

From: Judith Unsicker
To: dcron@applevalley.org
Date: 12/19/01 12:57PM
Subject: Your Request for Time Extension on Section 303(d) Comments

Jay Cass of the Regional Board's Victorville office has forwarded your request to me. We cannot postpone consideration of Regional Board action on the recommendations for update of the Section 303(d) list to our February meeting because of the schedule set by California State Water Resources Control Board staff. The Regional Board's action is only advisory, and State Water Board action on a statewide Section 303(d) list is currently planned for early 2002. There will be a separate public participation process for the State Water Board's action, and you will have the opportunity to submit written comments then. The contact person for the list update process at the State Board is Diane Beaulaurier, at (916) 341-5549.

I will be attending a meeting this afternoon and will be on vacation from December 20 until January 1. Please contact me on or after January 2 if you have further questions about our list update recommendations or the listing process.

Judith Unsicker
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CC: Chuck Curtis; Diane Beaulaurier; Jehiel Cass

January 16, 2002

To: Judith Unsicker
Lahontan Regional Water Board

From: Debra Denton
Environmental Scientist

Thank you for the opportunity to review the draft recommendations for changes in Lahontan Region's Section 303(d) list. USEPA has the following comments regarding the draft dated, November 27, 2001. Below are some specific comments or issues to be considered for further revisions.

- 1) Many water bodies are proposed for de-listing based on the sole fact that the waters are impaired due to naturally occurring sources of pollutants. EPA's interpretation is that naturally-impaired waters must be listed unless the Regional Board had a natural sources exempted in their approved water quality standards.
- 2) Numerous water bodies are proposed for the "watch list" and thus requiring additional monitoring to determine the need for possible listing and TMDL development. The staff report must address how the Regional Board will further monitor and assess the water bodies on this watch list. There needs to be a schedule of monitoring and assessment of the water bodies for determining whether development of TMDLs is needed, or removal from the list because the water bodies are meeting water quality standards.
- 3) The listing criteria needs to specify how the Regional Board assessed attainment with the Basin Plan's narrative criteria, such as "no toxics in toxic amounts". The report states that the Board staff relied mostly on ambient water chemistry data and that no toxicity test data has been collected since 1997. The assessment of meeting the Basin Plan's water quality standards includes both narrative and numeric standards.
- 4) The report proposed to de-list for 29 water body/pollutant combinations. For example, one rationale used for de-listing was data based only on the State Board's Toxic Substances Monitoring Program (TSMP). The report states "the staff recommend that no new waters be listed solely because of TSMP results and waters previously listed because of TSMP results be delisted unless there is other evidence of impairment." If the TSMP data set is small for the particular water body, however tissue concentrations exceed the maximum tissue residue level (MTRL) criteria derived by the Office of Environmental Health Hazard Assessment, then the water body for that pollutant must be listed.

- 5) The report should address how its listing of Nevada border waters (e.g., Lake Tahoe, Walker River, Truckee River) are consistent or inconsistent with the State of Nevada?

We look forward to continued discussions on the 303(d) list. Please call me at 916-341-5520 or David Smith at 415-972-3416.

cc: Dave Smith, USEPA
Craig Wilson, SWRCB

From: Judith Unsicker
To: "egrimly@lycos.com".mime.Internet
Date: 1/31/02 12:48PM
Subject: Re: Haiwee Reservoir-Section 303(d) List

Thank you for your email. It will be transmitted to State Water Resources Control Board (State Board) staff for their consideration in formulation of recommendations for a statewide Section 303(d) list. The Regional Board's Total Maximum Daily Load (TMDL) unit is aware of Dr. Hering's research, summarized in the online report that you referenced.

The Lahontan Regional Water Quality Control Board (Regional Board) has already acted (on January 9, 2002) on recommendations to the State Board for update of the Section 303(d) list. The Regional Board approved the November 2001 staff recommendations posted on our webpage (www.swrcb.ca.gov/rwqcb6), with the exception of proposed new listings for the Mojave River.

The Section 303(d) listing process applies only to surface waters, and there is some debate as to whether sediment pore water should be considered surface or ground water. The State Board is developing formal policy language on listing/delisting criteria for the next (2004) Section 303(d) list update cycle. If that policy includes direction that pore water should be considered surface water for purposes of listing, Regional Board staff will evaluate the latest data and consider whether to recommend that Haiwee Reservoir be listed for arsenic in 2004.

