

Turbidity and Other Sediment Surrogates Workshop April 30 – May 2, 2002 Silver Legacy Hotel, Reno, NV

Sponsored by the Subcommittee on Sedimentation
Organized by [G. Douglas Glysson](#) and [John R. Gray](#), U.S. Geological Survey

MAIN AGENDA

Monday April 29

4:00 – 5:30 (Bronze Room) Registration/Check in

Tuesday April 30

6:45 (Pre-Function Solon, Grande Exposition Hall) Registration/Check in

7:00 (Silver Baron B) Tuesday speakers' meeting and breakfast buffet. All Tuesday computer-projection files are due at this time.

7:00 (Pre-Function Solon) Continental breakfast

8:00 – 12:00 Opening Session

Chair: Doug Glysson, USGS

Grande Exposition C

8:00 Welcome, Introductions, Objectives, and Expected Products

Doug Glysson, USGS, Reston VA

8:15 [Managing Turbidity, Suspended Solids and Bedded Sediments Under the Clean Water Act– The EPA Perspective](#)

Bill Swietlik, EPA, Washington, DC

8:45 [Issues related to use of turbidity measurements as a surrogate for suspended sediment](#)

Andy Ziegler, USGS, Lawrence KS

9:15 [Biological aspects of turbidity and other optical properties of water](#)

Chris Holdren, USBR, Denver CO

9:45 Break (Pre-Function Solon)

10:15 [Total suspended solids data for use in sediment studies](#)
Doug Glysson, USGS, Reston VA

10:35 [Contrasts between published 'standard' methods for turbidity](#)
Bruce Pruitt, Nutter & Associates, Athens GA (presented by Doug Glysson)

11:05 [Ten years of continuous suspended-sediment concentration monitoring in San Francisco Bay and delta](#)
Dave Schoellhamer, USGS, Sacramento CA

11:35 [Field trip overview](#)
Terry Rees, USGS, Carson City NV

11:50 Organization and objectives of breakout sessions John Gray, USGS, Reston VA

12:00 – 1:00 Lunch (on your own)

1:00 – 5:00 General Session I Chair: Jim Eychaner, USGS, Sacramento CA
Grande Exposition C

Turbidity And Its Use As A Sediment And Water-Quality Surrogate

1:00 [Turbidity Instrumentation - An Overview of Today's Available Technology](#)
Mike Sadar, Hach Inc., Loveland CO

1:30 [Turbidity studies at the National Water Quality Laboratory](#)
Pat Pavelich, USGS, Lakewood CO

2:00 [The Contribution of Suspended Organic Sediments to Turbidity and Sediment Flux](#)
Mary Ann Madej, USGS, Arcata CA

2:30 Continuous water-quality monitoring network in Illinois
Robin King, USGS, Urbana IL

3:00 Break (Pre-Function Solon)

3:30 [Turbidity as a surrogate to estimate the effluent suspended sediment concentration of sediment controls at a construction site in the Southeastern United States](#)
Richard Warner, University of Kentucky, Lexington KY

4:00 [Real-time water-quality monitoring in Kansas](#) Pat Rasmussen, USGS, Lawrence KS

4:30 Forum/Discussion

5:00 Adjourn

1:00 – 5:00 General Session II
Silver Baron D & E

Chair: John Gray, USGS

Other Surrogates For Estimating Suspended Sediment Properties

1:00 Welcome, Goals of Plenary Session. [Who Needs Sediment Surrogate Data](#)
John Gray, USGS, Reston VA

1:30 [Surrogate Techniques for Suspended-Sediment Measurement](#)
D. Wren, Ole Miss University

2:00 [Laser Theory and Technology](#) Yogi Agrawal, Sequoia Scientific

2:30 [Estimation of suspended solids concentrations based on acoustic backscatter intensity: theoretical background](#)
Jeff Gartner, USGS

3:00 Break (Pre-Function Solon)

3:30 Digital Optical Technology
Dan Gooding, USGS Vancouver, WA (Presented by LeRoy Schroder)

4:00 Pressure Differential Technology
Todd Rasmussen, University of GA,

4:30 Panel discussion All Speakers

5:00 Adjourn

5:30 (Silver Baron B) Calibration and Blind Sediment Sample Measurement Session

6:00 – 8:30 (Silver Baron A) Reception and continuation of Calibration and Blind Sediment Sample Measurement Session

Wednesday May 1

7:00 (Silver Baron B) Wednesday speakers' and field trip organizers meeting and breakfast buffet. All Wednesday computer-projection files are due at this time.

7:00 – Continental Breakfast (Pre-Function Solon)

8:00 – Breakout Sessions

Breakout 1 (Grande Exposition C) Definition of turbidity, how to measure it, how to store and retrieve it

Breakout 2 (Silver Baron D) How to use optical properties to monitor suspended sediment concentration

Breakout 3 (Silver Baron C) How to use surrogates and suspended sediment data to compute sediment flux

Breakout 4 (Silver Baron E) Other surrogates that may be used to monitor sediment

9:45 Break (Pre-Function Solon)

10:15 Breakout sessions continue

12:00 Lunch (on your own)

1:30 Field Trip

5:30 Return to hotel

Thursday May 2

7:00 (Silver Baron C) Thursday speakers' meeting and breakfast buffet.

7:00 (Pre-Function Solon) Continental Breakfast

8:00 Breakout Sessions Continue

Breakout 1 (Grande Exposition C) Definition of turbidity, how to measure it,
how to store and retrieve it

Breakout 2 (Grande Exposition A) How to use optical properties to monitor
suspended sediment concentration

Breakout 3 (Comedy Club) How to use surrogates and suspended sediment data
to compute sediment flux

Breakout 4 (Platinum) Other surrogates that may be used to monitor sediment

12:00 Lunch (on your own)

Closing Session

Chair: Doug Glysson

Grande Exposition C

1:00 Results of Calibration and Blind Sediment Sample Measurement Session

Mark Landers

1:30 Breakout Group 1 report

Andy Ziegler

2:00 Breakout Group 2 report

Dave Schoellhamer

2:30 Break (Pre-Function Solon)

3:00 Breakout Group 3 report

Bill Carey

3:30 Breakout Group 4 report

Jeff Gartner

4:00 Summary and Where we go from here

Doug Glysson

5:00 Adjourn