**26**	02:44		2.2	67
	16:26		0.2	6		12:26		0.4	12		08:52		0.6	18
Su					Th	19:19		1.7	52	M	15:15		2.4	73
						23:07		1.5	46		21:16		0.9	27
5	08:43		2.7	82	**16**	05:21		2.6	79	**27**	02:59		2.4	73
	17:48		0.1	3		13:30		0.5	15		09:32		0.4	12
M					F					Tu	16:00		2.3	70
											21:37		1.1	34
6	10:16		2.8	85	**17**	06:00		2.5	76	**28**	03:19		2.5	76
	18:53		0.0	0		14:47		0.5	15		10:16		0.3	9
Tu					Sa					W	16:51		2.1	64
					◑						21:57		1.3	40
7	11:41		2.8	85	**18**	06:53		2.4	73	**29**	03:45		2.7	82
	19:45		0.0	0		16:10		0.5	15		11:06		0.2	6
W					Su					Th	17:51		1.9	58
											22:14		1.5	46
8	02:58		1.8	55	**19**	08:17		2.3	70	**30**	04:17		2.8	85
	06:15		1.6	49		17:23		0.4	12		12:05		0.2	6
Th	12:50		2.9	88	M					F	19:15		1.7	52
	20:27		0.0	0							22:22		1.6	49
9	03:07		1.8	55	**20**	10:03		2.3	70					
	07:19		1.3	40		18:19		0.4	12					
F	13:49		2.9	88	Tu									
	21:02		0.2	6										
10	03:18		1.9	58	**21**	01:58		1.9	58					
	08:13		1.1	34		05:22		1.7	52					
Sa	14:41		2.8	85	W	11:25		2.4	73					
○	21:31		0.4	12		19:04		0.3	9					
11	03:30		2.0	61	**22**	02:08		1.9	58					
	09:04		0.8	24		06:18		1.5	46					
Su	15:30		2.6	79	Th	12:23		2.5	76					
	21:55		0.7	21		19:39		0.4	12					

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

September

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Th	05:54 12:48 19:42 23:54	03:00 09:00 16:12 21:42	1.3F -1.6E 1.2F -0.5E	**12** M	04:18 10:18 16:48 22:42	01:18 07:12 13:36 19:36	1.5F -1.4E 1.6F -1.3E	**23** F	02:54 07:12 13:30 20:48	04:54 10:48 17:00 23:42	-0.5E 1.3F -1.7E 1.5F
2 F	06:24 14:06 21:54 23:36	03:36 09:48 17:30	1.2F -1.7E 1.0F	**13** Tu	04:36 11:06 17:42 22:54	01:42 07:48 14:24 20:12	1.4F -1.5E 1.5F -0.9E	**24** Sa	02:54 07:54 14:12 21:06	05:12 11:24 17:30	-0.8E 1.5F -1.7E
3 Sa ◐	07:06 15:42	04:12 10:54 19:18	1.1F -1.7E 1.0F	**14** W	05:00 12:00 18:48 23:06	02:06 08:24 15:18 20:54	1.2F -1.6E 1.3F -0.6E	**25** Su ●	03:00 08:30 14:54 21:24	00:00 05:36 12:00 18:00	1.5F -1.1E 1.6F -1.6E
4 Su	08:06 17:24	00:12 05:06 12:18 21:06	0.3F 0.9F -1.7E 1.2F	**15** Th	05:30 13:00 20:06 23:12	02:36 09:00 16:18 21:36	1.1F -1.6E 1.0F -0.2E	**26** M	03:12 09:12 15:42 21:42	00:18 06:00 12:36 18:36	1.5F -1.4E 1.7F -1.4E
5 M	09:24 18:42	02:00 06:12 13:54 22:12	0.4F 0.8F -1.8E 1.5F	**16** F	06:00 14:12 22:30	03:06 09:36 17:30	1.0F -1.4E 0.9F	**27** Tu	03:24 09:54 16:36 22:00	00:42 06:30 13:18 19:12	1.5F -1.7E 1.7F -1.1E
6 Tu	10:54 19:42	03:18 08:00 15:12 23:00	0.3F 0.9F -2.0E 1.7F	**17** Sa ◑	06:42 15:42	03:36 10:36 19:12	0.8F -1.2E 0.8F	**28** W	03:48 10:42 17:36 22:18	01:06 07:06 14:06 19:54	1.4F -1.9E 1.6F -0.8E
7 W	04:12 12:12 20:30	09:30 16:12 23:36	1.1F -2.2E 1.8F	**18** Su	07:36 17:12	00:12 04:30 12:18 21:06	0.3F 0.7F -1.1E 0.9F	**29** Th	04:18 11:36 18:54 22:30	01:36 07:42 15:06 20:36	1.3F -2.1E 1.5F -0.4E
8 Th	03:30 06:24 13:12 21:06	04:54 10:30 17:00	-0.2E 1.5F -2.2E	**19** M	08:54 18:30	02:12 05:36 14:06 22:12	0.3F 0.5F -1.2E 1.1F	**30** F	04:54 12:42 20:54 22:06	02:06 08:30 16:12	1.2F -2.1E 1.3F
9 F	03:30 07:36 14:06 21:36	00:06 05:30 11:18 17:42	1.8F -0.6E 1.7F -2.2E	**20** Tu	10:42 19:18	03:18 07:42 15:12 22:42	0.1F 0.5F -1.4E 1.3F				
10 Sa ○	03:42 08:36 15:00 22:06	00:30 06:00 12:06 18:24	1.7F -0.9E 1.8F -2.0E	**21** W	03:06 05:06 11:54 20:00	09:12 16:00 23:06	0.7F -1.5E 1.4F				
11 Su	04:00 09:24 15:54 22:24	00:54 06:36 12:48 19:00	1.6F -1.1E 1.8F -1.7E	**22** Th	02:54 06:24 12:48 20:24	04:30 10:06 16:36 23:24	-0.3E 1.0F -1.7E 1.4F				

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

October

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1	04:55		2.8	85	**12**	02:59		2.6	79	**23**	01:15		2.1	64
	13:19		0.2	6		10:25		0.1	3		07:27		0.6	18
Sa					W	17:14		1.9	58	Su	13:45		2.2	67
						21:27		1.4	43		19:37		0.8	24
2	05:45		2.8	85	**13**	03:23		2.7	82	**24**	01:27		2.3	70
	14:48		0.2	6		11:08		0.1	3		08:04		0.3	9
Su					Th	18:13		1.7	52	M	14:33		2.1	64
						21:39		1.5	46		19:59		1.0	30
3	06:54		2.7	82	**14**	03:51		2.7	82	**25**	01:43		2.4	73
	16:19		0.2	6		11:56		0.2	6		08:43		0.1	3
M					F	19:37		1.6	49	Tu	15:21		2.1	64
◐						21:42		1.6	49	●	20:20		1.2	37
4	08:38		2.6	79	**15**	04:24		2.6	79	**26**	02:04		2.6	79
	17:32		0.1	3		12:54		0.3	9		09:24		-0.1	-3
Tu										W	16:14		1.9	58
					16	05:04		2.5	76		20:38		1.4	43
5	01:44		1.8	55		14:04		0.3	9	Sa				
	04:06		1.8	55	Su					**27**	02:30		2.8	85
W	10:31		2.6	79							10:10		-0.2	-6
	18:28		0.2	6	**17**	06:00		2.4	73	Th	17:15		1.8	55
						15:21		0.4	12		20:53		1.5	46
6	01:39		1.9	58	M									
	05:42		1.5	46	◑					**28**	03:02		2.9	88
Th	11:56		2.6	79							11:04		-0.3	-9
	19:12		0.3	9	**18**	07:30		2.2	67	F	18:37		1.6	49
						16:30		0.4	12		20:57		1.6	49
7	01:48		1.9	58	Tu									
	06:45		1.2	37						**29**	03:40		2.9	88
F	13:02		2.6	79	**19**	00:39		1.8	55		12:06		-0.2	-6
	19:46		0.5	15		03:57		1.7	52	Sa				
					W	09:28		2.1	64					
8	01:59		2.0	61		17:24		0.4	12	**30**	04:26		2.8	85
	07:36		0.9	27							13:20		-0.1	-3
Sa	13:58		2.5	76	**20**	00:44		1.9	58	Su				
	20:14		0.7	21		05:17		1.5	46					
					Th	10:58		2.2	67	**31**	05:24		2.7	82
9	02:11		2.2	67		18:07		0.4	12		14:41		0.0	0
	08:21		0.6	18						M				
Su	14:49		2.4	73	**21**	00:54		1.9	58					
○	20:37		0.9	27		06:08		1.2	37					
					F	12:03		2.2	67					
10	02:24		2.4	73		18:42		0.5	15					
	09:04		0.3	9										
M	15:37		2.2	67	**22**	01:04		2.0	61					
	20:55		1.1	34		06:49		0.9	27					
					Sa	12:56		2.2	67					
11	02:40		2.5	76		19:11		0.7	21					
	09:44		0.2	6										
Tu	16:24		2.0	61										
	21:12		1.3	40										

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

October

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots	
1 Sa	05:36 14:00	02:42 09:18 17:36 22:36	1.1F -2.0E 1.2F 0.3F	**12** W	03:30 10:54 18:00 21:42	00:48 07:06 14:12 19:48	1.3F -2.0E 1.5F -0.5E	**23** Su	01:42 07:54 14:12 20:06	04:36 11:12 16:54 23:06	-1.3E 1.6F -1.2E 1.4F
2 Su	06:24 15:36	03:30 10:24 19:18	0.9F -1.8E 1.2F	**13** Th	04:00 11:42 19:06 21:54	01:06 07:36 15:00 20:30	1.2F -1.9E 1.4F -0.2E	**24** M	01:48 08:30 15:06 20:24	04:54 11:48 17:36 23:30	-1.7E 1.8F -1.0E 1.4F
3 M ◐	07:36 17:06	00:42 04:36 12:06 20:54	0.4F 0.8F -1.6E 1.3F	**14** F	04:30 12:30 21:12	01:36 08:12 16:00	1.1F -1.8E 1.2F	**25** Tu ●	02:06 09:06 16:00 20:36	05:24 12:30 18:12 23:54	-2.0E 1.9F -0.8E 1.4F
4 Tu	09:12 18:18	02:24 06:24 13:54 21:48	0.3F 0.7F -1.6E 1.5F	**15** Sa	05:06 13:36	02:12 09:00 17:06 22:18	0.9F -1.6E 1.0F 0.2F	**26** W	02:30 09:54 17:00 20:48	05:54 13:12 18:54	-2.3E 1.9F -0.5E
5 W	02:36 04:06 11:00 19:18	08:24 15:06 22:30	0.8F -1.8E 1.6F	**16** Su	05:48 14:48	02:54 09:48 18:30	0.7F -1.4E 0.9F	**27** Th	02:54 10:42 18:24 20:54	00:18 06:36 14:06 19:36	1.4F -2.4E 1.8F -0.2E
6 Th	02:12 06:06 12:24 19:54	04:00 09:42 16:00 23:00	-0.4E 1.2F -1.8E 1.7F	**17** M ◑	06:42 16:12	00:00 03:54 11:12 20:06	0.3F 0.6F -1.1E 1.0F	**28** F	03:30 11:36 20:24	00:48 07:18 15:12	1.3F -2.5E 1.6F
7 F	02:12 07:12 13:24 20:24	04:36 10:36 16:42 23:24	-0.8E 1.5F -1.7E 1.6F	**18** Tu	08:06 17:18	01:48 05:18 13:12 21:06	0.2F 0.4F -1.1E 1.1F	**29** Sa	04:18 12:42	01:24 08:06 16:24 21:24	1.2F -2.4E 1.5F 0.3F
8 Sa	02:24 08:06 14:18 20:48	05:06 11:24 17:24 23:48	-1.2E 1.7F -1.6E 1.6F	**19** W	01:54 03:48 10:00 18:12	07:18 14:24 21:42	0.4F -1.2E 1.2F	**30** Su	05:06 14:00	02:06 09:06 17:42 22:48	1.0F -2.1E 1.3F 0.4F
9 Su ○	02:36 08:48 15:12 21:06	05:30 12:06 18:00	-1.5E 1.8F -1.3E	**20** Th	01:36 05:30 11:30 18:54	03:24 08:54 15:12 22:12	-0.3E 0.7F -1.3E 1.3F	**31** M	06:06 15:24	03:12 10:18 19:06	0.8F -1.8E 1.3F
10 M	02:48 09:30 16:00 21:18	00:06 06:06 12:42 18:36	1.5F -1.8E 1.8F -1.0E	**21** F	01:36 06:30 12:36 19:24	03:54 09:54 15:54 22:30	-0.6E 1.0F -1.3E 1.4F				
11 Tu	03:06 10:12 17:00 21:30	00:24 06:30 13:24 19:06	1.4F -1.9E 1.7F -0.7E	**22** Sa	01:36 07:18 13:24 19:48	04:12 10:36 16:24 22:48	-1.0E 1.3F -1.3E 1.4F				

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

November

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1	06:49		2.4	73	**12**	02:13		2.6	79	**23**	07:35		-0.5	-15
	15:57		0.0	0		10:36		-0.2	-6		14:41		1.6	49
Tu					Sa					W	18:21		1.3	40
◐										●				
2	00:32		1.7	52	**13**	02:50		2.5	76	**24**	00:23		2.7	82
	02:44		1.7	52		11:28		-0.1	-3		08:21		-0.6	-18
W	08:52		2.2	67	Su					Th	15:47		1.5	46
	16:58		0.2	6							18:37		1.4	43
3	00:20		1.8	55	**14**	03:36		2.4	73	**25**	00:58		2.8	85
	04:50		1.4	43		12:26		0.0	0		09:12		-0.7	-21
Th	10:42		2.2	67	M					F				
	17:46		0.3	9										
4	00:29		1.9	58	**15**	04:34		2.2	67	**26**	01:39		2.9	88
	06:00		1.0	30		13:27		0.1	3		10:08		-0.7	-21
F	12:04		2.1	64	Tu	22:02		1.6	49	Sa				
	18:23		0.5	15										
5	00:42		2.0	61	**16**	00:18		1.6	49	**27**	02:27		2.8	85
	06:54		0.6	18		05:56		2.0	61		11:09		-0.6	-18
Sa	13:11		2.0	61	W	14:25		0.2	6	Su				
	18:54		0.8	24	◑	22:05		1.7	52					
6	00:57		2.2	67	**17**	02:30		1.4	43	**28**	03:22		2.6	79
	06:39		0.3	9		07:43		1.8	55		12:13		-0.4	-12
Su	13:09		1.9	58	Th	15:15		0.3	9	M				
	18:18		1.0	30		22:18		1.8	55					
7	00:13		2.4	73	**18**	03:48		1.1	34	**29**	04:29		2.3	70
	07:20		0.0	0		09:19		1.7	52		13:16		-0.2	-6
M	14:02		1.8	55	F	15:57		0.4	12	Tu				
	18:37		1.2	37		22:33		1.9	58					
8	00:30		2.5	76	**19**	04:43		0.8	24	**30**	06:01		2.0	61
	07:58		-0.1	-3		10:37		1.7	52		14:14		0.0	0
Tu	14:53		1.7	52	Sa	16:34		0.6	18	W	21:43		1.5	46
○	18:53		1.3	40		22:50		2.0	61	◐				
9	00:50		2.6	79	**20**	05:28		0.4	12					
	08:34		-0.2	-6		11:43		1.7	52					
W	15:42		1.6	49	Su	17:07		0.8	24					
	19:08		1.4	43		23:07		2.2	67					
10	01:13		2.7	82	**21**	06:10		0.1	3					
	09:11		-0.3	-9		12:43		1.7	52					
Th	16:34		1.6	49	M	17:35		1.0	30					
	19:20		1.4	43		23:28		2.4	73					
11	01:40		2.7	82	**22**	06:51		-0.2	-6					
	09:51		-0.2	-6		13:42		1.7	52					
F					Tu	18:00		1.2	37					
						23:53		2.5	76					