I am preparing a "response to comments" document for inclusion in the Regional Board's administrative record for this year's Section 303(d) list update. If you would like a copy, please send me a mailing address. I can also have you placed on the State Board's mailing list for its 2002 list update action if you wish.

Please note my new email address below, effective January 30, 2002.

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>>> "Ed G Grimly" <egrimly@lycos.com> 01/24/02 02:10PM >>>

While the source of arsenic at Haiwee is natural, the high arsenic sediment concentration at Haiwee Reservoir is in part due to treatment by LADWP. Why isn't Table 1: Recommendations for Update of the Section 303(d) List for the Lahontan Region updated to include arsenic as a "Pollutant(s)/Stressor(s) for Haiwee Reservoir?"

Link to article on arsenic
<http://es.epa.gov/ncer/final/grants/97/sediment/hering.html>

CC: Chuck Curtis; Diane Beaulaurier

**Response to Written Public Comments on the
Lahontan Regional Board's Recommendations for
Update of the Section 303(d) List and Priorities
for Developing TMDLs**

February 2002

California Regional Water Quality Control Board
Lahontan Region
2501 Lake Tahoe Boulevard
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Contact Person:

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Introduction

On January 9, 2002, the California Regional Water Quality Control Board, Lahontan Region (Regional Board) adopted recommendations to the California State Water Resources Control Board (State Board) for update of California's Clean Water Act Section 303(d) list of impaired surface waters needing Total Maximum Daily Loads (TMDLs). TMDLs are strategies required by the Clean Water Act to ensure attainment of standards. The Regional Board's action also included recommendations on priority ranking of water bodies for development of TMDLs. The list update process included opportunities for public participation. A number of written comments were received before and after the Board meeting.

Regional Board staff summarized and responded to the issues raised in written public comments at the January Board meeting. This written responsiveness summary has been prepared for inclusion in the record of the State Board's final recommendations to the U.S. Environmental Protection Agency (USEPA) for the statewide Section 303(d) list update.

Summary of Public Participation Process

Regional Board staff began the list update process by formally soliciting information and data from other agencies and the public. A solicitation letter dated March 13, 2001 was sent to the Regional Board's Section 303(d), basin planning and agenda announcement mailing lists, and to other parties including environmental and watershed groups. The solicitation process was also noticed through legal advertising in newspapers throughout the Lahontan Region, and through a press release. The letter and press release were posted on the Regional Board's internet webpage. The solicitation letter included a form to be returned in order to be placed on a focused Section 303(d) mailing list. The final mailing list included about 400 addresses.

Nine written responses were received to the solicitation letter. Two responses provided data of the type requested in the letter; the rest included qualitative information. These responses are included in the administrative record of the Regional Board's action and summarized in the November 2001 staff report.

Regional Board staff reviewed information and data provided by the public, and other readily available information and data, and then formulated recommendations for update of the Section 303(d) list and TMDL priorities. The recommendations were made available for public review between November 27 and December 28, 2001. The availability of the recommendations was noticed in writing to the Section 303(d) mailing list, and a press release was sent to newspapers throughout the region. Several newspaper stories on the list update process were published. The staff recommendations and supporting documents (a staff report and water body fact sheets) were posted on the Regional Board's webpage. Staff also provided information on the TMDL process and list update recommendations by telephone and email, and attended meetings to answer

questions at the request of specific groups of stakeholders. The Board's January 2002 agenda announcement, including the list update item, was mailed in late December. (The agenda announcement mailing list includes several hundred names.) The Section 303(d) list update item was not noticed as a public hearing, but public testimony was heard at the meeting before the Board took action. An audiotape of this agenda item will be included in the administrative record of the list update process.

Comments and Responses

Table 1 lists written public comments received after the November 27, 2001 release date for draft staff recommendations. Individual responses were provided for some of these comments, particularly comments requesting information on the list update or TMDL development processes. Copies of the responses are included in the appendix to this document. Available staff time did not permit the preparation of individual responses to all comment letters and emails.

The Southern California Alliance of Publicly Owned Treatment Works (SCAP) sent comments to the Lahontan Regional Board (and other Regional Boards) including proposals for listing and delisting criteria. These comments arrived before the start of the public review period for the Lahontan Regional Board's recommendations. They will be included in the administrative record. The Regional Board's listing/delisting considerations are discussed in the November 2001 staff report.

