**Water Quality**

Date: Time:

Location: GPS coordinates:

Weather conditions:

Cloud cover: wind speed wind direction

Air temperature Beaufort scale precipitation last 24 hours

Wave height: wave period

Shoreline description:

Description of water surface:

Odor Number of beach users:

Sampling method:

pH method

water temperature

salinity

dissolved oxygen

temperature range from data logger:

average speed of current:

direction of current:

The **Beaufort wind scale** is a system used to estimate and report wind speeds when no measuring apparatus is available. It was invented in the early 19th Century by Admiral Sir Francis Beaufort, the British Navy as a way to interpret winds from conditions at sea. Since that time, the scale has been modernized for effects on land.

**Dissolved oxygen** is one of the best indicators of the health of a water ecosystem. The oxygen freely available in water, vital to fish and other aquatic life . Dissolved oxygen can range from 0-18 parts per million (ppm), but most natural water systems require 5-6 parts per million to support a diverse population. Dissolved oxygen levels change and vary according to the time of day, the weather and the temperature.

**Salinity** - is the total amount of dissolved material in grams in one kilogram of sea water. It is measured in parts per thousand (ppt). This salinity measurement is a total of all the salts that are dissolved in the water. Variations in salinity are influenced by evaporation, river runoff, sea ice melting and precipitation

pH measurements in seawater. Ocean water has an excellent buffering system with the interaction of carbon dioxide and water so that it is generally always at a pH of 7.5 to 8.5. Neutral water is a pH of 7 while acidic substances are less than 7 (down to 1, which is highly acidic) and alkaline substances are more than 7 (up to 14, which is highly alkaline).

HOBOware Data Loggers: http://www.onsetcomp.com/

Wave height: <http://www.sccoos.org/data/waves/?r=0>