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

November

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Tu ◐	07:30 16:36	00:54 04:42 12:00 20:12	0.3F 0.6F -1.5E 1.3F	**12** Sa	02:48 11:12	00:00 06:48 14:48 20:00	1.0F -1.9E 1.3F 0.1F	**23** W ●	00:18 08:06 15:36 18:12	03:54 11:30 16:54 22:12	-2.5E 2.0F -0.2E 1.4F
2 W	01:18 03:06 09:18 17:36	06:42 13:42 21:06	0.6F -1.4E 1.4F	**13** Su	03:30 12:06	00:36 07:30 15:48 21:06	0.9F -1.8E 1.2F 0.2F	**24** Th	00:48 08:54 17:18	04:30 12:18 22:42	-2.7E 1.9F 1.4F
3 Th	00:54 05:18 11:12 18:24	02:54 08:30 14:48 21:42	-0.5E 0.8F -1.3E 1.4F	**14** M	04:18 13:06	01:36 08:24 16:42 22:24	0.7F -1.5E 1.1F 0.2F	**25** F	01:24 09:42	05:18 13:12 18:30 23:18	-2.7E 1.8F 0.2F 1.3F
4 F	01:00 06:36 12:36 19:00	03:36 09:48 15:42 22:12	-0.9E 1.2F -1.2E 1.5F	**15** Tu	05:18 14:06 23:54	02:42 09:36 17:42	0.6F -1.3E 1.1F	**26** Sa	02:12 10:42	06:06 14:12 19:24	-2.7E 1.7F 0.3F
5 Sa	01:12 07:30 13:42 19:24	04:12 10:42 16:24 22:42	-1.4E 1.5F -1.1E 1.4F	**16** W ◑	06:30 15:00 23:06	04:06 11:00 18:30	0.4F -1.1E 1.1F	**27** Su	03:00 11:42	00:06 07:06 15:18 20:30	1.2F -2.4E 1.6F 0.3F
6 Su	00:54 07:12 13:36 18:42	03:36 10:24 16:00 22:00	-1.7E 1.7F -0.9E 1.4F	**17** Th	02:48 08:12 15:48 23:06	00:54 05:36 12:24 19:18	-0.2E 0.4F -1.0E 1.1F	**28** M	04:00 12:48	01:06 08:00 16:18 21:48	1.0F -2.1E 1.5F 0.2F
7 M	00:42 07:54 14:30 18:54	04:06 11:00 16:36 22:24	-2.0E 1.8F -0.7E 1.4F	**18** F	04:18 10:00 16:30 23:12	01:30 07:18 13:18 19:54	-0.6E 0.6F -1.0E 1.2F	**29** Tu	05:06 13:48 22:18	02:24 09:12 17:18	0.8F -1.7E 1.4F
8 Tu ○	01:00 08:30 15:24 19:06	04:30 11:42 17:12 22:42	-2.1E 1.8F -0.5E 1.3F	**19** Sa	05:18 11:24 17:00 23:18	02:00 08:30 14:06 20:24	-0.9E 1.0F -0.9E 1.2F	**30** W ◐	00:18 06:30 14:42 22:12	04:00 10:36 18:12	0.6F -1.4E 1.3F
9 W	01:18 09:06 16:24 19:18	05:00 12:18 17:48 23:00	-2.2E 1.7F -0.3E 1.2F	**20** Su	06:00 12:24 17:30 23:30	02:24 09:18 14:48 20:48	-1.4E 1.3F -0.8E 1.3F				
10 Th	01:42 09:42 17:30 19:30	05:30 13:00 18:30 23:24	-2.2E 1.6F -0.1E 1.1F	**21** M	06:42 13:24 17:48 23:54	02:54 10:06 15:30 21:18	-1.8E 1.6F -0.6E 1.3F				
11 F	02:12 10:24 19:12	06:06 13:48	-2.1E 1.4F	**22** Tu	07:24 14:30 18:06	03:18 10:48 16:12 21:42	-2.2E 1.9F -0.4E 1.4F				

All times are local time. Daylight Saving Time has been used when needed.
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. Petersburg, Florida, 2022

Times and Heights of High and Low Waters

December

	Slack		Maximum			Slack		Maximum			Slack		Maximum	
	h	m	ft	cm		h	m	ft	cm		h	m	ft	cm
1	02:18		1.2	37	**12**	02:40		2.3	70	**23**	00:01		2.6	79
	07:58		1.8	55		11:02		-0.4	-12		08:23		-1.0	-30
Th	15:05		0.2	6	M	18:53		1.3	40	F				
	21:58		1.7	52		20:53		1.2	37	●				
2	03:52		0.8	24	**13**	03:28		2.1	64	**24**	00:48		2.7	82
	09:45		1.6	49		11:46		-0.3	-9		09:14		-1.0	-30
F	15:47		0.5	15	Tu	19:21		1.3	40	Sa				
	22:18		1.9	58		22:23		1.2	37					
3	04:58		0.4	12	**14**	04:24		1.9	58	**25**	01:39		2.7	82
	11:13		1.5	46		12:30		-0.1	-3		10:06		-1.0	-30
Sa	16:22		0.7	21	W	19:48		1.4	43	Su				
	22:39		2.1	64										
4	05:50		0.0	0	**15**	00:05		1.1	34	**26**	02:34		2.5	76
	12:27		1.5	46		05:33		1.7	52		10:57		-0.8	-24
Su	16:52		0.9	27	Th	13:14		0.0	0	M				
	23:01		2.2	67		20:15		1.5	46					
5	06:34		-0.3	-9	**16**	01:43		0.9	27	**27**	03:34		2.3	70
	13:32		1.4	43		07:00		1.5	46		11:46		-0.5	-15
M	17:17		1.1	34	F	13:57		0.2	6	Tu	19:08		1.2	37
	23:24		2.3	70	◑	20:41		1.6	49		22:24		1.0	30
6	07:14		-0.4	-12	**17**	03:04		0.6	18	**28**	04:43		2.0	61
	14:31		1.4	43		08:40		1.3	40		12:32		-0.3	-9
Tu	17:38		1.2	37	Sa	14:39		0.4	12	W	19:33		1.3	40
	23:49		2.4	73		21:08		1.8	55					
7	07:51		-0.5	-15	**18**	04:08		0.3	9	**29**	00:17		0.8	24
	15:25		1.4	43		10:16		1.2	37		06:08		1.6	49
W	17:56		1.3	40	Su	15:18		0.7	21	Th	13:14		0.1	3
						21:35		2.0	61		20:00		1.4	43
8	00:15		2.5	76	**19**	05:02		-0.1	-3	**30**	02:04		0.6	18
	08:27		-0.6	-18		11:43		1.2	37		07:54		1.3	40
Th					M	15:55		0.9	27	F	13:54		0.4	12
○						22:06		2.1	64	◐	20:30		1.6	49
9	00:45		2.5	76	**20**	05:53		-0.4	-12	**31**	03:33		0.2	6
	09:03		-0.6	-18		13:00		1.3	40		09:51		1.1	34
F					Tu	16:28		1.0	30	Sa	14:31		0.6	18
						22:39		2.3	70		20:53		1.9	58
10	01:19		2.4	73	**21**	06:42		-0.7	-21					
	09:40		-0.5	-15		14:13		1.3	40					
Sa					W	16:57		1.2	37					
						23:18		2.5	76					
11	01:57		2.4	73	**22**	07:32		-0.9	-27					
	10:20		-0.5	-15	Th									
Su														

Heights are referred to mean lower low water which is the chart datum of soundings.
All times are local time. Daylight Saving Time has been used when needed.

Tampa Bay Entrance (Egmont Channel), Florida, 2022

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

December

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Th	02:54 08:24 15:30 22:24	00:24 05:48 12:00 19:00	-0.5E 0.6F -1.0E 1.2F	**12** M	03:18 11:36 20:36	00:30 07:18 15:06	0.9F -1.9E 1.4F	**23** F ●	00:30 09:00	04:24 12:18 17:36 22:30	-2.8E 2.0F 0.2F 1.4F
2 F	04:30 10:24 16:06 22:48	01:18 07:30 13:12 19:42	-0.9E 0.8F -0.8E 1.2F	**13** Tu	04:06 12:24 20:36 22:42	01:30 08:06 15:48	0.8F -1.7E 1.4F	**24** Sa	01:12 09:48	05:12 13:12 18:24 23:18	-2.8E 1.9F 0.2F 1.4F
3 Sa	05:42 12:00 16:42 23:06	02:00 08:48 14:06 20:18	-1.3E 1.1F -0.6E 1.2F	**14** W	05:00 13:00 20:48	02:30 08:54 16:30 22:36	0.7F -1.5E 1.3F -0.3E	**25** Su	02:06 10:42	06:06 14:00 19:18	-2.7E 1.8F 0.1F
4 Su	06:36 13:12 17:00 23:30	02:42 09:42 15:00 20:48	-1.7E 1.4F -0.4E 1.2F	**15** Th	00:36 06:06 13:42 21:00	03:42 09:54 17:06 23:30	0.6F -1.2E 1.2F -0.5E	**26** M	03:06 11:30 19:42 20:48	00:12 07:06 14:54	1.3F -2.4E 1.7F
5 M	07:18 14:18 17:18 23:54	03:12 10:24 15:42 21:18	-1.9E 1.6F -0.2E 1.2F	**16** F ◑	02:18 07:36 14:18 21:18	05:00 11:12 17:42	0.5F -0.9E 1.2F	**27** Tu	04:06 12:18 19:42 23:00	01:18 07:54 15:36 21:12	1.1F -2.0E 1.5F -0.3E
6 Tu	07:54 15:18 17:30	03:42 11:06 16:18 21:42	-2.1E 1.7F -0.1E 1.2F	**17** Sa	03:42 09:30 14:54 21:36	00:24 06:30 12:18 18:24	-0.8E 0.6F -0.6E 1.1F	**28** W	05:18 12:54 20:00	02:36 08:54 16:18 22:18	0.9F -1.6E 1.4F -0.5E
7 W	00:18 08:30 16:24 17:36	04:12 11:42 22:06	-2.2E 1.7F 1.2F	**18** Su	04:48 11:24 15:24 22:00	01:00 08:06 13:24 19:06	-1.2E 0.9F -0.4E 1.1F	**29** Th	01:00 06:36 13:30 20:24	04:00 10:00 17:00 23:30	0.8F -1.1E 1.3F -0.9E
8 Th ○	00:48 09:00 17:36	04:42 12:18 22:30	-2.2E 1.7F 1.1F	**19** M	05:42 12:48 15:48 22:30	01:36 09:12 14:18 19:48	-1.6E 1.3F -0.3E 1.1F	**30** F ◐	02:48 08:24 13:54 20:54	05:30 11:12 17:36	0.7F -0.6E 1.1F
9 F	01:18 09:36 18:18	05:18 12:54 23:06	-2.2E 1.6F 1.1F	**20** Tu	06:36 14:12 16:06 23:06	02:12 10:00 15:06 20:30	-2.1E 1.6F -0.1E 1.2F	**31** Sa	04:18 10:48 14:12 21:30	00:30 07:18 12:30 18:18	-1.2E 0.8F -0.2E 1.0F
10 Sa	01:54 10:18 19:06	05:54 13:42 23:48	-2.1E 1.5F 1.0F	**21** W	07:24 15:54 23:42	02:54 10:48 21:06	-2.4E 1.9F 1.3F				
11 Su	02:30 10:54 19:48	06:36 14:24	-2.0E 1.4F	**22** Th	08:12	03:36 11:30 16:42 21:48	-2.7E 2.0F 0.1F 1.4F				

All times are local time. Daylight Saving Time has been used when needed.
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.

Notes

Port Manatee Entrance Current Tables

All times adjusted for Daylight Savings Time where applicable.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

January

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Sa	07:42 16:54	04:06 11:12 21:24	-1.3E 1.2F 0.7F	**12** W	05:12 22:12	01:48 08:48 14:36 18:36	-0.8E 0.7F 0.1F 0.5F	**23** Su	05:48 11:48 18:48	02:24 08:42 15:06 21:18	0.8F -0.7E 0.9F -0.6E
2 Su ●	00:30 08:30 17:18 18:36	04:54 12:00 22:12	-1.3E 1.2F 0.7F	**13** Th	06:06 22:54	02:42 09:42 15:36 19:30	-1.0E 0.9F 0.1F 0.5F	**24** M	00:30 07:00 12:06 19:24	03:30 09:30 15:42 22:24	0.6F -0.4E 0.9F -0.7E
3 M	01:24 09:18 17:42 19:36	05:42 12:48 23:06	-1.3E 1.2F 0.7F	**14** F	06:48 16:18 23:30	03:24 10:24 20:24	-1.0E 1.0F 0.5F	**25** Tu ◑	02:00 08:42 12:12 20:00	05:00 10:24 16:24 23:30	0.6F -0.2E 0.8F -0.8E
4 Tu	02:24 10:06 18:00 20:30	06:36 13:36 19:12	-1.2E 1.1F -0.1E	**15** Sa	07:24 16:18 17:42	04:06 10:54 21:12	-1.0E 1.1F 0.5F	**26** W	03:30 11:48 20:42	06:42 17:12	0.6F 0.7F
5 W	03:30 10:54 18:24 21:24	00:00 07:24 14:18 19:48	0.8F -1.1E 0.9F -0.2E	**16** Su	00:12 08:00 16:24 18:42	04:42 11:30 21:54	-1.0E 1.1F 0.5F	**27** Th	04:48 21:30	00:48 08:30 13:54 18:06	-0.9E 0.7F 0.2F 0.6F
6 Th	04:36 11:42 18:42 22:24	01:00 08:12 14:54 20:30	0.8F -1.0E 0.8F -0.3E	**17** M ○	01:00 08:36 16:30 19:18	05:12 12:00 17:54 22:30	-1.0E 1.0F -0.1E 0.6F	**28** F	05:48 22:30	02:06 09:36 15:30 19:12	-1.0E 1.0F 0.1F 0.5F
7 F	05:42 12:30 19:06 23:42	02:00 09:00 15:36 21:18	0.8F -0.8E 0.7F -0.3E	**18** Tu	01:48 09:12 16:48 19:54	05:48 12:36 18:18 23:06	-1.0E 1.0F -0.2E 0.7F	**29** Sa	06:42 16:24 23:30	03:12 10:24 20:30	-1.1E 1.1F 0.5F
8 Sa	06:54 13:00 19:36	03:06 09:54 16:12 22:12	0.7F -0.6E 0.6F -0.4E	**19** W	02:30 09:48 17:06 20:30	06:24 13:06 18:42 23:54	-1.0E 0.9F -0.2E 0.8F	**30** Su	07:30 16:06 18:12	04:06 11:06 21:30	-1.2E 1.2F 0.6F
9 Su ◐	01:06 08:12 13:24 20:06	04:36 10:48 16:48 23:36	0.6F -0.3E 0.6F -0.6E	**20** Th	03:18 10:24 17:24 21:12	07:00 13:36 19:12	-1.0E 0.9F -0.3E	**31** M	00:36 08:18 16:18 19:06	04:54 11:48 17:48 22:24	-1.2E 1.2F -0.2E 0.7F
10 M	02:42 10:18 13:30 20:48	05:54 11:54 17:18	0.6F -0.1E 0.6F	**21** F	04:06 11:00 17:48 22:06	00:42 07:30 14:06 19:54	0.9F -1.0E 0.9F -0.4E				
11 Tu	04:06 13:12 21:30	00:42 07:24 17:54	-0.7E 0.6F 0.6F	**22** Sa	04:54 11:30 18:18 23:12	01:30 08:06 14:36 20:30	0.8F -0.9E 0.9F -0.5E				

