Tahoe Area Sierra Club Group

September 13, 2010

Harold Singer, Acting Executive Director
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Blvd.
S. Lake Tahoe, CA 96150

By e-mail to DFSmith@waterboards.ca.gov

Dear Mr. Singer,

The attached comments are submitted in response to your "Notice of filing of draft environmental documents concerning Proposed Amendments to the Water Quality Control Plan for the Lahontan Region including the draft Lake Tahoe Total Maximum Daily Load for Sediment and Nutrients." We thank Lahontan Regional Water Quality Control Board (Lahontan) staff for meeting with us on numerous occasions to explain the development of the TMDL "package," some of the assumptions that were made, and some of the implementation concepts

TASC feels the Tahoe TMDL is a major work product that provides a good starting point to support a change in direction regarding regulation of discharges to Lake Tahoe's once-clear waters consistent with the non-degradation standard of the Outstanding Natural Resource Waters designation for the lake. Lahontan can and should use innovative methods, as long as Lahontan maintains its core duty—to protect and regulate for attainment of water quality. The key to knowing if a new method works is results—actual monitored and measured reduction in pollutants that improve lake clarity.

Accordingly, because the proposed TMDL is a promising but an untested approach, our support for it depends on the following conditions being met:

- An implementation plan is adopted. Chapter 11 of the TMDL (Implementation Plan) needs to have deadlines, reporting requirements, accountability measures, and mechanisms to assure the public that work is being done as predicted and that results are attained.
- A comprehensive monitoring network, including a fully funded RSWMP and LTIMP, is developed, implemented and in operation as a requirement of the NPDES permits.
- Effective and timely adaptive management, enforcement and reporting are in place.
- Credits are not awarded until expected annual load reductions have been confirmed through monitoring, either specific to a project and/or through field measurements of a BMP with similar attributes. This is especially important given the need to understand the actual results on a timely basis to justify the expenditures for the federal, state, and local residents who are supporting the work to restore the lake's clarity.

- All new projects undertaken in the Basin prior to the issuance of the NPDES permits in California install stormwater runoff controls to contain 100% of runoff on-site.
- Mechanisms are in place that will ensure timely adjustments to the model to reflect impacts from climate change, scientific findings regarding lake clarity response, near-shore issues and processes, and impacts from other sources, such as forest runoff, golf courses, ski areas, campgrounds, parking lots on public property, and unpaved roads.
- Near-shore clarity issues are addressed quickly, including the process and timeline for adopting, implementing and enforcing water quality standards to attain and maintain a clear view of the lake bottom while standing near the lake's edge.
- The Lahontan Board is identified as the official body to conduct oversight of the program and holds annual public meetings to review the progress of the TMDL.

Please review the following pages for detailed comments. We look forward to working with Lahontan to improve and implement the TMDL so that the mid-lake transparency ("clarity") standard is attained sooner than the current 65-year schedule.

Thank you for caring about Lake Tahoe and affording us this opportunity to share our views.

Sincerely,

Roger Rosenberger
Tahoe Area Sierra Club

Laurel Ames
TASC Conservation Committee

Detailed Comments

The following includes detailed questions and comments on the proposed Basin Plan Amendments (BPA) for the Tahoe TMDL.[1] Comments regarding changes to the summary document must also be reflected in the Basin Plan Amendments and TMDL chapters, as appropriate.

Overall Approach of the TMDL.

The body of work generated through this project provides an improved understanding of the pollutants affecting lake clarity loss, their sources, and the new annual water transparency standard (hereafter referred to as 'clarity') of 97.4 feet (29.7 meters).

While we understand the agency's desire to record clarity as an annual average, the TASC recommends that the winter four-month mean Secchi readings continue to be reported, in order to validate the assertion that changing from a winter average to an annual average is equivalent over time.

