

*Watershed Sciences Approaches for Monitoring and Prioritization of Salmonid Restoration*

**SRF Monitoring Workshop Agenda, November 10, 2003**

- 3:00 – 5:00 pm      Registration and Check-in
- 5:30 p.m.            Dinner at Jughandle
- 7:00 p.m.            Walt Duffy of the USGS and HSU will discuss monitoring fish to assess the response of watersheds to restoration.
- 8:00 p.m.            Monitoring Overview with hydrologist Randy Klein on the use of turbidity monitoring to assess watershed health.

**SRF Monitoring Workshop Agenda, November 11, 2003**

- 8:00 a.m.            Breakfast
- 9am – 5pm.:      Introduction and outline of the day with Randy Klein and Walt Duffy.  
Note: The presenters will offer the same workshop each day so participants can break into smaller working groups.

Turbidity Monitoring workshop with Randy Klein will include discussions and examples of:

- 1) significance of turbidity from a biological perspective,
- 2) sources of turbidity from a watershed process perspective,
- 3) it's utility as a surrogate for suspended sediment concentration,
- 4) methods for measuring turbidity,
- 5) designing a monitoring network,
- 6) drawing conclusions from a data set, and
- 7) summarizing data through graphic and tabular methods.

Manual methods of data collection will be compared with automated turbidity recording. Examples of common pitfalls will be described. Attendees will come away with a better understanding of strategic collection of quality data, and a reality check on what it takes to operate a recording station.

**SRF Monitoring Workshop Agenda, November 12, 2003**

- 8:00 am Breakfast
- 9am – 5 pm:      Walt Duffy will present on monitoring fish to assess the response of watersheds to restoration. The workshop will include discussion or examples of:
- 1) appropriate life history stages for monitoring,
  - 2) methods for sampling juvenile stages for abundance and estimating population size,
  - 3) examples of calculating juvenile population estimates with variance,
  - 4) discussion of the relation of juvenile condition to habitat
  - 5) discussion of smolt sampling
  - 6) examples of calculating smolt production
  - 7) discussion of adult escapement
  - 8) example of calculating adult escapement using

Walt's workshop will include visits to field sites to discuss methods and their pitfalls under various conditions.