

The Accuracy of Continuous Water-Quality Data of the USGS New Jersey Water Science Center

Effective October 1, 2013:

The accuracy of continuous water-quality data is routinely verified through inspections for fouling and calibration drift. The USGS New Jersey Water Science Center requires that either constant or prorated adjustments be made to the continuous water-quality record when the difference between a sensor's response and a known value exceeds the following criteria: Water Temperature, 0.2 degrees Celsius (+ or) ; Specific Conductance, the greater of 5 microsiemens/cm (+ or) or 3% of the measured value; Dissolved Oxygen, the greater of 0.3 mg/L (+ or) or 5% of the measured value; pH, 0.2 units (+ or); Turbidity, 0.5 FNU (+ or) or 5% of the measured value. If the difference between a sensor's response and a known value is within specified criteria, the data are considered to be reliable and are not adjusted.

The accuracy of continuous dissolved nitrate-plus-nitrite, dissolved organic carbon, and total chlorophyll-a data is routinely verified through discrete water-quality samples. The records for dissolved nitrate plus nitrite and total chlorophyll-a are adjusted to laboratory analytical values.