As noted by regulatory entities and the research community, the TMDL was developed on the best information available in 2004. Because of the six-year-old cutoff date, many research and monitoring gaps remain or are not included. Therefore a robust, ongoing monitoring, research and adaptive management structure must be clearly stated and adhered to through an implementation management plan for the public to be assured that anticipated load reduction targets are to be met and the clarity standard achieved.

Lake Tahoe TMDL Summary.

The summary (page 1) should include the following information and answer the questions and issues raised prior to the November Board hearing:

- The implementation management plan should be described. The plan should include a description of what success is and how the agency will know it has been attained, a timeline of decision points and protocols for those decision points, how the expected $1.5 billion will be spent, how it will be awarded (e.g., cheapest project, most effective, highest priority, off-the shelf technology or innovation, etc.).
- Why the cutoff point for "fine" particles is 16 microns and below instead of 2.5 microns and below. Peer reviewers noted that it is believed the largest impacts are actually from fines roughly 2-5 microns and smaller. This discussion is missing from the document and should be provided.
- The estimated loading addresses only atmospheric deposition onto the Lake's surface. Loading from deposition onto land has been included in the other land-based sources (e.g. urban runoff), but not reported. The document should report the estimated land-based deposition. In addition, further research is needed to better refine atmospheric estimates and amend the model to add those quantities of particulates and nutrients. This information

[1] Unless otherwise stated, references to information and page numbers are based on the July 9, 2010, Proposed Amendments document.

may result in a need to increase the load reductions required of atmospheric sources to attain the clarity standard.

- The quantity of fine sediment that enters the lake via stream channels because adjacent flood plains are no longer functioning properly as a result of development and other human disturbances. Because this value is unknown, this factor should be noted under the Stream Channel source category and a factor for fine sediment transported in the stream amended into the model.
- The text, especially the introduction (page 3), should insert "mid-lake" before transparency to clarify the TMDL is only focused on the mid-lake standard.
- The text should note the deteriorating conditions of the near-shore and that the agency long-ago concluded that the current turbidity standard is not adequate for protecting near-shore clarity; that it doesn't reflect the worsening water quality conditions; and that research is underway to better understand near-shore processes. The document should also explain how and when, once sufficient scientific information is available, the Board will develop and adopt a regulatory process to protect the new near-shore standard.

Although page 8 summarizes the results of assumed 'buildout,' what this actually represents has been a point of contention and confusion for quite some time. The text should include a clear description of what the assumptions actually are as described in the U.S. Geological Survey 2006 document cited in the models' references.[2]

Eliminate Numeric Effluent Limits for nutrients in Stormwater Discharges to Infiltration Systems (p. 2).

Nutrients:

- The TASC has serious concerns with the proposal to eliminate the effluent limits for nitrogen in stormwater discharges to infiltration systems due to the magical qualities of soil to remove the nitrogen before it enters the water. The summary and substitute environmental document (SED) should explain how the soils can absorb enough nitrogen to help attain the nitrogen loading proposed in the model.
- Now that the lake is co-limited in a number of months of the year (see State of the Lake Report 2008 and 2009), the input of nitrogen to the groundwater, the streams and the lake is of very serious concern. There is no information provided to assure that a large percentage of nitrogen will be treated in the soil through infiltration, because soil saturation during stormwater events will result in no soil treatment volume, as well as an increase in nitrogen discharge. The CWA 303(d) list for nitrogen sources should be re-examined and additional specific nitrogen reduction measures added to the crediting program.

[2] Tahoe Land-Use Change Model Summary Report and Climate Change Literature Review and Tahoe Basin Projections, U.S. Geological Survey, March 31, 2006

The effluent limit for nitrogen entering stormwater infiltration systems should be maintained as an integral part of all associated monitoring programs and as a standard requirement of the TMDL unless and until such time adequate scientific information shows that infiltration can sufficiently remove nitrogen as required by the TMDL load reductions. Without such controls and a monitoring program, it will be difficult or impossible to determine the amount of nitrogen added to the lake's load.

