Turbidity

Equipment List

1 Turbidity Kit containing;

- Turbidity meter-always use on level, stationary surface
- Box containing 3 gel standards and 3 empty cells
- Oil
- Cloth
- Notebook
- bottle with lid

Considerations

Human recreation disturbs sediment and increases turbidity. Turbidity is usually greater in shallow water. If possible, sample from mid-stream. Significant rainfall greatly effects turbidity.

Accuracy Check

1. Clean gel standards with cloth and oil if needed

2. Holding from the lid to avoid fingerprints on glass, place the first Standard (0-10 range) in the cell compartment of the meter with the white diamond on the vial aligning with the orientation mark on the meter. Close the lid.

3. Press power. Be sure the automatic range is set and the display shows "AUTO RNG." If not, set by pressing the "RANGE" key until displayed. Press "READ." The display will show "----- NTU".

4. Record the NTU value in the notebook and data sheet. If the reading is not within 5% of the Standard ([|reading-standard| / standard] x 100), clean the standard and try again. If it is still off, contact Willamette Riverkeeper.

5. Repeat this procedure with the remaining two Standards (0-100 and 01-1000 ranges).

Sample Measurement

1. Collect a sample in a plastic beaker or bottle by submerging your arm to your elbow. If you are measuring more than 10 minutes after collecting the sample, be sure to gently invert the sample container to re-suspend the sediment. Do not shake as this will introduce NTU-altering air bubbles. Fill one of the glass sample cells to the white line.

2. Wipe the bottle with a soft, lint-free cloth to remove water spots and fingerprints. Beware of fogging cells in cooler weather.

3. Holding from the lid, place the sample cell in the cell compartment of the meter with the white diamond on the vial aligning with the orientation mark on the meter. Close the lid.

4. Press power. Be sure the automatic range is set and the display shows “AUTO RNG.” If not, set with the “RANGE” key until displayed. Press “READ.” The display will show “----- NTU”. Record the value and clean the sample cell.