SITE CONDITIONS



What are site conditions?

Site conditions are observations that provide context to your water quality or benthic macroinvertebrate data. These include weather, rainfall, water depth, tide stage, and more. Visual indicators are valuable clues to understanding what might be influencing the data you collect.

How do we measure them?

This table describes some of the site conditions that are typically recorded. Each group may choose to add additional observations.

Indicator	Measurement/Observation
Water Depth	Use a secchi disk, depth finder, or weighted line to record a depth measurement in meters.
Water Stage (Height)	Use a marked gauge stick or tape measure to record a height measurement in feet.
Weather Conditions	Record the weather: sunny, partly cloudy, rain, snow, etc.
Water Color/Odor	Record a description of the water color or odor.
Tidal Stage	Reference a tide chart or observe conditions to determine the tidal stage: Incoming (Flood), Low, Outgoing (Ebb), High.
Rainfall	Record rainfall from a local weather station or personal rain gauge.
General Comments	Record anything noteworthy, such as debris or trash at the site, evidence of wildlife, fish or crab kills, algal blooms, and land use conditions and changes.

Why do we care?

Human Health

High bacteria values during wet weather indicate typical combined sewer overflows; high values during dry weather suggest infrastructure issues.



Pollution

Site conditions like unusual water color and odor can help identify urban pollution issues, like oil spills or discharges.
Water color can also be a good first indication of algal blooms.



Aquatic Life

If your stream appears unusually cloudy or has a layer of fine sediment along the bottom, it could suggest upstream erosion or runoff. This can reduce habitat quality, resulting in fewer sensitive species.





Streamwater turned white, likely from carwashing. Photo by the Alliance for Aquatic Resource Monitoring.

PLEASE NOTE:

This fact sheet provides general information about site conditions, but monitoring in specific locations may require more detailed methods and considerations.