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

February

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Tu ●	01:42 09:06 16:36 19:54	05:42 12:30 18:18 23:12	-1.2E 1.1F -0.3E 0.8F	**12** Sa	06:12 15:54 23:12	03:06 10:00 20:12	-0.8E 1.0F 0.3F	**23** W ◑	01:54 18:48	05:00 09:48 15:18 22:42	0.6F 0.1F 0.8F -0.9E
2 W	02:42 09:48 16:54 20:42	06:36 13:06 18:54	-1.2E 1.0F -0.3E	**13** Su	07:00 15:24 18:00	03:54 10:36 16:36 21:12	-0.9E 1.0F -0.1E 0.5F	**24** Th	03:12 19:30	06:48 11:36 16:12	0.7F 0.3F 0.6F
3 Th	03:42 10:30 17:12 21:30	00:06 07:12 13:36 19:24	0.9F -1.1E 0.9F -0.4E	**14** M	00:18 07:42 15:24 18:42	04:30 11:06 17:06 21:54	-1.0E 1.0F -0.2E 0.6F	**25** F	04:24 20:42	00:12 08:24 14:30 17:30	-0.9E 0.8F 0.2F 0.4F
4 F	04:36 11:00 17:30 22:30	00:54 07:48 14:00 20:00	0.9F -0.9E 0.8F -0.5E	**15** Tu	01:12 08:18 15:36 19:18	05:06 11:36 17:24 22:30	-1.0E 1.0F -0.3E 0.8F	**26** Sa	05:30 15:36 22:24	02:00 09:30 19:06	-0.9E 1.0F 0.4F
5 Sa	05:30 11:18 17:48 23:36	01:48 08:18 14:24 20:36	0.9F -0.7E 0.7F -0.6E	**16** W ○	01:54 08:54 15:48 19:54	05:42 12:06 17:48 23:06	-1.1E 1.0F -0.4E 0.9F	**27** Su	06:30 15:06 17:30 23:54	03:12 10:12 16:12 20:48	-1.0E 1.1F -0.1E 0.5F
6 Su	06:36 11:30 18:12	02:48 08:48 14:48 21:18	0.8F -0.4E 0.7F -0.7E	**17** Th	02:36 09:24 16:06 20:36	06:12 12:30 18:18 23:48	-1.1E 1.0F -0.5E 1.0F	**28** M	07:18 15:12 18:30	04:06 10:48 16:48 21:48	-1.1E 1.1F -0.3E 0.7F
7 M	00:54 08:00 11:06 18:42	04:00 09:18 15:06 22:12	0.6F -0.1E 0.7F -0.7E	**18** F	03:18 09:48 16:24 21:24	06:42 12:54 18:54	-1.0E 1.0F -0.6E				
8 Tu ◐	02:12 19:12	05:24 10:06 15:42 23:24	0.6F 0.1F 0.6F -0.7E	**19** Sa	04:06 10:06 16:48 22:18	00:36 07:06 13:18 19:30	0.9F -0.9E 1.0F -0.7E				
9 W	03:30 19:54	07:00 11:54 16:24	0.6F 0.3F 0.5F	**20** Su	04:54 10:24 17:12 23:24	01:24 07:36 13:42 20:12	0.9F -0.7E 1.0F -0.8E				
10 Th	04:36 20:48	00:48 08:24 14:36 17:24	-0.8E 0.7F 0.3F 0.4F	**21** M	05:54 10:30 17:42	02:18 08:12 14:12 20:48	0.8F -0.5E 1.0F -0.9E				
11 F	05:30 22:00	02:06 09:18 15:36 18:36	-0.8E 0.9F 0.1F 0.3F	**22** Tu	00:36 07:18 10:24 18:12	03:24 08:48 14:42 21:42	0.6F -0.2E 0.9F -0.9E				

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

March

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Tu	01:00 08:06 15:24 19:18	04:54 11:30 17:24 22:36	-1.2E 1.1F -0.4E 0.9F	**12** Sa	04:42 15:18 21:24	01:12 08:42 18:12	-0.6E 0.8F 0.2F	**23** W	01:30 09:36 18:18	04:36 14:54 22:06	0.7F 0.8F -1.0E
2 W ●	02:00 08:48 15:36 20:00	05:36 11:54 17:54 23:18	-1.2E 1.0F -0.5E 1.0F	**13** Su	06:42 15:48 17:42	03:36 10:24 20:54	-0.7E 0.9F 0.4F	**24** Th	02:36 18:54	06:06 10:36 15:30 23:12	0.7F 0.3F 0.6F -0.9E
3 Th	02:48 09:18 15:48 20:48	06:12 12:24 18:24	-1.1E 0.9F -0.6E	**14** M	00:06 07:30 15:30 18:36	04:30 11:06 17:00 22:06	-0.9E 1.0F -0.2E 0.6F	**25** F ◑	03:48 19:54	07:42 13:42 16:36	0.8F 0.3F 0.4F
4 F	03:36 09:42 16:06 21:36	00:06 06:48 12:42 18:54	1.0F -0.9E 0.9F -0.7E	**15** Tu	01:12 08:18 15:30 19:24	05:06 11:36 17:30 22:42	-1.0E 1.0F -0.3E 0.8F	**26** Sa	05:06 21:48	01:12 09:06 15:24 18:36	-0.8E 0.9F 0.1F 0.3F
5 Sa	04:30 09:54 16:18 22:30	00:48 07:12 13:00 19:24	1.0F -0.7E 0.9F -0.8E	**16** W	02:06 08:54 15:42 20:06	05:42 12:00 17:54 23:24	-1.0E 1.0F -0.4E 0.9F	**27** Su	06:12 15:12 17:18 23:54	03:00 10:06 20:42	-0.8E 1.0F 0.4F
6 Su	05:24 10:00 16:42 23:30	01:42 07:36 13:18 19:54	0.9F -0.4E 0.8F -0.9E	**17** Th	02:48 09:18 15:54 20:54	06:12 12:18 18:24	-1.0E 1.0F -0.6E	**28** M	07:12 15:06 18:36	04:06 10:48 16:54 22:06	-0.9E 1.0F -0.3E 0.6F
7 M	06:30 09:42 17:00	02:30 08:00 13:36 20:30	0.8F -0.2E 0.8F -0.9E	**18** F ○	03:30 09:42 16:12 21:42	00:00 06:42 12:42 18:54	1.0F -1.0E 1.0F -0.8E	**29** Tu	01:12 08:00 15:12 19:30	04:54 11:24 17:24 22:54	-1.0E 1.0F -0.4E 0.8F
8 Tu	00:24 08:36 17:24	03:36 14:00 21:06	0.7F 0.7F -0.9E	**19** Sa	04:18 09:54 16:30 22:36	00:42 07:12 13:00 19:30	1.0F -0.8E 1.1F -1.0E	**30** W	02:12 08:36 15:24 20:18	05:36 11:48 17:54 23:36	-1.0E 1.0F -0.6E 0.9F
9 W	01:30 17:48	05:00 09:12 14:18 21:54	0.6F 0.2F 0.6F -0.8E	**20** Su	05:06 10:06 16:54 23:30	01:30 07:36 13:24 20:06	0.9F -0.6E 1.1F -1.1E	**31** Th	03:00 09:06 15:36 21:06	06:12 12:12 18:24	-0.9E 1.0F -0.8E
10 Th ◐	02:30 18:24	06:12 10:48 14:54 23:06	0.7F 0.4F 0.4F -0.7E	**21** M	06:12 10:12 17:18	02:24 08:12 13:54 20:48	0.9F -0.4E 1.1F -1.2E				
11 F	03:36 19:24	07:42 14:48 16:18	0.7F 0.2F 0.3F	**22** Tu	00:30 07:30 10:12 17:42	03:24 08:48 14:24 21:24	0.8F -0.2E 1.0F -1.1E				

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

April

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
		00:12	1.0F			03:54	-0.8E			07:24	0.8F
1	03:48	06:48	-0.8E	**12**	06:54	10:24	0.9F	**23**	03:30	13:30	0.2F
F	09:30	12:30	0.9F	Tu	14:24	16:18	-0.2E	Sa		16:48	0.4F
●	15:48	19:00	-0.9E		18:06	21:36	0.7F	◑	20:12		
	21:48										
		01:00	1.0F		00:48	04:30	-0.9E			01:12	-0.7E
2	04:42	07:12	-0.6E	**13**	07:36	10:48	0.9F	**24**	04:42	08:30	0.8F
Sa	09:36	12:42	0.9F	W	14:24	16:48	-0.5E	Su	14:42	18:54	0.4F
	16:06	19:30	-1.0E		19:06	22:24	0.8F		22:18		
	22:36										
		01:42	0.9F		01:48	05:06	-0.9E			02:42	-0.8E
3	05:36	07:36	-0.3E	**14**	08:06	11:12	1.0F	**25**	05:48	09:30	0.9F
Su	09:42	13:00	0.9F	Th	14:36	17:24	-0.7E	M	13:54	15:36	-0.2E
	16:18	19:54	-1.1E		20:00	23:06	1.0F		17:18	20:48	0.5F
	23:24										
		02:30	0.9F		02:36	05:30	-0.8E		00:00	03:48	-0.8E
4	06:42	08:00	-0.2E	**15**	08:24	11:30	1.0F	**26**	06:42	10:12	0.9F
M	09:30	13:18	0.9F	F	14:54	17:54	-0.9E	Tu	14:00	16:18	-0.4E
	16:36	20:18	-1.1E		20:54	23:54	1.0F		18:30	22:00	0.7F
		03:18	0.8F		03:30	06:06	-0.7E		01:12	04:30	-0.8E
5	00:06	08:30	0.8F	**16**	08:42	11:48	1.1F	**27**	07:18	10:42	0.9F
Tu	08:30	13:36	0.8F	Sa	15:12	18:30	-1.1E	W	14:12	16:54	-0.6E
	16:54	20:48	-1.0E	○	21:48				19:24	22:48	0.8F
						00:42	1.0F				
	00:54	04:12	0.8F	**17**	04:30	06:42	-0.5E		02:12	05:12	-0.7E
6		09:12	0.1F	Su	08:54	12:12	1.1F	**28**	07:48	11:06	0.9F
W		14:06	0.7F		15:36	19:06	-1.3E	Th	14:24	17:30	-0.8E
	17:18	21:18	-0.9E		22:36				20:18	23:36	0.9F
						01:36	1.0F				
	01:42	05:18	0.7F	**18**	05:36	07:18	-0.3E		03:06	05:42	-0.6E
7		09:54	0.2F	M	09:00	12:36	1.1F	**29**	08:06	11:18	0.9F
Th		14:36	0.5F		16:00	19:48	-1.3E	F	14:42	18:06	-1.0E
	17:48	21:54	-0.8E		23:30				21:06		
						02:30	0.9F				
	02:36	06:30	0.7F	**19**	07:06					00:18	0.9F
8		11:18	0.3F	Tu	08:54	13:06	1.0F	**30**	04:06	06:18	-0.4E
F		15:18	0.4F		16:30	20:24	-1.3E	Sa	08:18	11:30	0.9F
	18:30	23:00	-0.7E					●	14:54	18:36	-1.1E
					00:18	03:36	0.9F		21:54		
	03:48	07:42	0.7F	**20**	08:48	13:42	0.9F				
9		14:12	0.2F	W	17:00	21:06	-1.2E				
Sa		16:48	0.3F								
◐	19:54										
					01:18	04:48	0.8F				
		01:12	-0.6E	**21**		09:36	0.2F				
10	05:00	08:48	0.8F	Th		14:24	0.7F				
Su	15:18	18:48	0.3F		17:42	21:54	-1.0E				
	22:06										
					02:18	06:06	0.8F				
		02:54	-0.7E	**22**		11:12	0.3F				
11	06:06	09:42	0.8F	F		15:18	0.5F				
M	14:42				18:36	23:12	-0.8E				
	16:54	20:24	0.5F								
	23:48										

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

May

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Su	05:06 08:18 15:12 22:30	01:00 06:42 11:48 19:00	0.9F -0.2E 0.9F -1.2E	**12** Th	00:24 06:30 13:18 19:00	03:42 09:48 16:12 22:06	-0.7E 0.9F -0.7E 0.8F	**23** M	04:12 12:24 15:24 22:18	00:54 07:42 13:54 18:54	-0.8E 0.8F -0.1E 0.5F
2 M	06:24 08:06 15:30 23:06	01:42 12:06 19:24	0.9F 0.8F -1.2E	**13** F	01:30 06:54 13:36 20:00	04:18 10:12 16:48 23:00	-0.6E 1.0F -0.9E 0.9F	**24** Tu	05:06 12:30 17:06 23:48	02:00 08:36 14:54 20:24	-0.7E 0.8F -0.3E 0.6F
3 Tu	07:42 15:48 23:42	02:24 12:30 19:48	0.9F 0.8F -1.1E	**14** Sa	02:42 07:12 13:54 20:54	05:00 10:36 17:30 23:54	-0.4E 1.1F -1.2E 1.0F	**25** W	05:48 12:48 18:24	03:06 09:12 15:42 21:48	-0.6E 0.8F -0.6E 0.7F
4 W	16:06	03:06 08:18 13:00 20:18	0.9F 0.1F 0.7F -1.0E	**15** Su	03:54 07:24 14:24 21:42	05:36 11:00 18:06	-0.3E 1.1F -1.4E	**26** Th	01:12 06:12 13:06 19:24	03:54 09:42 16:30 22:42	-0.5E 0.8F -0.9E 0.8F
5 Th	00:18 16:36	03:54 09:00 13:36 20:54	0.9F 0.1F 0.6F -0.9E	**16** M ○	05:18 07:30 14:48 22:30	00:48 06:18 11:24 18:48	1.0F -0.1E 1.1F -1.4E	**27** F	02:24 06:36 13:24 20:18	04:42 10:06 17:06 23:30	-0.3E 0.8F -1.0E 0.9F
6 F	01:06 17:24	04:42 09:48 14:24 21:36	0.8F 0.2F 0.5F -0.8E	**17** Tu	07:12 15:18 23:18	01:48 12:00 19:30	1.0F 1.0F -1.4E	**28** Sa	03:42 06:42 13:48 21:06	05:18 10:24 17:36	-0.2E 0.9F -1.2E
7 Sa	02:00 18:30	05:54 10:42 15:18 22:42	0.8F 0.2F 0.4F -0.7E	**18** W	16:00	02:48 08:00 12:36 20:12	1.0F 0.1F 0.9F -1.3E	**29** Su	05:06 06:42 14:06 21:42	00:18 10:42 18:12	0.9F 0.8F -1.2E
8 Su	03:06 19:54	06:54 12:18 16:42	0.8F 0.2F 0.4F	**19** Th	00:12 16:42	03:42 08:54 13:30 21:00	1.0F 0.2F 0.8F -1.2E	**30** M ●	06:30 14:30 22:18	01:00 11:06 18:42	0.9F 0.8F -1.2E
9 M ◐	04:18 13:36 21:36	00:18 07:48 18:18	-0.7E 0.8F 0.5F	**20** F	01:06 17:42	04:42 09:48 14:24 22:00	0.9F 0.2F 0.6F -1.0E	**31** Tu	07:06 14:48 22:48	01:42 11:30 19:06	0.9F 0.7F -1.1E
10 Tu	05:12 13:00 16:18 23:06	01:48 08:42 14:42 19:42	-0.7E 0.8F -0.1E 0.6F	**21** Sa	02:06 19:00	05:54 11:12 15:36 23:24	0.9F 0.2F 0.5F -0.9E				
11 W	06:00 13:06 17:48	02:48 09:18 15:30 21:00	-0.7E 0.8F -0.4E 0.7F	**22** Su ◑	03:12 12:42 20:36	06:48 17:06	0.8F 0.5F				

