

## Guidelines and Rules of Thumb for Guessing the Tides and Currents

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There is no substitution for doing your homework on tide prediction; but if you should end up navigating by the seat of your pants and get caught without your resource, the guidelines below might help with a guess.

- Know the local pattern (semidiurnal, diurnal, or mixed). With a mixed tide (Puget Sound) a large range will be followed by a smaller range; in the others, successive ranges are similar.
- Typical duration between high and low water is six hours and 15 minutes.
- High water (or low water) the next day is fifty minutes later each day and the next day's range will be approximately the same as the previous days. Ranges change only slowly from day to day. For example if high water is 8 feet at 0900 today, expect a high of about 8 feet tomorrow at about 0950.
- Spring ranges (new and full moon) are about 20 percent larger than average; neap ranges (half-moons) are about 20 percent smaller than average.
- The largest spring ranges (higher highs and lower lows) occur near the solstices (21 June and 21 December); the weakest neap tides (smallest diurnal inequalities) occur near the equinoxes (21 March and 23 September).
- Look around (at shoreline, pilings, breakwaters) for signs (barnacles, seaweed, beach rubble) that mark the high-water line.
- The directional trend of anchored seaweed shows the current direction.
- The wake behind buoys or rocks in deep water also shows the current direction..
- In light winds, the set of an anchored boat or crab pot marker shows the current flow.
- Paddling hard but not moving relative to the shoreline is an obvious sign of an opposing current and/or wind direction.
- When a waterway changes from flood to ebb or vice versa, it does not often do so uniformly across the width. Current usually changes directions first in the shallow waters along its edge, because the water in the deeper mid-channel region has more momentum to be overcome by the new tidal forces. This process often leaves a current shear line (eddy line) on the surface (parallel to shore) that separates currents flowing in opposite directions. As the main flow proceeds to reverse, this current line moves out toward mid-channel. In this manner, currents often change directions from the edges in. Spotting this line, when present, and getting onto the proper side of it can make a difference of 2 or 3 knots in your speed made good.

Keep in mind these are only general rules of thumb and there are many exceptions.