Nutrients and Near-shore Clarity

The TASC understands that more information is needed to fully understand the complex near-shore processes affecting the lake's shoreline, and that although research is already underway, we do not yet have enough information to develop an appropriate near-shore clarity standard, nor assess what control mechanisms will be necessary to restore the lake's once-clear shoreline. Further, although the mid-lake clarity TMDL addresses all three clarity-reducing constituents (fine particles, nitrogen and phosphorous) it prioritizes a reduction in fine particles – as expected given that the pollutants with the greatest impact on *mid-lake* clarity are fine particles and the TMDL is based on a requirement to achieve the *mid-lake* clarity standard.

However, in the interim, the problem remains that the tributaries still deliver nutrients to the lake every day, primary productivity is still increasing exponentially, and Tahoe's once-clear near-shore continues to degrade. It may be that nutrients have little or nothing to do with the phenomenal growth of invasive plants and aquatic animals in the near shore, but the likelihood is that nutrients are one potential element that cannot be dismissed until studies prove those nutrients are not a part of the disturbing amount of near-shore growths.

Therefore, the TMDL must maintain regular application of effluent limits for nitrogen and phosphorus and include these nutrients in all monitoring programs. Further, Lahontan must react swiftly and appropriately to restore Tahoe's near-shore areas once the needed scientific information is available to support the development of a standard and indicator that protects clarity in the shoreline areas, and necessary pollutant control measures can be determined, adopted and enforced.

Infiltration and Groundwater:

The summary on page 2 regarding the elimination of numeric effluent limits for stormwater discharges to infiltration systems explains: *"In the event there isn't sufficient separation between infiltration systems and groundwater levels, the Basin Plan ensures water quality protection by stating that when the separation between infiltration systems and groundwater is less than five (5) feet, discharges may be required to meet effluent limits for discharges to surface waters.*"

Although the current BP language includes this reference to the five-foot distance, the proposed deletions to the BP include the removal of the following language (page 23): "*Therefore, discharges to infiltration systems located in areas where the separation between the highest anticipated ground water level and the bottom of the infiltration system is less than five (5) feet may be required to meet the effluent limits for stormwater discharges to surface waters."* Yet the proposed replacement language for this section does not include this specific protection, but rather addresses the issue in vague terms (as proposed on page 25): *"Infiltrating runoff volumes generated by*

the 20 year, 1-hour storm may not be possible in some locations due to shallow depth to seasonal groundwater levels, unfavorable soil conditions, or other site constraints such as existing infrastructure or rock outcroppings."

- Either the summary is inaccurate or the BPA language fails to include the five-foot distance.
- The agency responsible for determining when infiltration is not possible due to groundwater level(s) shall be designated and specific criteria provided.
- Multiple alternative locations in an area should be evaluated for potential to design treatment that infiltrates stormwater. A project proponent or implementing entity cannot simply look at one location in a project (as individual parcels and/or a combined area) and state infiltration is not feasible.
- The document should state the potential for higher seasonal water table as the climate changes and provide criteria for determining when infiltration capacities are lost.
- Reducing the five-foot standard is unlikely to protect groundwater. Rather, it could provide that nitrogen has an easier path to the lake.

Eliminate Numeric Effluent Limits for Total Iron and Oil and Grease for Discharges to Surface Water (p. 3).

Although staff stated at the 9/8/2010 public hearing that due to an inadequate project description, the proposal to amend the requirements for Iron, Oil and Grease for discharges to surface water will be removed from the currently-proposed BPA, we presume the agency will eventually propose these amendments in the next iteration. Therefore, we maintain the following comments for future consideration:

The future environmental documents should describe the regulatory and legal differences, if any, between the requirements for meeting a stormwater effluent limit versus Maximum Contaminant Level (MCL). Also the documents should describe the difference between the monitoring programs for each in the same way, listing the different parameters. If both are comparable in almost every way, then the proposal to retain the more stringent MCL for iron would be an advantage. This information should be provided in the next draft of the SED.