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

June

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 W	07:42 15:12 23:18	02:18 12:00 19:36	0.9F 0.7F -1.0E	**12** Su	03:30 05:36 13:06 20:48	09:48 17:06	1.0F -1.3E	**23** Th	04:18 11:30 18:18	02:12 07:54 15:12 21:30	-0.3E 0.7F -0.8E 0.6F
2 Th	08:18 15:48	02:54 12:42 20:06	0.9F 0.6F -1.0E	**13** M	05:24 13:36 21:36	00:00 10:24 17:48	1.0F 1.0F -1.4E	**24** F	01:48 04:36 12:00 19:18	03:18 08:24 16:00 22:42	-0.1E 0.7F -1.0E 0.7F
3 F	00:00 08:48 16:36	03:36 13:24 20:48	0.9F 0.6F -1.0E	**14** Tu ○	06:18 14:18 22:24	01:00 11:00 18:30	1.0F 0.9F -1.4E	**25** Sa	04:12 12:36 20:12	09:00 16:42 23:30	0.7F -1.1E 0.8F
4 Sa	00:42 09:24 17:30	04:18 14:18 21:30	0.8F 0.6F -0.9E	**15** W	15:00 23:12	01:48 07:12 11:42 19:24	1.1F 0.1F 0.9F -1.4E	**26** Su	05:00 13:06 20:54	09:36 17:24	0.7F -1.1E
5 Su	01:36 10:06 18:36	05:06 15:18 22:24	0.8F 0.6F -0.9E	**16** Th	08:06 15:54	02:42 12:36 20:12	1.1F 0.8F -1.3E	**27** M	05:48 13:36 21:24	00:12 10:12 17:54	0.9F 0.7F -1.1E
6 M	02:30 11:12 19:42	06:00 16:30 23:30	0.8F 0.6F -0.8E	**17** F	00:00 08:48 16:54	03:30 13:30 21:06	1.0F 0.8F -1.2E	**28** Tu	06:24 14:06 22:00	00:48 10:42 18:24	0.9F 0.6F -1.1E
7 Tu ◐	03:24 11:06 14:00 21:00	06:42 17:48	0.8F 0.6F	**18** Sa	00:54 09:36 18:06	04:24 14:36 22:00	0.9F 0.7F -1.0E	**29** W ●	07:00 14:36 22:30	01:24 11:18 19:00	0.9F 0.6F -1.0E
8 W	04:06 11:24 16:06 22:30	00:36 07:24 13:36 19:12	-0.7E 0.8F -0.3E 0.6F	**19** Su	01:48 09:54 11:18 19:18	05:18 15:42 23:00	0.8F 0.7F -0.9E	**30** Th	07:30 15:18 23:06	02:06 11:54 19:30	0.9F 0.6F -1.0E
9 Th	04:36 11:42 17:42	01:36 08:00 14:36 20:36	-0.6E 0.9F -0.6E 0.6F	**20** M	02:36 10:12 13:24 20:30	06:06 11:48 17:00	0.8F -0.1E 0.6F				
10 F	00:06 05:06 12:12 18:54	02:30 08:30 15:36 22:06	-0.4E 0.9F -0.9E 0.7F	**21** Tu ◑	03:24 10:36 15:12 22:00	00:06 06:48 13:00 18:30	-0.7E 0.7F -0.3E 0.6F				
11 Sa	01:42 05:24 12:36 19:54	03:36 09:06 16:18 23:06	-0.2E 1.0F -1.1E 0.9F	**22** W	03:54 11:00 16:54 23:48	01:12 07:18 14:06 20:06	-0.5E 0.7F -0.5E 0.6F				

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

July

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 F	07:42 16:00 23:48	02:30 12:36 20:06	0.9F 0.7F -1.0E	**12** Tu	13:18 21:24	00:00 05:30 10:00 17:42	1.0F 0.1F 0.8F -1.4E	**23** Sa	11:00 19:00	02:42 07:12 15:30 22:30	0.2F 0.6F -0.9E 0.7F
2 Sa	07:48 09:12 16:48	03:06 13:24 20:42	0.9F 0.7F -1.0E	**13** W ○	06:24 14:12 22:12	00:54 10:48 18:30	1.1F 0.8F -1.4E	**24** Su	11:48 19:48	04:06 08:00 16:18 23:12	0.2F 0.6F -1.0E 0.8F
3 Su	00:30 08:06 10:06 17:36	03:48 14:18 21:18	0.8F 0.8F -1.0E	**14** Th	07:12 15:12 23:00	01:42 11:42 19:24	1.1F 0.9F -1.3E	**25** M	12:36 20:30	04:54 09:06 17:06 23:54	0.1F 0.5F -1.0E 0.9F
4 M	01:06 08:30 11:06 18:30	04:18 09:36 15:12 22:00	0.8F -0.1E 0.7F -0.9E	**15** F	07:12 08:36 16:12 23:48	02:30 12:36 20:12	1.0F 0.9F -1.3E	**26** Tu	05:36 13:24 21:06	10:00 17:42	0.6F -1.0E
5 Tu	01:42 08:54 12:30 19:24	04:54 10:30 16:06 22:42	0.8F -0.2E 0.7F -0.8E	**16** Sa	07:24 09:36 17:12	03:12 08:36 13:36 21:00	0.9F -0.1E 0.9F -1.2E	**27** W	05:30 06:54 14:12 21:36	00:30 10:42 18:24	0.9F 0.6F -1.0E
6 W	02:12 09:24 14:18 20:36	05:30 11:36 17:24 23:36	0.8F -0.4E 0.6F -0.6E	**17** Su	00:36 07:42 10:42 18:06	03:48 09:12 14:30 21:36	0.9F -0.2E 0.9F -1.0E	**28** Th ●	05:36 07:48 14:48 22:12	01:00 11:24 18:54	0.9F 0.7F -1.0E
7 Th ◐	02:36 09:54 16:00 22:18	06:06 12:48 18:48	0.9F -0.5E 0.5F	**18** M	01:12 08:06 12:00 19:12	04:24 09:54 15:30 22:18	0.8F -0.3E 0.8F -0.8E	**29** F	05:48 08:24 15:30 22:48	01:36 07:06 11:54 19:24	0.9F -0.1E 0.8F -1.1E
8 F	02:54 10:30 17:36	00:30 06:48 13:54 20:30	-0.3E 0.9F -0.8E 0.6F	**19** Tu	01:48 08:30 13:30 20:18	04:54 10:48 16:48 23:06	0.7F -0.4E 0.7F -0.5E	**30** Sa	06:06 08:54 16:06 23:24	02:06 07:30 12:36 19:54	0.9F -0.1E 0.8F -1.1E
9 Sa	00:36 03:00 11:06 18:42	07:24 15:00 22:06	0.9F -1.0E 0.7F	**20** W ◑	02:06 09:00 15:06 21:48	05:24 12:00 18:18	0.7F -0.5E 0.6F	**31** Su	06:30 09:36 16:48 23:54	02:30 08:00 13:18 20:24	0.9F -0.2E 0.9F -1.1E
10 Su	03:12 11:48 19:42	08:12 16:00 23:06	0.8F -1.2E 0.9F	**21** Th	02:12 09:30 16:36	00:00 06:00 13:18 19:48	-0.2E 0.7F -0.7E 0.5F				
11 M	12:30 20:36	04:30 09:06 16:48	0.1F 0.8F -1.3E	**22** F	01:06 10:12 18:00	06:30 14:24 21:24	0.7F -0.8E 0.6F				

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

August

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 M	06:48 10:30 17:30	03:00 08:36 14:06 20:54	0.9F -0.3E 0.9F -1.0E	**12** F ○	05:24 08:06 15:24 22:42	01:18 06:48 11:48 19:18	1.0F -0.2E 1.0F -1.3E	**23** Tu	04:42 12:36 20:00	09:06 16:48 23:18	0.4F -0.9E 0.9F
2 Tu	00:18 07:12 11:30 18:18	03:24 09:12 15:00 21:24	0.9F -0.4E 0.8F -0.8E	**13** Sa	05:42 09:00 16:18 23:24	01:54 07:24 12:36 20:00	0.9F -0.2E 1.0F -1.2E	**24** W	04:00 06:24 13:30 20:42	10:12 17:30 23:54	0.6F -1.0E 0.9F
3 W	00:36 07:36 12:54 19:18	03:54 10:00 15:54 22:00	0.9F -0.5E 0.7F -0.6E	**14** Su	06:00 09:54 17:06 23:54	02:24 08:00 13:30 20:36	0.9F -0.3E 1.0F -1.1E	**25** Th	04:06 07:12 14:12 21:18	05:42 10:42 18:06	-0.2E 0.7F -1.0E
4 Th	00:54 08:06 14:18 20:36	04:24 10:48 17:12 22:42	0.9F -0.6E 0.6F -0.3E	**15** M	06:18 10:54 18:06	02:54 08:42 14:24 21:06	0.8F -0.5E 1.0F -0.8E	**26** F	04:24 07:48 14:48 21:48	00:30 06:06 11:18 18:36	0.9F -0.2E 0.8F -1.1E
5 F ◐	01:00 08:36 15:54 23:00	05:00 12:00 18:42	0.9F -0.8E 0.5F	**16** Tu	00:18 06:42 12:06 19:06	03:18 09:18 15:18 21:36	0.8F -0.6E 0.8F -0.6E	**27** Sa ●	04:36 08:24 15:24 22:18	00:54 06:30 11:54 19:00	0.9F -0.3E 1.0F -1.1E
6 Sa	00:42 09:18 17:18	05:42 13:12 20:30	0.8F -0.8E 0.6F	**17** W	00:30 07:06 13:18 20:18	03:36 10:00 16:30 22:06	0.7F -0.7E 0.7F -0.3E	**28** Su	04:54 09:06 16:00 22:42	01:18 07:00 12:30 19:30	0.9F -0.4E 1.0F -1.0E
7 Su	10:12 18:24	01:18 06:36 14:30 22:06	0.2F 0.7F -0.9E 0.8F	**18** Th	00:24 07:36 14:42 22:48	04:00 10:54 17:54	0.7F -0.7E 0.6F	**29** M	05:12 09:48 16:42 23:00	01:42 07:30 13:12 19:54	0.9F -0.5E 1.0F -0.9E
8 M	11:12 19:24	03:18 07:42 15:48 23:06	0.2F 0.7F -1.1E 0.9F	**19** F ◑	08:12 16:06	04:30 12:12 19:24	0.7F -0.7E 0.6F	**30** Tu	05:36 10:48 17:30 23:12	02:00 08:06 14:00 20:24	0.9F -0.6E 0.9F -0.8E
9 Tu	12:18 20:18	04:36 08:54 16:48 23:48	0.1F 0.7F -1.2E 1.0F	**20** Sa	08:54 17:18	00:12 05:18 13:36 20:54	0.2F 0.6F -0.7E 0.6F	**31** W	05:54 11:48 18:24 23:24	02:24 08:42 14:48 20:54	1.0F -0.8E 0.8F -0.6E
10 W	05:24 13:24 21:12	10:00 17:42	0.7F -1.3E	**21** Su	10:00 18:18	02:24 06:12 15:00 22:00	0.3F 0.5F -0.8E 0.7F				
11 Th	05:12 07:12 14:30 22:00	00:30 11:00 18:30	1.0F 0.9F -1.3E	**22** M	11:24 19:12	04:00 07:30 16:00 22:42	0.1F 0.4F -0.8E 0.8F				

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

September

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
		02:54	1.0F			01:24	0.8F		03:00	05:00	-0.3E
1 Th	06:24	09:24	-0.9E	**12** M	04:48	07:30	-0.6E	**23** F	06:54	10:36	0.9F
	12:54	15:48	0.7F		10:00	13:24	1.1F		14:00	17:30	-1.0E
	19:30	21:30	-0.3E		17:06	20:06	-0.8E		20:42	23:48	0.9F
	23:30				22:54						
		03:24	0.9F			01:42	0.8F		03:12	05:30	-0.4E
2 F	06:54	10:12	-0.9E	**13** Tu	05:06	08:06	-0.8E	**24** Sa	07:36	11:06	1.0F
	14:12	17:06	0.6F		11:00	14:12	1.0F		14:36	18:00	-1.0E
	21:24				18:06	20:30	-0.5E		21:12		
	23:12				23:00						
		04:00	0.8F			02:06	0.8F			00:06	0.9F
3 Sa ◐	07:36	11:12	-0.8E	**14** W	05:24	08:42	-0.9E	**25** Su ●	03:30	05:54	-0.5E
	15:36	18:48	0.6F		12:00	15:12	0.8F		08:24	11:42	1.1F
		23:30	0.2F		19:12	20:54	-0.3E		15:18	18:24	-0.9E
					22:54				21:30		
		04:54	0.7F			02:24	0.7F			00:18	0.9F
4 Su	08:24	12:42	-0.8E	**15** Th	05:48	09:18	-0.9E	**26** M	03:48	06:30	-0.7E
	16:54	20:30	0.7F		13:00	16:12	0.7F		09:12	12:18	1.1F
					20:42				16:00	18:54	-0.8E
					22:18				21:42		
		01:42	0.2F			02:48	0.7F			00:42	1.0F
5 M		06:06	0.5F	**16** F	06:18	09:54	-0.8E	**27** Tu	04:06	07:00	-0.9E
	09:42	14:24	-0.8E		14:06	17:30	0.6F		10:00	13:06	1.0F
	18:06	21:54	0.8F			22:06	0.1F		16:48	19:18	-0.6E
									21:54		
		03:42	0.1F			03:24	0.6F			01:00	1.0F
6 Tu		07:36	0.5F	**17** Sa ◑	06:54	10:48	-0.7E	**28** W	04:24	07:42	-1.0E
	11:18	15:48	-1.0E		15:12	18:54	0.6F		10:54	13:54	0.9F
	19:12	22:48	0.9F			23:36	0.2F		17:42	19:54	-0.4E
									22:06		
	03:48					04:06	0.4F			01:30	1.0F
7 W	05:18	09:12	0.6F	**18** Su	07:42	12:30	-0.6E	**29** Th	04:54	08:18	-1.1E
	12:36	16:48	-1.1E		16:24	20:06	0.6F		11:48	14:48	0.8F
	20:06	23:30	1.0F						18:54	20:30	-0.2E
									22:12		
	03:42	05:12	-0.2E			02:24	0.2F			02:00	0.9F
8 Th	06:36	10:18	0.8F	**19** M		05:36	0.3F	**30** F	05:24	09:00	-1.1E
	13:42	17:36	-1.2E		09:18	14:30	-0.6E		12:48	15:54	0.7F
	20:54				17:36	21:12	0.7F		20:30		
									22:00		
		00:06	1.0F		03:30	07:24	0.3F				
9 F	04:00	05:48	-0.3E	**20** Tu	11:12	15:36	-0.7E				
	07:30	11:06	1.0F		18:36	22:06	0.8F				
	14:36	18:18	-1.2E								
	21:36										
		00:36	0.9F		02:54						
10 Sa ○	04:18	06:24	-0.4E	**21** W	05:18	09:00	0.5F				
	08:18	11:48	1.1F		12:24	16:24	-0.8E				
	15:24	18:54	-1.2E		19:24	22:48	0.8F				
	22:06										
		01:06	0.9F		02:48	04:36	-0.2E				
11 Su	04:30	06:54	-0.5E	**22** Th	06:12	10:00	0.7F				
	09:12	12:30	1.1F		13:18	17:00	-0.9E				
	16:12	19:30	-1.0E		20:06	23:18	0.9F				
	22:36										

