

## ***Advantages of the FSI Tide System***

### ***Why choose a non-vented system?***

- Non-vented pressure sensor (FSI)
  - Low maintenance
  - Uses barometric sensor at surface (in surface enclosure) to provide accurate water level readings
- Vented pressure sensor
  - Requires maintenance to keep vent tube clear - i.e., replace desiccant, check for kinks in cable or obstructions that will affect barometric pressure readings.

### ***Why choose a pressure-based system over an acoustic system?***

- Pressure Advantages
  - Easy to install and maintain
  - Typically lower-cost
  - Protected from vandalism
- Acoustic Advantages
  - Accessible for maintenance
  - No recalibration required
  - Installation above water protects from debris and fouling
- Pressure Disadvantages
  - Will eventually need recalibration (but pressure calibration is not difficult or costly)
- Acoustic Disadvantages
  - Temperature variation through air column affects accuracy. Measuring temperature near the sensor can help but does not reflect the temperature throughout the air column.
  - Readings can be affected by wave action/debris/high sediment content
  - Operation may be affected by condensation, freezing or other build-up on sensor
  - Accessible to vandals