Iron:

Researchers still lack a full understanding of the near-shore lake processes that are contributing to the loss of clarity, vulnerability to and impacts of invasive species, and exponential growth of algae in our near-shore environments. As such research is currently underway, the future environmental document should evaluate the best available science regarding the role of iron in near-shore processes, and whether this warrants tighter standards for iron.

Oil and Grease:

The future document should describe at what concentration(s) visual sheens are typically seen. The document currently states only "much lower than 2.0 mg/l." Will the deletion of the stormwater effluent limit affect the extent (e.g. frequency, location, etc.) of monitoring for these constituents? Are there

conditions that could prevent a visual sheen from being observed at levels below 2.0 mg/l? If it's possible for the visual sheen 'measurement' to be subjective, where the reading is different between different observers, then how many observations are necessary to validate the standard? Are there other uses for the data pertaining to measuring the concentrations?

Describe Stormwater Treatment Requirements.

On page 3 this section states: "*…and the need to prioritize load reduction actions to make the best use of limited public resources to control roadway runoff.*"

There has been extensive discussion regarding the cost of TMDL implementation and resources that are available to assist with these costs. The proposed BPA language seems to weigh in on this issue of contention, stating that public resources are "limited." However, in response to recent concerns expressed by local jurisdictions that the TMDL is an "unfunded local mandate," TRPA and Lahontan staff have responded by explaining that on the contrary, adoption of the TMDL will provide eligibility to the local jurisdictions for additional federal and state grant programs based on implementation of the mandated TMDL. Further, although not required to, the TRPA is proposing to provide "incentives" and allocations in conjunction with the award of credits by Lahontan, thus possibly providing additional financial means to help achieve the load reductions.

While the issue of funding is a valid discussion point, the TASC recommends the word "*limited*" be removed from this proposed BPA language. The intent will remain the same - that the idea is to make the best use of public resources to control roadway runoff. As much contention and question remains regarding public funding, it is not appropriate to state such funding is "limited" in the Basin Plan. This is an implementation issue (and is addressed later in this letter).

On page 25, the proposed language includes: "*Where conditions permit, project proponents should consider designing infiltration facilities to accommodate runoff volumes in excess of the 20 year, 1-hour storm to provide additional stormwater treatment."*

- What conditions would either permit or not permit this design?
- Will Lahontan give additional 'credit' for implementers who design to accommodate larger runoff volumes? If not, then how will Lahontan encourage or require such designs?
- Lahontan agrees there are water quality benefits from accommodating larger runoff volumes, so why not require them now? Why does this language only suggest that jurisdictions and project implementers "should consider" such a design?

The science regarding expected impacts of climate change in the Lake Tahoe Basin may still be under development and ongoing. However, evidence today supports the expectation that we will see less snow, more rain, shorter winters and more intense flooding events. In other words, science already supports the need to design infiltration facilities to accommodate greater than the 20-year, 1-hour storm.

As the SED states: "*Existing concentration-based numeric effluent limits for stormwater runoff would be retained as the primary compliance objective. Those limits, which apply to all stormwater runoff at all times, do not account for storm event variability and do not recognize any correlation between pollutant loads into the Lake and transparency*." (pages 16-37 and 16-38). As Lahontan therefore recognizes, these stormwater discharge effluent limits (included in Table 5.6-1, page 25) are not supported by current science with regards to lake clarity and pollutant loading.

Because the use of effluent limits would be retained as an option in certain circumstances, the SED should evaluate alternative effluent limits (e.g. lower limits).

Eliminate Reference to Alternative Deicer Studies.