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

October

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Sa	06:00 13:54	02:36 09:42 17:12 22:06	0.8F -1.0E 0.7F 0.1F	**12** W	03:54 10:54 18:24 21:36	00:42 07:30 14:06 20:00	0.8F -1.0E 1.0F -0.2E	**23** Su	02:06 07:30 14:24 20:12	04:54 10:48 17:18 23:06	-0.7E 1.0F -0.8E 0.9F
2 Su	06:48 15:12	03:24 10:42 18:54 23:54	0.7F -0.8E 0.7F 0.2F	**13** Th	04:12 11:42 19:48 21:18	01:00 08:06 15:00	0.8F -1.0E 0.9F	**24** M	02:24 08:24 15:18 20:24	05:24 11:30 17:48 23:24	-0.9E 1.1F -0.6E 1.0F
3 M ◐	08:00 16:36	04:30 12:42 20:18	0.5F -0.7E 0.7F	**14** F	04:36 12:30 21:06	01:24 08:36 15:54	0.7F -1.0E 0.8F	**25** Tu ●	02:42 09:12 16:12 20:36	06:00 12:18 18:24 23:48	-1.1E 1.1F -0.5E 1.0F
4 Tu	09:48 17:48	02:18 06:12 14:30 21:30	0.1F 0.4F -0.8E 0.8F	**15** Sa	05:06 13:18	02:00 09:06 16:54 21:48	0.6F -0.8E 0.7F 0.1F	**26** W	03:06 10:06 17:12 20:48	06:36 13:06 19:00	-1.2E 1.0F -0.3E
5 W	02:30 04:18 11:36 18:48	08:06 15:42 22:18	0.5F -0.9E 0.9F	**16** Su	05:48 14:18	02:36 09:48 18:12 23:06	0.5F -0.7E 0.7F 0.2F	**27** Th	03:30 10:54 18:24 20:54	00:12 07:12 14:00 19:36	1.0F -1.3E 1.0F -0.1E
6 Th	02:24 05:48 12:48 19:42	04:12 09:30 16:36 23:00	-0.2E 0.7F -1.0E 0.9F	**17** M ◑	07:00 15:30	03:42 11:12 19:18	0.3F -0.5E 0.7F	**28** F	04:00 11:42 20:00	00:48 07:54 14:54	0.9F -1.2E 0.9F
7 F	02:42 06:42 13:48 20:24	04:48 10:24 17:18 23:30	-0.4E 0.9F -1.1E 0.9F	**18** Tu	08:48 16:48	01:24 05:24 13:36 20:24	0.1F 0.3F -0.5E 0.7F	**29** Sa	04:42 12:36 21:12	01:24 08:36 16:00	0.8F -1.1E 0.8F
8 Sa	02:54 07:36 14:36 20:54	05:24 11:06 17:54 23:48	-0.5E 1.0F -1.0E 0.9F	**19** W	02:12 10:42 17:54	07:06 14:54 21:18	0.4F -0.6E 0.7F	**30** Su	05:30 13:42	02:12 09:24 17:18 22:18	0.7F -0.9E 0.7F 0.1F
9 Su ○	03:12 08:24 15:30 21:18	05:54 11:48 18:30	-0.7E 1.1F -0.8E	**20** Th	01:36 04:48 11:54 18:42	03:12 08:18 15:42 22:00	-0.1E 0.6F -0.8E 0.8F	**31** M	06:36 14:54	03:12 10:42 18:42	0.6F -0.8E 0.7F
10 M	03:24 09:18 16:18 21:30	00:06 06:30 12:30 19:00	0.8F -0.8E 1.1F -0.6E	**21** F	01:42 05:48 12:48 19:24	03:48 09:18 16:18 22:30	-0.3E 0.8F -0.9E 0.8F				
11 Tu	03:36 10:06 17:18 21:36	00:24 07:06 13:18 19:30	0.8F -0.9E 1.0F -0.4E	**22** Sa	01:54 06:36 13:36 19:48	04:24 10:12 16:54 22:48	-0.5E 0.9F -0.9E 0.9F				

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

November

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Tu ◐	08:12 16:12	00:12 04:36 12:42 19:48	0.1F 0.4F -0.7E 0.7F	**12** Sa	02:54 10:54 19:54	07:06 14:24	-0.9E 0.8F	**23** W ●	00:48 08:12 15:48 18:24	04:36 11:18 17:06 22:06	-1.3E 1.1F -0.1E 1.0F
2 W	01:12 02:24 10:06 17:24	06:36 14:12 20:54	0.5F -0.7E 0.7F	**13** Su	03:30 11:36 20:36	00:36 07:36 15:18	0.5F -0.8E 0.8F	**24** Th	01:18 09:00 17:06 18:36	05:12 12:12 22:42	-1.4E 1.1F 0.9F
3 Th	01:00 04:30 11:36 18:18	02:48 08:06 15:18 21:42	-0.2E 0.6F -0.8E 0.8F	**14** M	04:24 12:36 21:30	01:24 08:24 16:24	0.4F -0.7E 0.7F	**25** F	01:54 09:42 18:36	05:54 13:06 23:24	-1.3E 1.0F 0.8F
4 F	01:18 05:48 12:48 19:00	03:42 09:24 16:06 22:12	-0.4E 0.8F -0.8E 0.8F	**15** Tu	05:48 13:42 22:48	02:30 09:30 17:24	0.4F -0.6E 0.7F	**26** Sa	02:36 10:30 19:24	06:42 14:00	-1.2E 1.0F
5 Sa	01:36 06:48 13:48 19:30	04:24 10:18 16:48 22:42	-0.6E 0.9F -0.8E 0.8F	**16** W ◑	07:18 14:54 23:00	03:54 11:24 18:18	0.4F -0.5E 0.7F	**27** Su	03:24 11:24 20:18	00:12 07:36 14:54	0.8F -1.1E 0.9F
6 Su	01:00 06:42 13:48 18:54	04:00 10:06 16:30 22:00	-0.8E 1.0F -0.6E 0.8F	**17** Th	01:18 08:54 15:54 23:06	05:18 12:42 19:06	0.5F -0.6E 0.7F	**28** M	04:30 12:30 21:18	01:06 08:30 16:00	0.7F -0.9E 0.8F
7 M	01:06 07:36 14:48 19:12	04:30 10:48 17:00 22:12	-1.0E 1.1F -0.4E 0.8F	**18** F	03:06 10:12 16:42 23:24	01:06 06:36 13:42 19:54	-0.2E 0.6F -0.6E 0.7F	**29** Tu	05:54 13:36 21:48 23:42	02:18 09:42 17:06	0.6F -0.8E 0.7F
8 Tu ○	01:24 08:18 15:48 19:18	05:06 11:36 17:36 22:30	-1.1E 1.1F -0.2E 0.8F	**19** Sa	04:24 11:18 17:12 23:42	01:54 07:48 14:30 20:24	-0.4E 0.7F -0.6E 0.8F	**30** W ◐	07:24 14:42 22:12	03:42 11:24 18:06	0.5F -0.7E 0.7F
9 W	01:42 09:00 17:00 19:18	05:36 12:18 22:48	-1.1E 1.0F 0.7F	**20** Su	05:30 12:24 17:36	02:42 08:48 15:06 20:48	-0.7E 0.9F -0.5E 0.8F				
10 Th	02:00 09:42 18:24	06:06 13:06 23:18	-1.1E 1.0F 0.7F	**21** M	00:00 06:30 13:30 17:54	03:24 09:42 15:48 21:12	-0.9E 1.0F -0.4E 0.9F				
11 F	02:24 10:18 19:18	06:30 13:48 23:48	-1.0E 0.9F 0.6F	**22** Tu	00:24 07:24 14:42 18:12	04:00 10:30 16:24 21:36	-1.2E 1.1F -0.3E 1.0F				

All times are local time. Daylight Saving Time has been used when needed.
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.

Port Manatee, Tampa Bay, Florida, 2022

F–Flood, Dir. 035° True E–Ebb, Dir. 217

December

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Th	01:48	00:00	-0.2E	**12** M	03:30	00:30	0.5F	**23** F ●	00:48	05:06	-1.4E
	09:00	05:24	0.6F		11:12	07:30	-0.8E		08:48	12:12	1.1F
	15:36	12:36	-0.6E		19:12	14:42	0.8F		17:30	22:30	0.8F
	22:42	18:54	0.7F		21:30						
2 F	03:24	01:06	-0.3E	**13** Tu	04:30	01:18	0.5F	**24** Sa	01:42	05:54	-1.3E
	10:30	06:54	0.7F		12:06	08:18	-0.7E		09:36	13:06	1.1F
	16:24	13:42	-0.6E		19:48	15:30	0.7F		17:54		
	23:06	19:36	0.7F		22:12				19:30	23:18	0.8F
3 Sa	04:48	02:06	-0.6E	**14** W	05:36	02:12	0.6F	**25** Su	02:36	06:48	-1.2E
	11:54	08:18	0.8F		13:00	09:06	-0.7E		10:24	13:54	1.0F
	17:00	14:42	-0.5E		20:24	16:24	0.7F		18:18	19:24	-0.1E
	23:30	20:18	0.7F		23:24	21:42	-0.1E		20:30		
4 Su	05:48	02:54	-0.8E	**15** Th	06:48	03:18	0.6F	**26** M	03:42	00:18	0.8F
	13:18	09:18	0.9F		13:48	10:06	-0.6E		11:12	07:36	-1.1E
	17:24	15:30	-0.3E		21:00	17:12	0.7F		18:48	14:36	0.9F
	23:48	20:42	0.7F			22:48	-0.2E		21:30	20:06	-0.1E
5 M	06:48	03:36	-1.0E	**16** F ◑	01:00	04:36	0.6F	**27** Tu	04:48	01:18	0.8F
	14:30	10:12	1.0F		08:00	11:18	-0.5E		12:06	08:30	-1.0E
	17:42	16:12	-0.2E		14:36	17:48	0.7F		19:24	15:24	0.8F
		21:06	0.7F		21:30	23:54	-0.4E		22:42	20:54	-0.2E
6 Tu	00:12	04:12	-1.2E	**17** Sa	02:42	05:54	0.6F	**28** W	06:00	02:18	0.7F
	07:36	10:54	1.0F		09:36	12:18	-0.4E		13:00	09:24	-0.8E
	15:42				15:12	18:24	0.7F		19:54	16:12	0.7F
	17:54	21:30	0.7F		22:00					21:54	-0.2E
7 W	00:36	04:48	-1.2E	**18** Su	04:12	00:54	-0.6E	**29** Th	00:06	03:36	0.7F
	08:12	11:36	1.1F		11:12	07:18	0.7F		07:12	10:30	-0.6E
	16:54				15:36	13:18	-0.3E		13:42	17:00	0.7F
	18:06	21:54	0.7F		22:24	19:00	0.8F		20:30	23:12	-0.4E
8 Th ○	01:06	05:18	-1.1E	**19** M	05:24	01:54	-0.9E	**30** F ◐	01:42	05:12	0.6F
	08:48	12:12	1.0F		12:54	08:42	0.8F		08:48	11:42	-0.4E
	17:54	22:24	0.6F		16:00	14:30	-0.2E		14:18	17:36	0.6F
					22:54	19:36	0.8F		21:06		
9 F	01:30	05:48	-1.0E	**20** Tu	06:24	02:48	-1.1E	**31** Sa	03:18	00:24	-0.5E
	09:18	12:54	1.0F		14:30	09:42	1.0F		10:48	06:36	0.6F
	18:06				16:18				14:48	12:54	-0.2E
	19:18	22:54	0.6F		23:30	20:18	0.8F		21:42	18:12	0.6F
10 Sa	02:06	06:18	-0.9E	**21** W	07:12	03:36	-1.3E				
	09:54	13:24	0.9F		16:06	10:36	1.1F				
	18:18					21:00	0.8F				
	20:12	23:36	0.5F								
11 Su	02:42	06:54	-0.8E	**22** Th	00:06	04:18	-1.4E				
	10:30	14:00	0.9F		08:00	11:24	1.1F				
	18:42				17:00	21:42	0.8F				
	20:48										

All times are local time. Daylight Saving Time has been used when needed.
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.

Notes

Port Tampa Entrance Current Tables

All times adjusted for Daylight Savings Time where applicable.

Old Tampa Bay Entrance (Port Tampa), Florida, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

January

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
		05:06	-1.2E			02:48	-0.8E		00:36	03:30	0.8F
1 Sa	09:12	12:12	1.1F	**12** W	06:24	09:12	0.6F	**23** Su	06:24	09:48	-0.9E
	16:36				12:48	14:06	-0.1E		13:12	16:06	0.9F
	18:30	22:06	0.8F		15:36	19:12	0.5F		19:18	22:18	-0.7E
					22:18						
	00:42	06:06	-1.3E			04:06	-0.9E		01:48	04:36	0.7F
2 Su	10:00	13:06	1.2F	**13** Th	07:24	10:18	0.8F	**24** M	07:42	10:42	-0.7E
●	17:18	18:18	-0.1E		14:36				13:42	16:36	0.8F
	19:30	23:00	0.9F		15:54	19:48	0.5F		19:36	23:00	-0.7E
					22:48						
	01:42	07:00	-1.4E			05:00	-1.0E		03:06	06:06	0.6F
3 M	10:54	13:54	1.2F	**14** F	08:12	11:06	0.9F	**25** Tu	09:18	11:42	-0.4E
	17:54	19:12	-0.2E		15:54	20:36	0.5F		14:06	17:12	0.7F
	20:36	23:54	0.9F		23:24			◑	20:00	23:48	-0.8E
	02:36	07:48	-1.4E			05:36	-1.1E		04:42	07:36	0.6F
4 Tu	11:36	14:36	1.2F	**15** Sa	09:00	11:54	1.0F	**26** W	11:12	12:48	-0.2E
	18:24	20:06	-0.3E		16:18				14:24	17:54	0.6F
	21:42				17:42	21:24	0.6F		20:36		
		00:48	0.9F		00:12	06:12	-1.1E			00:42	-0.8E
5 W	03:36	08:30	-1.3E	**16** Su	09:36	12:36	1.0F	**27** Th	06:06	09:18	0.7F
	12:18	15:18	1.1F		16:42				13:36	18:42	0.6F
	19:00	20:54	-0.4E		18:48	22:18	0.7F		21:24		
	22:54										
		01:48	0.9F	**17** M ○	01:00	06:30	-1.2E			03:30	-0.9E
6 Th	04:36	09:12	-1.2E		10:12	13:12	1.1F	**28** F	07:18	10:24	0.9F
	13:00	15:54	1.1F		17:06	18:24	-0.2E		15:30	19:48	0.6F
	19:30	21:48	-0.5E		19:48	23:06	0.8F		22:24		
	00:06	02:48	0.8F		01:48	06:48	-1.2E			04:54	-1.1E
7 F	05:42	09:54	-1.0E	**18** Tu	10:48	13:48	1.1F	**29** Sa	08:12	11:18	1.1F
	13:36	16:36	1.0F		17:30	19:06	-0.3E		16:06		
	20:00	22:36	-0.6E		20:48	23:54	0.9F		17:12	20:54	0.6F
									23:36		
	01:18	03:54	0.7F	**19** W	02:42	07:18	-1.2E			05:36	-1.3E
8 Sa	06:54	10:36	-0.8E		11:18	14:18	1.1F	**30** Su	09:06	12:06	1.2F
	14:06	17:12	0.9F		17:54	19:48	-0.4E		16:18	17:30	-0.1E
	20:36	23:30	-0.7E		21:42				18:42	22:00	0.8F
						00:48	0.9F				
	02:36	05:06	0.6F	**20** Th	03:36	07:42	-1.2E		00:42	06:18	-1.4E
9 Su	08:06	11:24	-0.6E		11:48	14:42	1.0F	**31** M	09:48	12:54	1.3F
◐	14:36	17:42	0.8F		18:18	20:30	-0.5E		16:36	18:12	-0.3E
	21:06				22:42				20:00	23:00	0.9F
		00:36	-0.8E			01:42	0.9F				
10 M	03:54	06:36	0.5F	**21** F	04:24	08:24	-1.2E				
	09:36	12:18	-0.4E		12:18	15:06	1.0F				
	15:00	18:12	0.7F		18:42	21:06	-0.6E				
	21:36				23:36						
		01:30	-0.8E			02:36	0.9F				
11 Tu	05:12	07:54	0.6F	**22** Sa	05:24	09:06	-1.1E				
	11:06	13:06	-0.3E		12:48	15:36	0.9F				
	15:18	18:42	0.6F		19:00	21:42	-0.6E				
	22:00										

