Methodology to Estimate Pollutant Load Reductions

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Participating Agencies

- US Army Corps of Engineers (Technical Team Leader, Teresa Rodgers)
- Lahontan Regional Water Quality Control Board (Dave Roberts)
- Tahoe Research Group (John Reuter)
- Stormwater Quality Improvement Committee

Purpose

Develop a methodology that can be used to estimate the effects of Lake Tahoe Basin stormwater quality improvement projects and Best Management Practices (BMPs) in reducing specific pollutant loads

Methodology to Estimate Pollutant Load Reductions

- > A methodology is required that:
 - Addresses different geographic scales (e.g., regional, project, individual BMPs),
 - Addresses the effects of both source controls and water quality treatment facilities,
 - Addresses maintenance and monitoring effects,
 - Focuses on priority pollutants (inorganic particulates <20 microns, nitrogen species, phosphorous species,
 - Applies to different stages of project development (e.g., conceptual planning, watershed analysis, detailed design), and
 - Can be adapted to support the future TMDL implementation system.

Three Parts

- Part 1 Investigate Local and Regional Water Quality Improvement Practices
- Part 2 Summarize Existing Information and Programs at a National Level
- Part 3 Develop Load Reduction Methodology

Part 1. Investigate Local and Regional Water Quality Improvement Practices

- Stakeholder interviews,
- Review of existing Lake Tahoe Basin practices and policies, and
- > Recommendations for their modification

Part 2 - Summarize Existing Information and Programs at a National Level

- Conducted concurrently with Part 1,
- Conduct research outside of the Tahoe Basin to identify analysis methods and pollutant load reduction methodologies that may be transferable, in whole or part, to the Lake Tahoe Basin with some modification.

Part 3 - Develop Load Reduction Methodology

Focus of the majority of the effort

- Initial screening of methods,
- Development and testing of new methods,
- Compilation of methodologies at the various geographic scales required, and
- Review with Lake Tahoe Basin stakeholders. The methodology will be designed to support future basin-wide modeling and assessments.

Project Advisory Committee (PAC) and Stakeholder Involvement

- The project will be guided by PAC
- PAC will include the US Army Corps of Engineers (Corps) and their project partners working on the TMDL program.
- Two sets of stakeholder interviews and three stakeholder meetings are included in the project to ensure that the methodology meets the needs of the end users, primarily the agencies responsible for implementing, funding, and regulating stormwater quality improvement projects in the Lake Tahoe Basin

Schedule

Task/Optional Task	Award Date on or Before
Part 1a	1 December 2004
Part 1b - 1d	1 June 2005
Part 2	1 June 2005
Tasks 3	1 November 2005

Use of Results

Used for project planning and analyses by various implementers

BMP and Watershed Modeling

Progress Tracking