The paragraph proposed for removal (shown on page 15 of the 7/9/2010 document) is outdated and should be removed. Further, the TMDL documents must explain how, when implemented properly, the TMDL will incentivize the consideration of alternative deicer and traction abrasive materials. However, although the focus of the TMDL is on those constituents which impact water clarity (fine PM, N and P), the amendments to the Basin Plan shall not negate or reduce the responsibility to consider the salt impacts from deicing materials. According to the discussion in Chapter 4.8 of the BP, it appears Lahontan recognizes that vegetation impacts occur from these materials. However, the BP suggests it is TRPA's responsibility to regulate such impacts. We disagree, because the listed beneficial uses for Lake Tahoe include both aquatic and terrestrial habitat (near the shore), which can be negatively affected by salt compounds. Therefore, with regards to the proposed BPA, it shall be clear that the only impacts of the amendments are to remove the outdated references and that no changes will affect regulation of deicing materials with regards to other pollutants.

Climate Change.

The Basin is already experiencing the impacts of climate change.[3] This includes more precipitation falling as rain and less as snow, more rain-on-snow events, flooding events, lake warming, warmer nighttime temperatures (especially during the winter months, further affecting snow levels), etc. Although the model was based on actual historical weather and climate data, we have long advocated that the model incorporate climate change impacts in some way, rather than wait for future adjustments. We note that information regarding climate change impacts and associated land use scenarios was gathered with the intention the information would be used for the TMDL, as summarized by David Halsing (USGS 2006):

> "The second part [of the report] summarizes and explains a detailed review of the most recent and relevant scientific literature on climate changes – specifically temperature and precipitation – expected to occur under various greenhouse gas emissions scenarios. From these projections of climate changes, a central estimate of temperature and precipitation changes, as well as ranges of variability around it, is developed for the Sierra Nevada mountain range in the region of Lake Tahoe. The result of the land use/land cover modeling and the changes expected to occur in regional climate both provide ways for users and decision-

[3] 2010 State of the Lake Report, TERC

makers to generate new inputs for the Total Maximum Daily Load (TMDL) Watershed model, which estimates sediment- and nutrient-loading to Lake Tahoe."

However, it does not appear that the climate change information provided by the USGS modeling efforts was incorporated into the current TMDL. If this is correct,

- Why did Lahontan decide not to use the climate change information that was gathered specifically for the TMDL?
- What are the loading implications of waiting 1, 2, 5, 10 or more years to adjust the model to reflect impacts of climate change (which generally result in increased loading to the Lake coupled with lake processes that themselves can further reduce mid-lake transparency as well)?

We understand any adjustments based on climate change impacts have been delayed until the implementation of the TMDL (via adaptive management), there will potentially be a lag time of years between the impacts occurring on the ground and updates to the model. Therefore, we will fall further behind with regards to pollutant load reduction. Also, as local jurisdictions are awarded credits for achieving modeled/estimated load reductions, TRPA intends to tie additional development allocations to these credits. Thus, additional development will occur *before* the adaptive management process can account for climate change impacts. How does the TMDL address this?

Considerations for TMDL Implementation.

TASC notes the following concerns regarding the successful *implementation* of the new direction of the BPA:

1. Coverage Removal.

   Although Lahontan staff members have explained that it may be possible to get credit for coverage removal and eventually, improvements and restoration to naturally-functioning "stormwater treatment systems" such as flood plains, the current suite of tools provided to implementers for estimating load reductions are more heavily focused on non-natural systems for stormwater treatment (e.g. constructed facilities to capture and infiltrate and/or treat stormwater). According to Lahontan, in general, the removal of 10% coverage may generate an 8% decrease in loading (Project Report: Integrated Water Quality Management Strategy, March 2008, p.55-56). Removing coverage and restoring land, e.g. sensitive lands like SEZs which promote flood plain connectivity and provide for overbanking, will help reduce pollutant loading to the lake. Coverage removal and restoration of land must therefore be heavily incentivized as one of the most efficient options implementers can use for meeting load reductions, especially from an operations and maintenance perspective.