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

February

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots	
1 Tu ●	01:54 10:30 17:00 21:06	07:00 13:30 19:00 23:54	-1.4E 1.3F -0.5E 1.0F	**12** Sa	07:48 15:48 22:48	04:42 10:48 20:00	-0.9E 0.9F 0.5F	**23** W ◑	03:00 10:00 12:42 18:48	06:18 11:18 16:12 22:24	0.6F -0.1E 0.7F -0.9E
2 W	02:54 11:06 17:24 22:00	07:36 14:00 19:48	-1.4E 1.2F -0.6E	**13** Su	08:36 15:42 17:54	05:24 11:30 21:12	-1.0E 1.0F 0.6F	**24** Th	04:42 12:42 19:36	07:54 17:06 23:42	0.7F 0.6F -0.8E
3 Th	03:54 11:36 17:48 23:00	00:54 08:12 14:30 20:24	1.0F -1.3E 1.1F -0.7E	**14** M	00:00 09:12 15:54 19:12	05:48 12:06 17:30 22:18	-1.1E 1.1F -0.2E 0.7F	**25** F	06:06 20:42	09:18 14:06 18:12	0.8F 0.1F 0.5F
4 F	04:48 12:06 18:18	01:48 08:36 14:54 21:06	1.0F -1.1E 1.0F -0.8E	**15** Tu	01:06 09:42 16:12 20:12	06:12 12:36 18:06 23:06	-1.2E 1.1F -0.4E 0.8F	**26** Sa	07:06 15:36 22:12	03:54 10:24 19:30	-1.0E 1.0F 0.5F
5 Sa	00:00 05:42 12:30 18:42	02:42 09:12 15:18 21:48	0.9F -0.9E 0.9F -0.8E	**16** W ○	02:00 10:12 16:30 21:06	06:36 13:06 18:48	-1.2E 1.1F -0.5E	**27** Su	08:00 15:12 18:06 23:48	04:48 11:06 16:36 20:54	-1.2E 1.2F -0.2E 0.6F
6 Su	01:00 06:48 12:54 19:00	03:36 09:48 15:42 22:30	0.8F -0.7E 0.8F -0.8E	**17** Th	02:54 10:36 16:48 21:54	00:00 07:00 13:30 19:24	0.9F -1.2E 1.1F -0.7E	**28** M	08:42 15:24 19:24	05:30 11:42 17:18 22:12	-1.3E 1.2F -0.4E 0.7F
7 M	02:00 07:54 13:06 19:18	04:42 10:24 16:06 23:18	0.7F -0.5E 0.7F -0.8E	**18** F	03:42 11:00 17:06 22:42	00:48 07:30 13:54 19:54	1.0F -1.2E 1.1F -0.7E					
8 Tu ◐	03:18 09:18 13:18 19:36	06:06 11:18 16:36	0.6F -0.3E 0.6F	**19** Sa	04:36 11:24 17:18 23:36	01:42 08:06 14:18 20:24	1.0F -1.1E 1.0F -0.8E					
9 W	04:42 11:06 13:24 20:00	00:06 07:30 17:12	-0.7E 0.6F 0.6F	**20** Su	05:30 11:48 17:36	02:30 08:42 14:36 20:48	0.9F -0.9E 0.9F -0.9E					
10 Th	05:54 13:18 20:42	01:54 08:54 17:54	-0.7E 0.6F 0.5F	**21** M	00:30 06:36 12:12 17:54	03:24 09:24 15:06 21:18	0.8F -0.6E 0.9F -0.9E					
11 F	07:00 14:30 21:36	03:48 10:00 18:54	-0.8E 0.8F 0.5F	**22** Tu	01:36 08:00 12:30 18:18	04:36 10:18 15:36 21:42	0.7F -0.4E 0.8F -0.9E					

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

March

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Tu	01:06 09:24 15:42 20:24	06:06 12:18 18:00 23:12	-1.3E 1.3F -0.6E 0.9F	**12** Sa	06:24 14:06 21:00	03:06 09:30 18:24	-0.7E 0.8F 0.4F	**23** W	02:36 09:54 12:12 18:24	05:42 15:48 21:54	0.7F 0.8F -1.0E
2 W ●	02:18 09:54 16:06 21:18	06:36 12:48 18:42	-1.3E 1.2F -0.8E	**13** Su	08:12 15:30 17:36 23:36	05:06 11:18 20:48	-0.9E 0.9F 0.5F	**24** Th	04:06 12:18 19:06	07:36 16:30 22:42	0.7F 0.6F -0.9E
3 Th	03:12 10:24 16:24 22:06	00:00 07:06 13:12 19:18	1.0F -1.2E 1.2F -0.9E	**14** M	08:54 15:36 19:18	05:42 11:54 17:24 22:06	-1.0E 1.0F -0.3E 0.6F	**25** F ◑	05:36 20:06	09:00 13:48 17:36	0.8F 0.1F 0.5F
4 F	04:00 10:48 16:42 22:54	00:54 07:36 13:36 19:54	1.1F -1.1E 1.1F -1.0E	**15** Tu	01:00 09:30 15:54 20:24	06:06 12:24 18:00 23:12	-1.1E 1.1F -0.5E 0.8F	**26** Sa	06:48 15:12 21:30	03:24 10:06 19:06	-0.8E 0.9F 0.4F
5 Sa	04:48 11:06 17:00 23:42	01:42 08:00 13:54 20:24	1.1F -0.9E 1.0F -1.0E	**16** W	02:12 10:00 16:12 21:18	06:36 12:48 18:42	-1.1E 1.1F -0.7E	**27** Su	07:42 15:00 18:12 23:36	04:42 10:54 16:36 20:42	-1.0E 1.1F -0.2E 0.4F
6 Su	05:42 11:24 17:12	02:30 08:30 14:18 20:54	1.0F -0.7E 0.9F -1.0E	**17** Th	03:12 10:24 16:30 22:06	00:06 07:00 13:12 19:18	0.9F -1.1E 1.1F -0.8E	**28** M	08:30 15:12 19:36	05:30 11:36 17:24 22:12	-1.1E 1.2F -0.5E 0.6F
7 M	00:36 06:36 11:36 17:24	03:18 09:06 14:36 21:12	0.9F -0.5E 0.8F -0.9E	**18** F ○	04:00 10:48 16:42 22:54	00:54 07:30 13:36 19:48	1.0F -1.1E 1.1F -0.9E	**29** Tu	01:18 09:12 15:30 20:36	06:06 12:06 18:06 23:24	-1.2E 1.2F -0.7E 0.8F
8 Tu	01:30 07:48 11:48 17:42	04:18 09:42 15:00 21:24	0.7F -0.3E 0.8F -0.9E	**19** Sa	04:54 11:12 16:54 23:36	01:48 08:06 13:54 20:18	1.1F -1.0E 1.0F -1.0E	**30** W	02:30 09:42 15:54 21:30	06:36 12:36 18:42	-1.2E 1.2F -0.9E
9 W	02:42 09:18 11:54 18:12	05:36 10:30 15:24 21:48	0.6F -0.1E 0.7F -0.8E	**20** Su	05:48 11:30 17:06	02:36 08:42 14:18 20:42	1.0F -0.8E 1.0F -1.0E	**31** Th	03:24 10:12 16:12 22:18	00:12 07:06 13:00 19:18	1.0F -1.1E 1.1F -1.1E
10 Th ◐	04:00 11:36 18:48	07:12 16:06 22:36	0.6F 0.6F -0.7E	**21** M	00:30 06:48 11:48 17:24	03:30 09:24 14:48 21:00	1.0F -0.6E 0.9F -1.1E				
11 F	05:24 19:42	08:30 12:48 17:06	0.7F 0.1F 0.5F	**22** Tu	01:30 08:06 12:06 17:48	04:24 10:06 15:18 21:18	0.8F -0.3E 0.8F -1.1E				

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

April

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 F ●	04:18 10:36 16:30 23:00	01:00 07:30 13:24 19:54	1.1F -1.0E 1.1F -1.1E	**12** Tu	08:00 14:24 19:18	04:36 11:06 16:48 22:00	-0.9E 1.0F -0.5E 0.6F	**23** Sa ◑	05:18 13:42 20:06	01:00 08:36 17:36	-0.8E 0.9F 0.4F
2 Sa	05:00 10:54 16:36 23:42	01:48 07:54 13:36 20:18	1.1F -0.8E 1.0F -1.1E	**13** W	01:00 08:36 14:48 20:18	05:18 11:30 17:36 23:06	-1.0E 1.0F -0.7E 0.8F	**24** Su	06:18 13:24 16:48 22:00	02:54 09:30 15:00 19:18	-0.9E 1.0F -0.2E 0.4F
3 Su	05:48 11:06 16:48	02:36 08:24 13:54 20:42	1.1F -0.7E 0.9F -1.1E	**14** Th	02:06 09:06 15:06 21:12	05:48 11:54 18:12	-1.0E 1.0F -0.9E	**25** M	07:06 13:48 18:36	04:00 10:12 16:00 21:00	-0.9E 1.1F -0.5E 0.5F
4 M	00:24 06:42 11:12 17:00	03:18 09:00 14:18 20:48	1.0F -0.5E 0.9F -1.1E	**15** F	03:12 09:30 15:18 22:00	00:00 06:24 12:18 18:42	1.0F -0.9E 1.0F -1.0E	**26** Tu	00:06 07:48 14:12 19:42	04:48 10:54 17:00 22:24	-1.0E 1.1F -0.7E 0.7F
5 Tu	01:12 07:42 11:24 17:18	04:06 09:36 14:42 21:00	0.9F -0.3E 0.8F -1.1E	**16** Sa ○	04:06 09:54 15:36 22:48	00:54 07:00 12:36 19:06	1.1F -0.8E 1.0F -1.1E	**27** W	01:30 08:24 14:36 20:36	05:30 11:24 17:42 23:24	-1.0E 1.1F -1.0E 0.9F
6 W	02:06 08:54 11:36 17:48	05:06 10:12 15:12 21:24	0.7F -0.2E 0.8F -1.0E	**17** Su	05:06 10:18 15:48 23:36	01:42 07:36 13:06 19:30	1.1F -0.7E 1.0F -1.2E	**28** Th	02:36 08:54 14:54 21:24	06:00 11:48 18:18	-0.9E 1.0F -1.1E
7 Th	03:12 10:42 18:24	06:30 15:48 22:00	0.7F 0.7F -1.0E	**18** M	06:06 10:30 16:06	02:36 08:18 13:30 19:48	1.1F -0.5E 0.9F -1.2E	**29** F	03:30 09:18 15:12 22:12	00:12 06:30 12:12 18:54	1.0F -0.8E 1.0F -1.2E
8 F	04:24 12:12 19:12	07:48 16:30 22:54	0.7F 0.6F -0.9E	**19** Tu	00:30 07:24 10:48 16:36	03:36 09:06 14:06 20:18	1.0F -0.3E 0.9F -1.2E	**30** Sa ●	04:18 09:36 15:30 22:54	01:00 06:54 12:24 19:24	1.1F -0.7E 0.9F -1.2E
9 Sa ◐	05:36 13:30 20:18	08:48 17:36	0.7F 0.5F	**20** W	01:36 09:00 10:54 17:12	04:36 14:42 20:48	0.9F 0.8F -1.2E				
10 Su	06:36 13:54 15:42 21:42	01:12 09:48 19:12	-0.8E 0.8F 0.4F	**21** Th	02:48 11:00 17:54	06:06 15:24 21:42	0.8F 0.7F -1.0E				
11 M	07:18 14:06 17:54 23:30	03:36 10:30 15:54 20:42	-0.8E 0.9F -0.2E 0.5F	**22** F	04:00 18:48	07:30 12:18 16:18 22:54	0.8F 0.1F 0.6F -0.8E				

