Utilizing Bioassessments and Citizen Science for Stewardship in the Truckee River Watershed

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Presentation outline

- Truckee River Watershed
- TRWC Monitoring Goals
- TRWC Monitoring Elements
- TRWC Monitoring Findings
- Lessons Learned
Mission - Protect and Restore

Our Values:

- Ecologically Sound
- Partnerships
- Economics
Truckee - Pristine? No

- 7 dams
- 6 listed waters
- 1 railroad
- 1 Interstate
- Logging
- Gravel mining
- Grazing
Specific concerns

- Truckee River Operating Agreement
- Truckee Sediment TMDL
- Urban land use
- Dirt roads
Monitoring program focus

- Address impairment in watershed
- Excess sediment
- Nutrients an emerging concern
Monitoring program history

- Bioassessment started 1999
- Ambient monitoring - 1 day/year 2001 - 2006
- Ambient expanded in 2007
Monitoring program today

- Bioassessment
  - 5 streams annually
- Ambient water quality
  - ~20 sites, 4 x per year
  - Temp, pH, EC, DO, turbidity
  - Nutrient grab samples 1 - 2 per year
What have we learned?

- Bioassessment
- Analysis = Eastern Sierra IBI
- Over half of streams monitored do not fully support beneficial uses
Nutrients

- Not commonly monitored in watershed
- Standards for few streams
- Many other streams show high nutrients
Next steps for TRWC

- Deposited sediment
  - Contracted study
  - Tight linkage to impaired biota
  - Key to maintaining Truckee River 303(d) listing

- Increase monitoring around TROA
  - Bioassessment - increase efforts below dams
Lessons learned - planning

- Define purpose of program
  - Specific pollutant
  - Land use
  - Education
- Identify specific questions
- Seasonality - are you monitoring at the right time?
Putting data to use

• Follow accepted procedures (i.e. SWAMP protocols)
• Submit data to state via CEDEN
  • Can’t be used in Integrated Report otherwise
  • Provides decision makers with QA confidence
  • Required by state funding sources
Disseminating data to public

- A challenge - Ideas welcome!
- Annual monitoring report
- Provide as requested
  - Locally - usually development proposal
Contact info

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