2. Monitoring.

   Adequate monitoring is necessary to successfully reduce the pollutant loads entering Lake Tahoe. The Regional Stormwater Monitoring Plan (RSWMP) must provide for adequate monitoring in conjunction with the crediting program and other implementation activities. In addition, the LTIMP stream monitoring program must be fully funded, and partner agencies must be held accountable for their contributions to LTIMP monitoring. For example, will the Forest

Service be responsible for ongoing monitoring in the uplands and contribute to LTIMP status and trend data? Without consistent stream monitoring, it will be difficult if not impossible to track pollutant concentrations from public property, including land disturbance, and unpaved roads.

For the urban areas, monitoring must be performed for all projects of different BMP designs, different geomorphic states, including soil types, infiltration rates, slope, size and other significant differences.

Actual, on-the-ground measurements are needed to assure the actions being taken by the local jurisdictions are achieving the required load reductions and to justify the expenditure of public and local funds. Models such as those associated with the Crediting Program can provide useful planning tools for estimating the benefits of a given project. However, without confirmation through adequate monitoring, the models provide limited value. The RSWMP monitoring network must be fully developed to collect the information necessary to measure baseline loads and confirm load reductions post-project construction and in the long term. Cost should not affect the development of the scientific monitoring network. Instead, once the network is developed, Lahontan should identify how the costs will be covered through implementation activities (e.g. included in NDPES permits). Credits should only be awarded when monitoring is completed to confirm load reductions.

However, page 12 states: "*The Regional Board expects the monitoring plan components to be fully developed by agency stakeholders within the first two years following TMDL adoption by USEPA, and full monitoring program operation is expected by the third year*."

- It appears that the monitoring plan will not be fully developed before NPDES permits are issued. Is this correct?
- If so, how will Lahontan know what to put in the NPDES permits in order to adequate cover monitoring needs? How will baseline loads be measured prior to implementation of projects for which entities will receive credits upon project completion?
- Why will two more years be required for development of the monitoring plan?

Entities should not be awarded credit, especially where TRPA will correlate credits with approval of additional development allocations, prior to completion and operation of the monitoring network.

Page 12 further states that: "*Once fully developed, the monitoring program will assess progress of TMDL implementation and provide a basis for reviewing, evaluating, and revising TMDL elements and associated implementation actions. The monitoring program will cover each of the four major pollutant sources and will monitor the in-lake responses to the pollutant loading. The source monitoring will focus on the largest pollutant source, urban uplands. The in-lake monitoring has been established and operating for about 40 years and is expected to continue*."

- What is the difference between the "monitoring program that will cover each of the four major pollutant sources" and the "source monitoring?"

Will the monitoring network proposed also monitor the three other sources?

- This also implies the monitoring program will continuously monitor the in-lake responses to the pollutant loading. Because clarity measurements will be taken on a regular schedule, why wait 15 years to assess load reductions versus clarity response?[4] We understand that due to environmental factors, conclusions about clarity response cannot be made on just a year or two of readings. Lahontan staff has stated that it is assumed that a five-year time period is probably sufficient to reflect trends. Therefore, if clarity continues to decline for five+ years, yet jurisdictions are being awarded credits for estimated load reductions, will Lahontan really wait another 10 years to assess why clarity is declining as pollutant loads are supposedly being reduced (see next paragraph)?

3. Adaptive Management.

The term "adaptive management" has been used for years by numerous Lake Tahoe Basin entities. The application, however, has not been very successful. According to Lahontan staff, the intent of the TMDL program will be to incorporate new findings (e.g. measurement data, new technology, etc.) into the program and implementation tools (the Crediting Program) in a timely manner. For example, future monitoring may show that more or less fine particulate matter was removed by a given BMP than currently estimated. In such a situation, the TMDL model(s) will be adjusted to reflect this different load reduction, and jurisdictions' Stormwater Management Plans will also be adjusted. In concept, this type of adaptive system can be beneficial, especially when the program is beginning with recognition of research and monitoring gaps (including an expanded monitoring network). However, because thus far adaptive management has been extremely slow, at best, we are concerned that a lag time in "adapting" TMDL tools could lead to the award of more credits than should actually be received.