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

May

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Su	05:06 09:54 15:36 23:36	01:42 07:24 12:42 19:48	1.1F -0.5E 0.9F -1.2E	**12** Th	00:48 07:30 13:36 20:06	04:18 10:24 16:54 23:00	-0.8E 0.9F -0.9E 0.9F	**23** M	05:24 12:12 17:06 22:24	02:00 08:42 14:30 19:30	-0.9E 1.0F -0.5E 0.4F
2 M	05:54 10:00 15:48	02:24 07:54 13:06 19:54	1.0F -0.4E 0.9F -1.1E	**13** F	02:06 08:00 13:54 21:06	05:06 10:54 17:36 23:54	-0.7E 0.9F -1.0E 1.0F	**24** Tu	06:12 12:42 18:30	03:00 09:18 15:30 21:00	-0.8E 1.0F -0.7E 0.6F
3 Tu	00:18 06:54 10:12 16:06	03:12 08:30 13:30 19:54	1.0F -0.3E 0.9F -1.1E	**14** Sa	03:12 08:30 14:12 21:54	05:48 11:24 18:12	-0.6E 0.9F -1.2E	**25** W	00:06 06:48 13:06 19:36	03:54 09:54 16:30 22:18	-0.7E 0.9F -0.9E 0.7F
4 W	01:00 08:00 10:24 16:36	04:00 09:12 14:00 20:18	0.9F -0.1E 0.8F -1.1E	**15** Su	04:18 08:54 14:30 22:48	00:48 06:36 11:48 18:30	1.1F -0.5E 0.9F -1.2E	**26** Th	01:30 07:24 13:36 20:30	04:42 10:30 17:18 23:18	-0.6E 0.9F -1.1E 0.9F
5 Th	01:48 09:12 10:48 17:12	04:54 14:42 21:00	0.8F 0.8F -1.1E	**16** M ○	05:24 09:12 14:54 23:36	01:42 07:18 12:18 19:00	1.1F -0.4E 0.9F -1.3E	**27** F	02:36 07:54 14:00 21:24	05:24 10:54 18:06	-0.5E 0.8F -1.2E
6 F	02:42 10:42 18:00	06:00 15:24 21:48	0.8F 0.8F -1.1E	**17** Tu	06:42 09:36 15:30	02:42 08:06 12:54 19:24	1.1F -0.2E 0.9F -1.3E	**28** Sa	03:36 08:18 14:18 22:06	00:06 05:54 11:12 18:42	1.0F -0.4E 0.8F -1.2E
7 Sa	03:42 11:36 19:00	07:06 16:24 22:54	0.8F 0.6F -0.9E	**18** W	00:36 08:06 09:54 16:06	03:42 13:36 20:06	1.0F 0.9F -1.3E	**29** Su	04:30 08:36 14:24 22:48	00:54 06:24 11:36 19:12	1.0F -0.3E 0.8F -1.2E
8 Su	04:36 12:00 14:18 20:12	08:00 13:06 17:36	0.8F -0.1E 0.5F	**19** Th	01:36 09:54 16:54	04:42 14:24 21:00	1.0F 0.8F -1.1E	**30** M ●	05:24 08:48 14:42 23:30	01:42 07:00 11:54 19:30	1.0F -0.2E 0.8F -1.1E
9 M ◐	05:30 12:24 16:06 21:42	00:42 08:42 14:06 19:06	-0.9E 0.8F -0.3E 0.5F	**20** F	02:36 10:54 17:48	05:54 15:24 22:24	0.9F 0.7F -1.0E	**31** Tu	06:18 09:00 15:00	02:30 07:36 12:24 19:24	1.0F -0.2E 0.8F -1.1E
10 Tu	06:18 12:48 17:54 23:24	02:12 09:24 15:06 20:30	-0.8E 0.9F -0.4E 0.6F	**21** Sa	03:36 11:18 13:12 19:00	07:00 16:24	0.9F 0.6F				
11 W	06:54 13:12 19:06	03:18 09:54 16:06 21:48	-0.8E 0.9F -0.7E 0.7F	**22** Su ◑	04:36 11:42 15:12 20:30	00:48 07:54 13:24 17:48	-0.9E 1.0F -0.2E 0.4F				

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

June

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 W	00:12 07:12 09:24 15:36	03:12 08:18 12:54 19:36	1.0F -0.1E 0.8F -1.1E	**12** Su	03:30 07:18 13:06 21:54	05:24 10:30 17:42	-0.3E 0.8F -1.2E	**23** Th	00:00 05:36 12:00 19:24	02:42 08:42 16:00 22:06	-0.5E 0.7F -0.9E 0.7F
2 Th	00:54 08:06 09:54 16:12	03:54 13:36 20:06	0.9F 0.8F -1.2E	**13** M	04:48 07:48 13:42 22:48	00:54 06:18 11:06 18:18	1.1F -0.2E 0.8F -1.3E	**24** F	01:24 06:12 12:30 20:18	03:42 09:12 17:06 23:12	-0.3E 0.7F -1.0E 0.8F
3 F	01:36 08:54 10:42 17:00	04:36 14:24 21:00	0.9F 0.8F -1.2E	**14** Tu ○	06:00 08:18 14:24 23:42	01:54 07:06 11:48 18:54	1.1F -0.1E 0.9F -1.3E	**25** Sa	02:48 06:36 12:54 21:12	04:42 09:42 17:54	-0.2E 0.6F -1.1E
4 Sa	02:12 09:30 11:48 17:54	05:18 10:36 15:24 21:54	0.9F -0.1E 0.8F -1.1E	**15** W	07:06 08:54 15:12	02:48 12:36 19:54	1.1F 0.9F -1.3E	**26** Su	04:00 07:06 13:12 22:00	00:06 05:30 10:12 18:42	0.9F -0.2E 0.6F -1.1E
5 Su	02:54 10:00 13:06 18:54	06:06 11:30 16:18 23:00	0.9F -0.2E 0.7F -1.0E	**16** Th	00:30 08:06 09:48 16:06	03:36 13:24 21:00	1.1F 0.9F -1.3E	**27** M	05:00 07:30 13:30 22:42	00:54 06:06 10:48 19:18	1.0F -0.1E 0.6F -1.1E
6 M	03:36 10:30 14:36 20:12	06:48 12:30 17:30	0.9F -0.3E 0.6F	**17** F	01:24 08:42 11:00 17:00	04:30 09:48 14:24 22:00	1.1F -0.1E 0.8F -1.2E	**28** Tu	05:48 07:54 14:00 23:24	01:36 11:24 19:48	1.0F 0.7F -1.1E
7 Tu ◐	04:18 11:00 16:06 21:36	00:12 07:30 13:24 18:54	-0.9E 0.8F -0.5E 0.6F	**18** Sa	02:12 09:12 12:18 18:06	05:18 10:42 15:24 22:54	1.0F -0.2E 0.8F -1.1E	**29** W ●	06:30 08:30 14:42	02:24 12:00 19:54	1.0F 0.7F -1.1E
8 W	05:00 11:30 17:36 23:12	01:24 08:00 14:18 20:12	-0.8E 0.8F -0.6E 0.6F	**19** Su	03:00 09:42 13:48 19:24	06:06 11:42 16:30 23:54	1.0F -0.4E 0.7F -0.9E	**30** Th	00:00 07:00 09:18 15:24	03:00 08:06 12:42 20:00	1.0F -0.1E 0.8F -1.2E
9 Th	05:42 11:54 18:48	02:18 08:36 15:06 21:36	-0.7E 0.8F -0.8E 0.7F	**20** M	03:42 10:18 15:18 20:48	06:54 12:48 17:54	0.9F -0.5E 0.6F				
10 F	00:42 06:18 12:18 19:54	03:24 09:12 16:06 22:54	-0.6E 0.8F -0.9E 0.8F	**21** Tu ◑	04:18 10:54 16:48 22:24	01:00 07:30 13:48 19:24	-0.8E 0.9F -0.7E 0.5F				
11 Sa	02:12 06:48 12:42 21:00	04:30 09:48 17:00 23:54	-0.4E 0.8F -1.1E 1.0F	**22** W	05:00 11:30 18:12	01:54 08:06 14:48 20:48	-0.6E 0.8F -0.8E 0.6F				

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

July

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 F	00:30 07:30 10:12 16:12	03:30 08:48 13:30 20:30	1.0F -0.2E 0.8F -1.2E	**12** Tu	05:24 07:00 13:18 22:42	00:54 10:42 18:54	1.1F 0.8F -1.3E	**23** Sa	01:36 04:12 10:54 20:06	07:48 16:54 23:00	0.5F -0.9E 0.8F
2 Sa	01:06 07:54 11:06 17:00	04:06 09:30 14:24 21:12	1.0F -0.3E 0.9F -1.2E	**13** W ○	06:06 08:06 14:18 23:30	01:48 11:36 19:42	1.2F 0.8F -1.4E	**24** Su	04:06 11:30 21:00	08:24 17:54	0.5F -1.0E
3 Su	01:36 08:18 12:12 18:00	04:36 10:12 15:18 21:54	1.0F -0.4E 0.8F -1.2E	**14** Th	06:36 09:12 15:18	02:36 07:54 12:30 20:30	1.2F -0.2E 0.9F -1.4E	**25** M	05:12 12:12 21:48	00:00 09:18 18:36	0.9F 0.5F -1.1E
4 M	02:06 08:42 13:18 19:00	05:06 10:54 16:12 22:42	0.9F -0.5E 0.8F -1.0E	**15** F	00:12 07:00 10:24 16:18	03:18 08:42 13:30 21:12	1.2F -0.3E 0.9F -1.3E	**26** Tu	05:24 06:42 13:00 22:24	00:42 10:18 19:12	1.0F 0.5F -1.1E
5 Tu	02:36 09:06 14:30 20:12	05:36 11:42 17:18 23:42	0.9F -0.5E 0.7F -0.9E	**16** Sa	00:54 07:30 11:30 17:18	03:48 09:30 14:30 21:48	1.1F -0.4E 0.9F -1.2E	**27** W	05:36 07:48 13:48 23:00	01:24 11:06 19:42	1.1F 0.6F -1.2E
6 W	03:12 09:30 15:48 21:30	06:12 12:30 18:36	0.9F -0.6E 0.6F	**17** Su	01:30 07:54 12:36 18:24	04:24 10:12 15:24 22:24	1.1F -0.6E 0.9F -1.1E	**28** Th ●	05:54 08:48 14:42 23:30	02:00 07:18 11:54 19:54	1.1F -0.2E 0.7F -1.2E
7 Th ◐	03:42 09:54 17:12 23:06	00:42 06:48 13:18 20:00	-0.7E 0.8F -0.7E 0.6F	**18** M	02:06 08:24 13:48 19:36	05:00 11:06 16:30 23:06	1.0F -0.7E 0.8F -0.9E	**29** F	06:12 09:42 15:30	02:30 07:54 12:42 20:06	1.1F -0.3E 0.8F -1.2E
8 F	04:18 10:24 18:36	01:42 07:30 14:06 21:30	-0.5E 0.8F -0.8E 0.7F	**19** Tu	02:36 08:54 15:06 20:48	05:30 12:00 17:42 23:54	0.9F -0.8E 0.7F -0.6E	**30** Sa	00:00 06:30 10:30 16:18	02:54 08:30 13:30 20:30	1.1F -0.4E 0.9F -1.2E
9 Sa	00:54 04:54 10:54 19:54	02:48 08:06 15:00 23:00	-0.3E 0.7F -0.9E 0.8F	**20** W ◑	03:06 09:24 16:24 22:12	06:06 13:00 19:06	0.8F -0.8E 0.6F	**31** Su	00:24 06:48 11:24 17:12	03:18 09:06 14:24 21:06	1.1F -0.5E 0.9F -1.2E
10 Su	02:42 05:30 11:36 20:54	04:00 08:54 17:00	-0.1E 0.7F -1.0E	**21** Th	03:30 09:54 17:48 23:54	00:48 06:36 14:06 20:30	-0.4E 0.7F -0.8E 0.6F				
11 M	04:24 06:06 12:24 21:54	00:00 09:42 18:00	1.0F 0.7F -1.2E	**22** F	03:54 10:24 19:06	01:48 07:12 15:30 21:54	-0.2E 0.6F -0.8E 0.7F				

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

August

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 M	00:48 07:06 12:18 18:06	03:42 09:42 15:18 21:42	1.0F -0.6E 0.9F -1.1E	**12** F ○	05:36 09:42 15:36 23:42	02:06 07:36 12:36 20:12	1.2F -0.5E 1.0F -1.4E	**23** Tu	04:54 11:30 21:18	08:48 18:12	0.4F -1.0E
2 Tu	01:18 07:24 13:12 19:06	04:06 10:12 16:06 22:24	1.0F -0.7E 0.9F -0.9E	**13** Sa	05:54 10:42 16:36	02:36 08:24 13:30 20:48	1.2F -0.6E 1.1F -1.3E	**24** W	04:36 07:00 12:48 21:54	00:18 10:00 18:42	1.0F 0.5F -1.1E
3 W	01:42 07:42 14:18 20:12	04:36 10:42 17:06 23:12	0.9F -0.8E 0.7F -0.7E	**14** Su	00:12 06:18 11:36 17:36	03:06 09:00 14:30 21:18	1.1F -0.8E 1.1F -1.1E	**25** Th	04:42 08:06 13:54 22:24	00:54 06:18 11:06 19:06	1.1F -0.3E 0.6F -1.2E
4 Th	02:06 08:00 15:30 21:42	05:06 11:24 18:30	0.9F -0.8E 0.6F	**15** M	00:42 06:42 12:36 18:30	03:30 09:42 15:24 21:48	1.0F -0.9E 1.0F -0.9E	**26** F	04:54 09:06 14:48 22:54	01:18 06:54 11:54 19:18	1.1F -0.4E 0.8F -1.2E
5 F ◐	02:36 08:30 17:00 23:36	00:06 05:42 12:00 20:00	-0.5E 0.8F -0.8E 0.6F	**16** Tu	01:06 07:06 13:36 19:30	03:54 10:18 16:18 22:24	1.0F -0.9E 0.9F -0.7E	**27** Sa ●	05:06 09:54 15:42 23:18	01:48 07:30 12:42 19:42	1.1F -0.6E 0.9F -1.2E
6 Sa	02:54 09:00 18:36	01:12 06:24 12:48 21:42	-0.2E 0.7F -0.8E 0.7F	**17** W	01:24 07:24 14:42 20:42	04:18 11:00 17:24 23:12	0.9F -0.9E 0.8F -0.5E	**28** Su	05:24 10:42 16:30 23:36	02:06 08:00 13:30 20:06	1.1F -0.7E 1.0F -1.1E
7 Su	02:00 09:48 19:48	07:18 14:00 23:06	0.6F -0.9E 0.9F	**18** Th	01:42 07:48 15:54 22:06	04:42 11:48 18:48	0.8F -0.8E 0.6F	**29** M	05:36 11:24 17:18	02:24 08:30 14:18 20:42	1.1F -0.8E 1.0F -1.1E
8 M	03:54 10:48 20:54	08:12 17:30	0.6F -1.0E	**19** F ◑	02:00 08:12 17:18	00:00 05:12 13:00 20:12	-0.3E 0.6F -0.8E 0.6F	**30** Tu	00:00 05:48 12:12 18:12	02:48 09:00 15:12 21:18	1.0F -0.9E 1.0F -0.9E
9 Tu	05:18 12:00 21:42	00:00 09:24 18:24	1.0F 0.6F -1.2E	**20** Sa	00:06 02:00 08:36 18:42	05:48 15:00 21:36	0.5F -0.7E 0.7F	**31** W	00:18 06:06 13:06 19:12	03:12 09:24 16:00 22:00	1.0F -0.9E 0.9F -0.7E
10 W	05:06 07:18 13:18 22:30	00:48 06:06 10:36 19:06	1.2F -0.1E 0.7F -1.3E	**21** Su	02:06 09:12 19:42	06:36 16:42 22:48	0.4F -0.8E 0.8F				
11 Th	05:18 08:36 14:30 23:06	01:30 06:54 11:36 19:42	1.2F -0.3E 0.8F -1.4E	**22** M	10:12 20:36	03:36 07:36 17:36 23:36	0.1F 0.4F -0.9E 0.9F				

