

Lake Tahoe TMDL Program Status – (August 27, 2009)

A. TMDL Development

Staff from the Lahontan Water Board and the Nevada Division of Environmental Protection (NDEP) have teamed up since 2001 on the joint Lake Tahoe Total Maximum Daily Load (TMDL) program. This TMDL team is aiming to release a proposed TMDL for public review and comment by late 2009. Though the TMDL is not ready for public review at this time, the TMDL team will continue meeting with stakeholders to gain valuable input for revising draft TMDL documents, proposing amendments to current stormwater regulations, writing environmental documentation for the proposed TMDL adoption, and developing the Lake Clarity Crediting Program.

1. Revising TMDL Documents

The TMDL team received numerous comments on the Draft Technical Report (September 2007) and has used the comments to revise the Technical Report to an updated June 2009 version and to the Draft Lake Tahoe TMDL Report. The TMDL team submitted these documents in April 2009 for scientific peer review. On August 17, 2009: the Lahontan Water Board staff received the final of five completed scientific peer review comments. These peer reviews were solicited to comply with California Health and Safety Code section 57004 and to help inform drafting the final proposed TMDL. Today, these comments are available for public viewing on the [Lake Tahoe TMDL Peer Review webpage](#).

Please do not submit comments on the peer review or draft TMDL documents at this time. The peer reviews will be included in the formal TMDL adoption record. The peer review comments will be used to revise the draft documents prior to releasing the TMDL documents for public review and comment.

When released for public review and comment (expected late 2009), the draft Lake Tahoe TMDL will include several key components:

- Final Lake Tahoe TMDL Report
- Updated Lake Tahoe TMDL Technical Report
- Scientific Peer Review Comments and Response to Comments
- Proposed Amendments to the Lahontan Water Board Basin Plan
- Environmental Documentation

2. Revising Stormwater Regulations & CEQA Scoping

Staff are drafting proposed amendments to the Water Quality Control Plan for the Lahontan Region (Basin Plan) to incorporate the Lake Tahoe TMDL and edit portions of the Basin Plan to facilitate TMDL implementation. The proposed amendments will include a summary of the Lake Tahoe TMDL science findings, a description of existing pollutant loads and sources, tables allocating allowable loads to the primary sources and responsible entities, and a detailed implementation plan. The amendments will also include adjustments to the stormwater regulatory approach for facilitating Lake Tahoe TMDL implementation.

The California Environmental Quality Act (CEQA) requires lead agencies to hold a public scoping meeting to solicit input regarding a project's potential to have an adverse effect on the physical environment. The project is the proposed adoption of the Lake Tahoe TMDL and the associated Basin Plan amendment. Staff held two CEQA Scoping Meetings in July 2008 to describe the Basin Plan amendment process and ask attendees for feedback about how incorporating the Lake Tahoe TMDL into the Basin Plan might affect the environment. The July 2008 CEQA Scoping Meetings did not include any information about the need for changes to the Basin Plan's stormwater regulatory approach.

As staff further developed Basin Plan amendment proposals, an additional CEQA Scoping Meeting was needed to inform stakeholders and the interested public about the need for changes in the Basin Plan's existing stormwater language and to solicit public input about the potential affect from adopting regulatory changes.

Staff held the Supplemental CEQA Scoping Meeting in South Lake Tahoe on August 12, 2009. 18 individuals attended the meeting with various representations: El Dorado County, Placer County, the City of South Lake Tahoe, CalTrans, the US Forest Service, California Tahoe Conservancy, the League to Save Lake Tahoe, US EPA, US Army Corps of Engineers, and a few private interests. Staff presented a brief overview of the Lake Tahoe TMDL program and then described the need for changes to the Basin Plan.

The current Basin Plan regulatory approach for stormwater references a 20 year, 1-hour design storm for all stormwater facilities, includes concentration-based numeric effluent limits for stormwater discharges, and describes a 20-year implementation phase for restoration efforts ending in 2008. The TMDL science indicates that annual pollutant loads must be reduced to restore lake clarity, but this science and approach is not in the current Basin Plan. To align the Basin Plan with current science and provide implementers needed flexibility to target high polluting watersheds, staff expect to propose amendments that will narrow the applicability of the design storm and concentration-based effluent limits and re-define the implementation timeframe. TMDL implementation will focus on

mass-based, average annual pollutant load reductions and provide municipal dischargers the opportunity to prioritize pollutant load reduction actions.

