Session 19

Improving the Quality and Reliability of Data Collected for Ecological Restoration Projects
Quality Challenges for Data Collected for Ecological Projects

- Quality for ecological measurements, especially observational data
  - Field data collected by judgment of scientist
  - Estimates (data) are based on senses (vision, auditory)
  - Instruments are not used
Examples

• species IDs/counts/abundance
• condition/cover classes
• phenology
• gender
Example Project Lifecycle

- Plan
- Prepare
- Collect
- Review
- Evaluate
Example Project Lifecycle with Key QA Components

Plan
- Data quality indicators and acceptance criteria
- Quality control measurements

Prepare
- Standard Operating Procedures (SOPs)
- Training and certification

Collect
- Technical assessments

Review
- Data verification
- Data validation

Evaluate
- Data usability
- Lessons learned

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- Technical assessments

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Presentations

1. Can We Obtain Reliable Data when Implementing Ecological Restoration Projects?
   - Louis Blume, USEPA, Chicago, IL

2. Zen and the Art of Ecosystem Restoration: Assessing Precision and Accuracy in the Lab and Field
   - Timothy Lewis, USACE, Vicksburg, MS

3. Watervliet Dams Removal: A Case Study for Monitoring in a Complex Non-Wadable River
   – Marty Boote, Environmental Consulting & Technology, Inc., Ann Arbor, MI

   - Lynde Dodd, USACE, Lewisville, TX