

Beach Profile

Materials:

1. Calibrated Staff - one 8 or 10 foot pole calibrated in ± 5 cm segments starting 4 feet from the bottom.
2. Sighting Staff - one 4½ foot pole with a 3 m line 4 feet from the bottom.
3. Line level.
4. Metric tape measure.
5. Clipboard with data sheet.

Procedure:

1. The starting level will be a measurement from the top of your benchmark (seawall, crossover) to the sand. If the sand is below the line Your measurement is a negative number. If the line is covered by sand take your first reading then dig down to the line. Your measurement is a positive number.
2. Set your sighting staff (with line attached) at the base of your benchmark.
2. Run your metric transect line down to the water perpendicular to the beach.
3. Set your calibrated staff at your first reading point (2 meters along transect).
4. Pull the string, with line level attached, taught between the two staves.
5. While the recorder in the group watches the line level, the person holding the calibrated staff moves the line up or down until the line is level.
6. When the line is level take the reading.
7. Where the calibrated staff is along the transect line is the “distance traveled”. The reading off the calibrated staff is the “elevation change”.
8. Take readings at the top and bottom of a scarp.
9. Take readings at the landward foot, crest, and seaward foot of all ridges.
10. Make sure you take readings to show any other unusual occurrence on the beach.
11. If the beach is flat, gently sloping down or gently sloping up readings every 2 meters will suffice.
12. Try to take readings all the way to the base of the worm reef. If you cannot try to measure the distance from where you stopped to the base of the worm reef.

Datasheet:

1. Fill out the profile location (ex. monument, north crossover, south seawall)
2. You can get the high and low tide info for the day by calling the weather station at 225-2300.
3. The top comment section is for beach conditions or anything that might affect all readings.
4. Distance from last measurement: this should be no more than 2 meters. If you have an unusual topographical feature they can be as close as necessary to map the feature.
5. Distance from benchmark: total distance from this spot to the benchmark.
6. Elevation change: this is the number read off the calibrated staff. Remember that the numbers below the zero line are positive (showing an incline on the beach) and the numbers above the zero are negative (showing a decline on the beach).
7. The comment section is for explaining why you took a reading before 2 meters (scarp, dune let, etc.).

Location:

Bathtub Reef Park

1. South side of north crossover
2. South side of main crossover
3. Wall at south end of park