Meeting attendees asked questions regarding the CEQA process. These questions led to a productive discussion of the opportunity to provide feedback and comment on the proposed Basin Plan amendment effort. Staff look forward to receiving comments from stakeholders and the public to help guide the analysis of potential impacts from this project. The public comment period for CEQA Scoping closes on September 15, 2009. Please contact Douglas F. Smith, Chief of the TMDL and Basin Planning Unit to submit comments, questions, or for more information phone 530 542-5453 or email dfsmith@waterboards.ca.gov.

3. Lake Tahoe Watershed Model and Lake Clarity Model

Under contracts, Tetra Tech, Inc. developed the Lake Tahoe Watershed Model as part of the TMDL source analysis, and UC Davis developed the Lake Clarity Model for the TMDL linkage analysis. Water Board staff and NDEP staff are working with Tetra Tech and UC Davis to package electronic, executable versions of the models and input files for public accessibility and use. Please note that both Tetra Tech and UC Davis are no longer under contract for these models and there are no contractual obligations for either technical support or user manuals.

B. TMDL Implementation

Lake Clarity Crediting Program Development

The Lake Tahoe TMDL team is working with contracted consultants to create tools to support implementation efforts. Most importantly, Environmental Incentives, LLC has been retained, with funding from US EPA, to develop a crediting and tracking program to help link urban implementation actions to expected load reductions. This crediting program will provide the basis for tracking compliance with each jurisdiction's allocation. The crediting program is intended to provide implementation flexibility, encourage effective and innovative practices, foster cooperative water quality improvement efforts, and provide a consistent methodology to assess Municipal NPDES Storm Water Permit compliance.

Water Board staff expect to incorporate jurisdiction-specific load allocations and associated targets into updated National Pollutant Discharge Elimination System permits in 2010 following TMDL adoption. The permits will include (in the Monitoring & Reporting Programs) crediting mechanisms to estimate pollutant load reductions associated with various implementation actions. Such activities might include erosion control projects, stream environment zone restoration efforts, residential best management practices, and water quality infrastructure maintenance work. The crediting program will help define specific rules and modeling tools necessary to

calculate these estimates. The TMDL team anticipates that regional monitoring efforts and improvements in technology will help refine these estimates over time. An adaptive management framework will provide the means to incorporate new information into the crediting system to track TMDL implementation progress.

CA NPDES Municipal Stormwater Permits

Stormwater discharges from the municipal jurisdictions within the Lake Tahoe Basin are regulated under Board Order No. R6T-2005-0026. In addition to specifying waste discharge requirements for runoff discharges, the Order also serves as a National Pollutant Discharge Elimination System Phase I Storm Water Permit (NPDES Permit) as required by Clean Water Act section 402(p). The City of South Lake Tahoe, El Dorado County, and Placer County are co-permittees under the NPDES Permit.

In anticipation of Lake Tahoe TMDL implementation requirements, NPDES Permit Section IX requires the co-permittees to develop a Pollutant Load Reduction Strategy to gather critical information needed for long-term stormwater planning. Specifically, Section IX requires the three jurisdictions to (1) identify storm water discharge points, (2) delineate the sub watershed for each discharge point and estimate pollutant loading for those watersheds, and (3) prioritize capital improvement and stormwater program activities based on loading estimates.

With funding assistance from the California Tahoe Conservancy, each of the three jurisdictions has completed its initial Pollutant Load Reduction Strategy effort. The products include detailed jurisdiction maps with identified discharge points and associated catchments, tables listing relative total suspended solid, nitrogen, and phosphorus loads, as well as text describing how the information will be incorporated into various program activities. The extensive GIS work and initial pollutant load estimates greatly improve the municipalities' ability to comprehensively plan for meeting future load reduction requirements.

The current NPDES Permit expires in October 2010. At that time, Water Board staff expects to update the NPDES Permit to include specific fine sediment particle and nutrient waste load allocations consistent with Lake Tahoe TMDL goals. Staff also expect to require the municipalities to submit revised Storm Water Management Plans describing how required load reduction targets will be met. The completed Pollutant Load Reduction Strategy will provide the co-permittees with much-needed baseline information to inform the revised plans. Staff will continue to work with the Permittees in the interim to ensure municipal storm water management programs are adequately prepared for the treatment challenges ahead.