

A WATER TURBIDITY FIELD MEASUREMENT WORKSHOP

Tuesday, November 1, 2005
9 a.m. - 5 p.m.
Fort Bragg Town Hall
363 N. Main Street, Fort Bragg, California

Co-sponsored by:

California Department of Forestry and Fire Protection, University of California Cooperative Extension and University of California, The Center for Forestry

There has been increasing interest in the study and monitoring of various in-stream and water quality parameters to evaluate whether or not land management activities impact aquatic resources and to assure compliance with state and federal environmental and water quality regulations.

Conference Goals: To educate participants on how to measure turbidity in the field by using hands-on instruction. We will examine various in-stream turbidity measurement devices, demonstrate grab sampling protocol, and review data processing and QAQC (Quality Assurance and Quality Control) requirements. Different types of instrumentation and sampling methodologies will be discussed and demonstrated to offer participants a wide view of turbidity sampling protocols. In-the-field demonstrations will allow everyone an opportunity to handle the equipment.

We will:

- Demonstrate various turbidity measurement equipment in the field
- Demonstrate grab sampling and discuss chain of custody requirements
- View a permanent monitoring installation
- Collect turbidity samples, review results, and discuss proper data processing techniques

The workshop will begin at 9 a.m. with presentations in the morning and the rest of the day (until 5 p.m.) will be spent in the field. An array of turbidimeters will be set up in the lab, so you're welcome to come at 8:30 a.m. if you'd like to examine them. In the afternoon, four stations will be set up that attendees will rotate through with different equipment set ups to maximize the hands-on experience. The day will conclude with a discussion of the pros and cons of each method.

Who Should Attend: Landowners, land managers, restoration practitioners, regulatory agency personnel and resource professionals.

The workshop will be held rain or shine, so please be prepared for inclement weather—field gear, i.e. boots, rain gear if necessary.

Agenda Tuesday, November 1, 2005

- 9:00 a.m. **Introduction**—*Cajun James*, Sierra Pacific Industries, Redding
- 9:00 - 9:45 **KEYNOTE SPEAKER: Uses of Field Measurement for Turbidity: Examination of the Spectrum of Available Devices**—*E. George Robison*, Humboldt State University, Arcata

- 9:45 - 11:00 **Data Management & QAQC—Most Appropriate Method of Dealing With Your Data**—*Jack Lewis, USDA Forest Service, Pacific Southwest Station*
An array of turbidimeters will be set up in the lab, so you're welcome to come at 8:30 a.m. if you'd like to examine them.
- 11:00 - 12:00 **Travel to the Field & Lunch**
- 12:00 - 4:00 Split into 4 groups and rotate through the stations as outlined below (1 hour per station):
- Group #1: Demonstration and Handling of Numerous Turbidity Measurement Devices & Sediment Sampling**—*Matt House, Green Diamond Resource Co., Korb*
- Group #2: Permanent Installations**—*Liz Keppeler, USDA FS, PSW Research Station, Caspar Creek, Fort Bragg*
- Group #3: Demonstration and Handling of Numerous Turbidity Measurement Devices & Sediment Sampling**—*Cajun James, Sierra Pacific Industries, Redding*
- Group #4: Grab Sampling: Demonstration of How to Collect Samples**—*Kate Sullivan, The Pacific Lumber Company, Scotia*
- 4:00 - 4:30 **Discussion of the Pros and Cons of Each Method**—What Are the Merits of a Permanent Versus Non-Permanent Installations
- 4:30 - 5:00 *Depart from the field*