# The Tides

## Bore Tide

A tidal bore (or simply bore in context, or also aegir, eagre, or eygre) is a tidal phenomenon in which the leading edge of the incoming tide forms a wave (or waves) of water that travels up a river or narrow bay against the direction of the river or bay's current.

**Neap Tide**

When the Sun and Moon form a right angle, as when we see a half moon, their gravitational pulls fight each other and we notice a smaller difference between high and low tides. These are called neap tides.

## Spring Tide

When the Moon, Earth, and Sun fall in a straight line, which we call syzygy, we notice the greatest difference between high and low tide water levels. These spring tides occur twice each month, during the full and new Moon. If the Moon is at perigee, the closest it approaches Earth in its orbit, the tides are especially high and low.

## Rip Tide

A rip current, commonly referred to simply as a rip, or by the misnomer rip tide, is a strong channel of water flowing seaward from near the shore, typically through the surf line. Typical flow is at 0.5 meter-per-second (1–2 feet-per-second), and can be as fast as 2.5 meters-per-second (8 feet-per-second), which is faster than any human swimmer.

**Low Tide**

n. In both senses also called low water.
1. The lowest level of the tide.
2. The time at which the tide is lowest.

**High Tide**

1. Abbr. HT
a. The tide at its fullest, when the water reaches its highest level.
b. The time at which this tide occurs. Also called high water

## Brown Tide

Brown Tide is a bloom (excessive growth) of small marine algae (Aureococcus anophagefferens). Although algae of many types are found in all natural freshwater and marine ecosystems, blooms of the Brown Tide organism literally turn the water deep brown, making it unappealing to swimmers and fishermen alike. While not harmful to humans, the presence of the Brown Tide is a problem for bay scallops and eelgrass, and to a lesser degree other finfish and shellfish. Brown Tide is unlike most other algal blooms because of its unusually high concentrations, the extent of area it covers and the length of time it persists.

**Red Tide**

Harmful algal blooms, (HAB) occur when colonies of algae grow out of control while producing toxic or harmful effects on people, fish, shellfish, marine mammals and birds. The human illnesses caused by HABs, though rare, can be debilitating or even fatal. Many people call HABs 'red tides,' scientists prefer the term harmful algal bloom. One of the best known HABs in the nation occurs nearly every summer along Florida’s Gulf Coast.

## Semidiurnal Tide

These are tides occurring twice a day. This means a body of water with semi-diurnal tides, like the Atlantic Ocean, will have two high tides and two low tides in one day, much like the eastern seaboard of North America.

**Diurnal Tide**

These tides occur once a day. A body of water with diurnal tides, like the Gulf of Mexico, has only one high tide and one low tide in a 25-hour period.

## Mixed Tide

Some bodies of water, including most of North America that's in contact with the Pacific Basin, have mixed tides, where a single low tide follows two high tides.