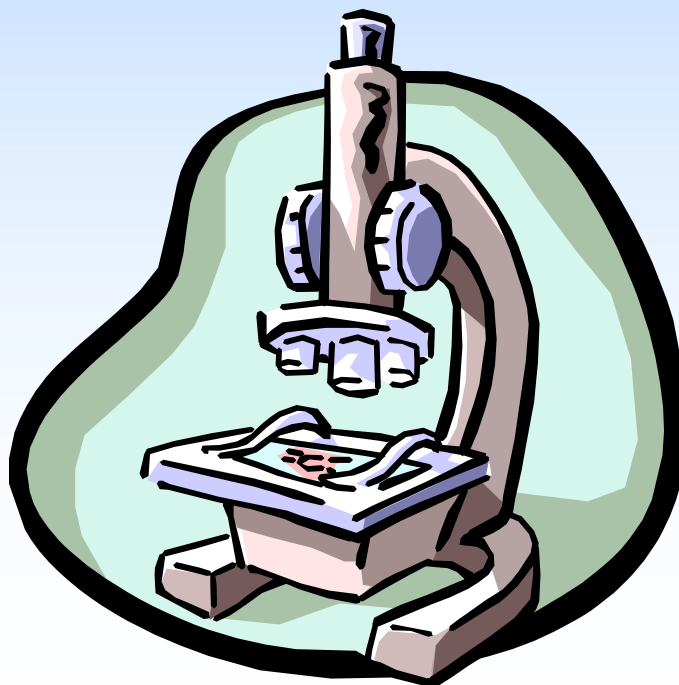


Lake Tahoe TMDL Implementation Tool Box

New and Innovative Technologies

Lake Tahoe TMDL Symposium
Friday, Dec. 10, 2004



New and Innovative Technologies

- ❑ Typical WQIPs in Lake Tahoe Basin have emphasized:
 - source control
 - storm water runoff capture, conveyance
 - treatment primarily through detention and infiltration

- ❑ Recently WQ management/regulatory agencies have begun to explore enhancing nutrient and fine-sediment removal through wider range of technologies/approaches in order to meet WQ objectives

- ❑ USEPA 2004 Targeted Watershed grant funding secured for this purpose





New and Innovative Technologies

- ❑ Project goal: explore application of alternate pollutant reduction approaches for each major source category in the Lake Tahoe basin

- ❑ Project objectives:
 - identify new or innovative technologies
 - guidance on feasibility of implementation
 - evaluate opportunities for application
 - quantify effectiveness or load reduction capacity of opportunities
 - develop methodologies to estimate load reductions
 - evaluate maintenance requirements



Technologies to be Evaluated (Minimal)

- ❑ Advanced storm water treatment:
 - Flocculation
 - Filtration
 - Chemically/biologically enhanced
 - Centralized treatment facilities

- ❑ Methods that focus on reducing runoff volume (hydrologic control)
 - Low Impact Development techniques
 - Water reuse
 - Enhanced evapotranspiration

Technologies to be Evaluated (Minimal)

- ❑ Airborne pollutants/sources:
 - motor vehicle exhaust
 - roadway dust entrainment
 - wood stove emissions
 - prescribed burn controls

- ❑ Stream channel erosion:
 - bank stabilization
 - stream rehabilitation
 - stream restoration





New and Innovative Technologies

- ❑ Information will be utilized in development of Load Reduction Matrix (matrices)
- ❑ Stakeholder working group, peer review
- ❑ Timeline