

**Topic:**

**Tide**

QC-0505

**Resource:**

[NOAA  
Tides On  
Line](#)

**Basics:** Tide is a regular variation in sea level that occurs in response to changes in gravity from the sun and the moon as earth rotates. On-line tide tables are a useful tool for predicting tides at specific coastal stations. It takes some practice to read tide tables correctly but no experienced boater travels coastal routes without good knowledge of tides.

**Question:** *How many tides changes occur daily?*

**Answer:** In most locations, like the Atlantic coast, there are two high and two low tides in an approximate 25-hour period. Although tide times vary each day, tides are usually very predictable for locations with good records, even at times far in the future. Tides may be affected in unexpected and dramatic ways by local weather conditions.

**Question:** *Why is knowledge of tide important to coastal paddlers?*

**Answer:** If you plan to paddler in coastal waters tide can dramatically affect what areas are accessible. You may find water has retreated from your put-in when you arrive, or that the put-in is no longer easily accessible when you wish to take out, if you have not carefully analyzed and predicted tide for your area. Changing tide can cause strong currents and even tidal rips in specific locations that could affect the difficulty and duration of your trip

**Advanced Concepts:** You may want to get more information on the following:

- What is spring tide? neap tide? ebb tide? flood tide? slack water?
- How do you know high & low tide times at a given station?
- Knowing tides at a station how do you predict local tide times?
- Knowing local tide times how can you predict tidal currents for your trip?

*For more information contact*

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