Page 12 states that: "*As part of the TMDL Management System, the Regional Board will annually assess relevant research and monitoring findings and may adjust annual load reduction targets and/or the TMDL implementation approach as needed.*"

- What mechanism assures that the Board will annually review the entire program, including the success of the implementation management plan?
- What specific mechanisms will ensure that TMDL tools will be adapted in a timely manner?
- What are the criteria the Board will use to assess whether to make adjustments annually?
- What is considered "as needed" and who will make this determination?

In other words, when new information is found that necessitates a model/crediting program update, what mechanisms will ensure this will be done

[4] Page 12 states: "Following the first fifteen year implementation period of this TMDL, the Regional Board will evaluate the status and trend of the lake transparency relative to the load reductions achieved."

immediately, and in a way that another year of crediting does not occur based on outdated information?

Will the scientific community, especially researchers from TERC, UCD and other institutions that helped develop the TMDL, be included in the adaptive management process? If so, how? If not, who will assess the new science and determine whether a change to the TMDL implementation (or TMDL itself) is warranted?

4. Funding

The issue of funding has been one of large debate and contention. Although Lahontan and TRPA have explained that additional funding opportunities will result once the TMDL is adopted (i.e. through federal and state grant programs aimed at TMDL implementation), and TRPA also intends to provide financial "incentives" to entities who achieve their load reductions (or "credits"), the issue of cost continues to be one of the largest concerns expressed by all parties. Therefore, the final TMDL documents should discuss in greater detail the additional funds that will actually be available to assist in implementation once the TMDL package is adopted.

5. Enforcement.

Regulations are only effective if adequately enforced. While we realize staff cannot inspect every project or assumption used by implementers to estimate their load reductions (e.g. through the clarity crediting model), there must be sufficient enforcement to deter inadvertent or direct manipulation of model inputs so that anticipated load reductions occur and credit is not received for load reductions that do not occur.

6. Baseline Estimates.

In the current TMDL package a baseline pollutant loading to the lake has been estimated for 2004 as one basin-wide value. However, the baseline values for each jurisdiction's 2004 contribution have not yet been estimated. According to Table 5.18-5, local jurisdictions will be required to calculate their 2004 baseline load values within two years of TMDL adoption using the specified tools.

> "To ensure comparability between the basin-wide baseline load estimates and the jurisdiction-scale baseline load estimates for urban runoff, municipalities and the state highway department must use a set of standardized baseline condition values that are consistent with those used to estimate the 2003/2004 basin-wide pollutant loads. Specifically, baseline load estimate calculations shall reflect infrastructure and typical basin-wide conditions and management practices as of October 2004." (p. 9)

We understand the tools they will use to determine their individual 2004 baseline values will be based on a different model than the one that provided the 2004 basin-wide baseline loading. Thus some minor differences will be expected when all individual values are summed together. However, what will Lahontan do if the sum of the individual jurisdictions' baseline levels fall far short of the basin-wide loading estimate? How will such a discrepancy be resolved? If not resolved, we may see local jurisdictions estimating lower baseline values than exist and thus

setting the stage for not having to reduce as much loading. Lahontan needs a solid plan to address the individual jurisdictions' baseline values to ensure that when totaled together, they are within 5% of the basin-wide 2004 baseline value that has already been estimated.

In conclusion, we look forward to working with Lahontan staff on the upcoming "implementation phase" of TMDL development. A serious, rigorous and detailed implementation management plan can provide for success of the TMDL, especially if accompanied by a strong commitment by the Board to on-the-ground monitoring, timely adaptive management and a very clear plan for accountability, transparency, responsibility, timelines, and deadlines.