

Tides

What is the “Tide”?

This is the alternate rise and fall of the surface of the sea. It is caused by the attraction of the moon and sun and occurs twice a day. When the tide is high, there will be less beach than at low tide because the water level is so much higher. **01** (Lyall Bay)

Tidal effects on the surf environment

Changes in the tide can affect the conditions in the environment in a number of ways:

- Increase or decrease in the amount of land.
- Formation of new rips.
- Wave action.
- currents.

For example, at some beaches waves will spill at low tide. As the tide rises and waves hit the steep rise, they will start dumping as a shorebreak. Waves will also spill at high tide, because as the tide falls, less water covers the sand bar and the waves will start dumping.

Tidal currents also occur at sea, sometimes very close to beaches. It is important to know tide changes throughout the day. Not only will the tide height affect the beach and waves, but it will also affect the movement of objects floating at sea. This is particularly important in search and rescue operations.