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

September

	Slack	Maximum			Slack	Maximum			Slack	Maximum		
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Th	00:42 06:24 14:06 20:30	03:42 09:48 17:00 22:48	0.9F -1.0E 0.7F -0.4E	**12** M	05:12 11:36 17:36 23:42	02:12 08:30 14:24 20:42	1.1F -1.1E 1.2F -0.9E	**23** F	03:36 08:12 13:54 21:36	00:06 05:48 11:00 18:18	1.0F -0.5E 0.7F -1.1E
2 F	01:06 06:48 15:24 22:18	04:12 10:12 18:36 23:48	0.8F -1.0E 0.6F -0.2E	**13** Tu	05:30 12:24 18:30	02:30 09:06 15:18 21:12	1.0F -1.1E 1.1F -0.7E	**24** Sa	03:48 09:06 14:54 22:00	00:30 06:24 11:54 18:42	1.1F -0.7E 0.9F -1.1E
3 Sa ◐	01:18 07:24 17:00	04:42 10:48 20:24	0.7F -0.9E 0.7F	**14** W	00:00 05:48 13:18 19:30	02:54 09:36 16:06 21:48	0.9F -1.1E 0.9F -0.5E	**25** Su ●	04:00 09:54 15:48 22:24	00:48 06:54 12:36 19:06	1.1F -0.9E 1.0F -1.0E
4 Su	01:06 08:06 18:30	05:30 11:42 21:54	0.6F -0.9E 0.8F	**15** Th	00:18 06:06 14:18 20:42	03:18 10:00 17:06 22:30	0.9F -1.0E 0.8F -0.3E	**26** M	04:18 10:36 16:36 22:42	01:06 07:24 13:30 19:42	1.1F -1.0E 1.1F -0.9E
5 M	09:06 19:42	02:30 06:36 16:30 23:00	0.1F 0.5F -0.9E 1.0F	**16** F	00:30 06:24 15:24 22:12	03:42 10:18 18:30	0.8F -0.9E 0.7F	**27** Tu	04:30 11:24 17:30 23:06	01:30 07:48 14:18 20:18	1.0F -1.1E 1.1F -0.8E
6 Tu	04:00 10:24 20:36	08:00 17:30 23:42	0.5F -1.1E 1.1F	**17** Sa ◑	00:36 06:54 16:48	04:12 10:30 20:00	0.7F -0.8E 0.6F	**28** W	04:42 12:12 18:30 23:24	01:54 08:12 15:06 21:00	1.0F -1.1E 1.0F -0.6E
7 W	04:00 06:30 12:12 21:18	05:12 09:24 18:12	-0.1E 0.5F -1.2E	**18** Su	00:30 07:30 18:06	04:48 11:06 21:12	0.6F -0.7E 0.7F	**29** Th	05:00 13:06 19:42 23:42	02:24 08:36 16:06 21:42	1.0F -1.1E 0.9F -0.4E
8 Th	04:06 07:54 13:42 22:00	00:18 05:54 10:42 18:42	1.2F -0.4E 0.7F -1.3E	**19** M	08:18 19:06	01:42 05:36 16:00 22:18	0.1F 0.4F -0.7E 0.8F	**30** F	05:24 14:12 21:24 23:54	02:54 09:00 17:12 22:36	0.9F -1.1E 0.8F -0.1E
9 F	04:24 09:00 14:54 22:30	00:54 06:36 11:48 19:12	1.2F -0.6E 0.9F -1.3E	**20** Tu	03:06 09:30 19:54	07:00 16:54 23:06	0.4F -0.8E 0.9F				
10 Sa ○	04:36 09:54 15:54 23:00	01:24 07:12 12:42 19:42	1.2F -0.8E 1.1F -1.2E	**21** W	03:18 05:30 11:12 20:36	08:30 17:30 23:42	0.4F -1.0E 1.0F				
11 Su	04:54 10:42 16:48 23:24	01:48 07:54 13:36 20:12	1.1F -1.0E 1.1F -1.1E	**22** Th	03:18 07:12 12:48 21:12	05:12 09:48 17:54	-0.3E 0.5F -1.0E				

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

October

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Sa	06:00 15:30 23:42	03:30 09:30 19:00	0.8F -1.1E 0.7F	**12** W	04:30 12:12 18:36 23:00	01:36 08:30 15:06 20:42	0.9F -1.2E 1.1F -0.5E	**23** Su	02:36 08:54 14:54 21:00	05:48 11:42 18:00 23:48	-0.9E 0.9F -0.9E 1.0F
2 Su	06:36 17:00	04:06 10:12 20:30	0.7F -1.0E 0.8F	**13** Th	04:42 13:06 19:36 23:12	02:00 08:48 16:00 21:24	0.9F -1.1E 0.9F -0.3E	**24** M	02:54 09:48 15:48 21:24	06:18 12:36 18:36	-1.1E 1.0F -0.8E
3 M ◐	07:30 18:18	01:12 05:00 11:24 21:36	0.1F 0.5F -0.8E 0.9F	**14** F	05:00 14:00 20:54 23:18	02:24 09:00 17:00 22:06	0.8F -1.1E 0.8F -0.1E	**25** Tu ●	03:06 10:30 16:48 21:48	00:12 06:48 13:24 19:12	1.0F -1.2E 1.1F -0.6E
4 Tu	02:36 08:48 19:18	06:24 16:06 22:30	0.4F -0.9E 1.0F	**15** Sa	05:30 15:00 23:00	03:00 09:12 18:12	0.8F -1.0E 0.7F	**26** W	03:24 11:18 17:48 22:12	00:42 07:06 14:18 20:00	1.0F -1.2E 1.1F -0.5E
5 W	02:42 05:24 10:42 20:00	04:00 08:06 17:00 23:12	-0.1E 0.4F -1.0E 1.1F	**16** Su	06:06 16:06	03:30 09:48 19:30	0.7F -0.9E 0.7F	**27** Th	03:48 12:12 19:00 22:30	01:12 07:30 15:12 20:42	1.0F -1.2E 1.0F -0.3E
6 Th	02:48 07:06 12:42 20:42	04:54 09:36 17:42 23:42	-0.4E 0.5F -1.1E 1.1F	**17** M ◑	00:06 06:48 17:18	04:12 10:36 20:30	0.6F -0.8E 0.8F	**28** F	04:18 13:12 20:36 22:42	01:42 07:54 16:18 21:36	0.9F -1.2E 0.9F -0.1E
7 F	03:06 08:12 14:00 21:18	05:42 10:54 18:12	-0.7E 0.8F -1.1E	**18** Tu	01:18 07:54 18:12	05:12 13:12 21:24	0.5F -0.7E 0.8F	**29** Sa	04:48 14:18 22:36	02:18 08:30 17:36	0.8F -1.2E 0.8F
8 Sa	03:24 09:06 15:06 21:48	00:12 06:18 11:54 18:42	1.1F -0.9E 1.0F -1.0E	**19** W	01:36 03:24 09:18 19:00	06:48 15:06 22:06	0.4F -0.8E 0.9F	**30** Su	05:30 15:30	03:06 09:18 19:00 23:48	0.7F -1.1E 0.8F 0.1F
9 Su ○	03:42 09:54 16:00 22:06	00:36 06:54 12:42 19:06	1.1F -1.1E 1.1F -0.9E	**20** Th	01:42 05:36 11:06 19:36	03:30 08:18 16:12 22:42	-0.2E 0.4F -0.8E 0.9F	**31** M	06:18 16:42	03:54 10:18 20:06	0.6F -0.9E 0.9F
10 M	04:00 10:42 16:48 22:30	00:54 07:24 13:30 19:36	1.0F -1.2E 1.2F -0.8E	**21** F	02:00 07:00 12:36 20:06	04:24 09:36 16:48 23:06	-0.5E 0.6F -0.9E 1.0F				
11 Tu	04:12 11:30 17:42 22:42	01:12 08:00 14:18 20:12	1.0F -1.2E 1.1F -0.6E	**22** Sa	02:18 08:06 13:48 20:36	05:12 10:48 17:24 23:30	-0.7E 0.8F -0.9E 1.0F				

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

November

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Tu ◐	01:12 07:30 17:42	05:00 14:06 21:00	0.5F -0.8E 0.9F	**12** Sa	03:24 12:42 20:12 21:30	00:48 07:18 15:48	0.8F -1.1E 0.9F	**23** W ●	01:06 09:30 16:12 19:48	05:18 12:24 17:54 23:00	-1.2E 1.1F -0.3E 0.9F
2 W	01:06 03:54 09:12 18:36	02:24 06:42 15:12 21:48	-0.1E 0.4F -0.9E 1.0F	**13** Su	04:00 13:36 21:42	01:30 07:48 16:48	0.8F -1.1E 0.8F	**24** Th	01:36 10:24 17:24 20:12	05:42 13:24 18:48 23:36	-1.3E 1.1F -0.2E 0.9F
3 Th	01:18 05:54 11:18 19:18	03:30 08:24 16:12 22:24	-0.4E 0.5F -0.9E 1.0F	**14** M	04:42 14:24 22:18	02:12 08:36 17:42	0.7F -1.0E 0.8F	**25** F	02:12 11:18 18:48 20:36	06:12 14:24	-1.3E 1.1F
4 F	01:42 07:12 12:54 19:54	04:24 09:48 16:54 22:54	-0.7E 0.6F -0.9E 1.0F	**15** Tu	05:36 15:12 22:36	03:06 09:42 18:36 23:42	0.6F -0.9E 0.8F -0.1E	**26** Sa	02:48 12:12 20:18	00:12 06:48 15:24	0.9F -1.3E 1.0F
5 Sa	02:00 08:12 14:06 20:24	05:18 10:54 17:36 23:24	-0.9E 0.8F -0.8E 1.0F	**16** W ◑	01:00 06:48 16:00 22:54	04:12 11:18 19:18	0.5F -0.9E 0.8F	**27** Su	03:36 13:12 21:36	01:06 07:42 16:24	0.8F -1.2E 1.0F
6 Su	01:24 08:06 14:12 19:48	04:54 10:54 17:06 22:42	-1.1E 1.0F -0.7E 1.0F	**17** Th	02:42 08:12 16:42 23:18	00:42 05:42 12:36 19:48	-0.3E 0.5F -0.8E 0.8F	**28** M	04:24 14:06 21:48 23:36	02:00 08:54 17:30	0.7F -1.1E 0.9F
7 M	01:48 08:54 15:06 20:12	05:36 11:42 17:36 23:06	-1.2E 1.1F -0.6E 0.9F	**18** F	04:24 09:54 17:18 23:42	01:36 07:00 13:42 20:24	-0.4E 0.5F -0.8E 0.9F	**29** Tu	05:30 15:00 22:12	03:00 10:42 18:24 23:48	0.6F -0.9E 0.9F -0.2E
8 Tu ○	02:06 09:42 16:00 20:30	06:12 12:30 18:06 23:24	-1.3E 1.1F -0.5E 0.9F	**19** Sa	05:42 11:24 17:54	02:30 08:24 14:36 20:54	-0.6E 0.6F -0.7E 0.9F	**30** W ◐	01:30 06:54 15:48 22:36	04:12 12:12 19:06	0.5F -0.9E 0.9F
9 W	02:18 10:24 16:54 20:48	06:42 13:18 18:42 23:48	-1.2E 1.1F -0.4E 0.8F	**20** Su	00:06 06:48 12:42 18:24	03:24 09:36 15:36 21:24	-0.8E 0.8F -0.7E 0.9F				
10 Th	02:30 11:06 17:54 21:00	07:00 14:06 19:24	-1.2E 1.0F -0.2E	**21** M	00:24 07:48 13:54 18:54	04:12 10:36 16:30 21:54	-1.0E 0.9F -0.6E 0.9F				
11 F	02:54 11:54 19:00 21:18	00:12 07:06 14:54 20:06	0.8F -1.1E 1.0F -0.1E	**22** Tu	00:48 08:36 15:00 19:24	04:48 11:30 17:12 22:24	-1.1E 1.0F -0.5E 0.9F				

All times are local time. Daylight Saving Time has been used when needed.
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, 2022

F–Flood, Dir. 022° True E–Ebb, Dir. 210° True

December

	Slack	Maximum			Slack	Maximum			Slack	Maximum	
	h m	h m	knots		h m	h m	knots		h m	h m	knots
1 Th	03:18 08:42 16:36 23:06	00:48 05:54 13:06 19:42	-0.4E 0.5F -0.8E 0.9F	**12** M	03:48 13:00 20:06 22:36	01:12 08:00 16:06 21:18	0.8F -1.1E 0.9F -0.1E	**23** F ●	01:06 10:24 17:48 19:36	05:48 13:30 23:18	-1.3E 1.1F 0.9F
2 F	04:54 10:30 17:12 23:36	01:54 07:24 14:06 20:18	-0.7E 0.6F -0.7E 0.9F	**13** Tu	04:36 13:36 20:36 23:48	02:06 08:48 16:42 22:06	0.8F -1.1E 0.9F -0.2E	**24** Sa	01:54 11:12 18:42 20:30	06:42 14:18	-1.3E 1.1F
3 Sa	06:06 12:00 17:48	02:54 08:48 15:00 20:54	-0.9E 0.7F -0.6E 0.8F	**14** W	05:36 14:12 21:00	03:00 09:42 17:18 23:00	0.7F -1.0E 0.8F -0.3E	**25** Su	02:48 12:00 19:18 21:36	00:06 07:48 15:00 20:30	0.9F -1.3E 1.1F -0.1E
4 Su	00:00 07:06 13:12 18:24	03:54 09:54 15:54 21:24	-1.1E 0.8F -0.5E 0.8F	**15** Th	01:12 06:48 14:42 21:24	04:06 10:42 17:54 23:54	0.6F -0.9E 0.8F -0.5E	**26** M	03:42 12:48 19:42 22:54	01:00 08:36 15:48 21:18	0.9F -1.2E 1.0F -0.2E
5 M	00:30 08:00 14:24 18:48	04:42 10:54 16:36 21:48	-1.2E 1.0F -0.4E 0.8F	**16** F ◑	02:30 08:06 15:18 21:48	05:24 11:48 18:30	0.6F -0.8E 0.8F	**27** Tu	04:42 13:30 20:12	02:00 09:24 16:30 22:12	0.8F -1.1E 1.0F -0.4E
6 Tu	00:54 08:54 15:24 19:12	05:30 11:42 17:12 22:18	-1.2E 1.0F -0.3E 0.7F	**17** Sa	04:00 09:36 15:54 22:12	00:42 06:42 12:48 19:00	-0.6E 0.6F -0.7E 0.8F	**28** W	00:18 05:54 14:06 20:42	03:06 10:18 17:12 23:06	0.7F -1.0E 0.9F -0.5E
7 W	01:12 09:36 16:18 19:36	06:12 12:30 17:54 22:42	-1.2E 1.1F -0.2E 0.7F	**18** Su	05:24 11:12 16:36 22:42	01:36 08:06 13:48 19:36	-0.8E 0.7F -0.5E 0.8F	**29** Th	01:42 07:18 14:42 21:12	04:18 11:12 17:54	0.6F -0.8E 0.8F
8 Th ○	01:30 10:18 17:18 19:54	06:42 13:18 18:30 23:12	-1.2E 1.1F -0.2E 0.7F	**19** M	06:36 12:42 17:12 23:12	02:30 09:24 14:54 20:18	-0.9E 0.8F -0.4E 0.8F	**30** F ◐	03:12 08:48 15:18 21:42	00:12 05:48 12:12 18:24	-0.7E 0.6F -0.6E 0.8F
9 F	01:54 11:00 18:12 20:18	07:06 14:06 23:48	-1.1E 1.0F 0.8F	**20** Tu	07:36 14:12 17:48 23:42	03:30 10:36 16:00 21:06	-1.0E 0.9F -0.3E 0.8F	**31** Sa	04:36 10:24 15:54 22:18	01:12 07:12 13:06 19:06	-0.8E 0.6F -0.4E 0.7F
10 Sa	02:24 11:42 19:00 20:54	07:06 14:48	-1.1E 1.0F	**21** W	08:36 15:30 18:24	04:24 11:36 16:54 21:48	-1.1E 1.0F -0.2E 0.8F				
11 Su	03:00 12:24 19:42 21:36	00:24 07:18 15:24	0.8F -1.1E 0.9F	**22** Th	00:24 09:30 16:42 18:54	05:06 12:30 17:48 22:30	-1.2E 1.1F -0.1E 0.9F				

All times are local time. Daylight Saving Time has been used when needed.
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.