

Continuous In-Situ Measurements of Turbidity in Kansas Streams Turbidity and TSS Workshop Breakout Session 2 Reno, Nevada April 30 – May 2, 2002

By Patrick Rasmussen



Not all sensors are equal

No two sensors will give the same value

Some standards are sensor specific



Turbidity, Suspended Sediment, and Water Clarity: A Review

R. J. Davies-Colley and D. G. Smith JAWRA vol. 37, No. 5, pages 1085-1101

- Summary of many turbidity papers
- Recommendations based on observed data and previous studies
- Beam attenuation

The calibration of optical backscatter sensors for suspended sediment of varying darkness levels

Sutherland, T. F. and others, Marine Geology, 162 (2000), pages 587-597

- Compares sediment color to Munsell Soil Chart
- Measurements are made with OBS
- Color of particles influence OBS output

Point Measurement Representativeness

- Sensor placement must represent cross-section
- 20 cross-sections annually
- Plot data for comparison

Turbidity Duration Curve

Kansas River @ De Soto