Following are summaries of and responses to written public comments. Because many comments addressed the same issues, some comments and responses are combined. Copies of comment letters and emails will be included the administrative record.

Responses to USEPA Comments

Note: All written comments from the USEPA, Region IX concerned recommended revisions to the November 2001 staff report. The Lahontan Regional Board does not plan to produce a revised staff report. The responses below will become part of the record of the State Board's Section 303(d) list update process.

Comment: The USEPA stated that "naturally impaired" waters must be listed unless the Regional Board has exempted natural sources exempted in its approved water quality standards.

Response: Regional Board staff's rationale for recommending delisting for "naturally impaired" waters is outlined in the staff report. The requirement to develop TMDLs applies to water bodies impaired by "pollutants," and the definition of pollutants in the Clean Water Act references constituents *discharged* to water. (The USEPA's "California Toxics Rule" also applies specifically to toxic *pollutants* rather than all ambient toxic chemicals.) A discharge implies a human, rather than a natural cause. Regional Board staff believe that salts and trace elements coming entirely from natural sources are not pollutants requiring listing and TMDL development under Section 303(d). It may be

Table 1. List of Written Public Comments

DATE	PARTY SUBMITTING COMMENTS	SUBJECT	R*
12/5/01	U.S. Fish and Wildlife Service	Information request, mercury in Walker River watershed.	Yes
12/6/01	Susanville Consolidated Sanitary District	Jensen Slough, Susan River	Yes
12/11/01	Caltrans District 3	Tahoe Basin streams, Susanville HU	Yes
12/12/01	Eastern Sierra Advocates Network	Information request and address change	Yes
12/12/01	David Senesac	Upper Silver Creek watershed, Carson River Basin	Yes
12/15/01	Sue Burak	Mammoth Creek	Yes
12/18/01	Surprise Valley Watershed Group and Surprise Valley Resource Conservation District	Upper, Middle, and Lower Alkali Lakes; Mill Creek	No
12/19/01	IMC Chemicals, Inc.	Searles Lake	No
12/19/01	Dennis Cron, Town of Apple Valley	Request for Extension of Comment Period	Yes
12/20/01	Alpine County Board of Supervisors	Carson River watershed	No
12/21/01	City of Hesperia	Mojave River	No
12/21/01	Carson Water Subconservancy District	Carson River watershed	No
12/21/01	Los Angeles City Attorney (for Department of Water and Power)	Haiwee and Tinemaha Reservoirs	No
12/21/01	James Swinehart	Streams draining Warner Mountains	No
12/26/01	Mojave Water Agency	Request for information	Yes
12/26/01	Victor Valley Wastewater Reclamation Authority	Mojave River	No
12/27/01	South Tahoe Public Utility District	Carson River watershed	No
12/27/01	Tahoe Regional Planning Agency (TRPA)	Lake Tahoe Basin streams	No
12/27/01	Los Angeles County Sanitation Districts	Little Rock Reservoir, etc.	No
12/28/01	Mojave Water Agency	Mojave River	No
12/28/01**	Owens Valley Indian Water Commission	Keough Hot Springs	No
12/31/01	Nevada Division of Environmental Protection	Clarification of statement in TRPA comments	No
1/9/02, 1/16/02	Deirdre Flynn	Pathogens, Lake Tahoe Basin streams	Yes
1/16/02	U.S. Environmental Protection Agency, Region IX	Listing/delisting criteria and other comments on staff report	No
1/24/02	Ed G. Grimly	Haiwee Reservoir	Yes

* This column indicates whether a given set of written comments received a separate written response. Copies of separate responses are included in the appendix to this document.

**The January 28, 2001 date in this letter was apparently a typographical error.

appropriate to consider these chemicals “stressors” for purposes of Section 305(b) assessment.

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) recognizes that the natural water quality of some surface waters may exceed the narrative water quality objectives contained in Chapter 3. The following quotations from the Basin Plan apply to naturally impaired waters:

Page 3-2, under “prohibited discharge” heading:

“After application of reasonable control measures, ambient water quality shall conform to the narrative and numerical water quality objectives included in this basin plan. When other factors result in the degradation of water quality beyond the limits established in these water quality objectives, controllable human activities shall not cause further degradation in either surface or ground waters.”

Page 3-13, under “General Direction Regarding Compliance with Objectives” heading:

“It is not feasible to cover all circumstances and conditions which would be created by all discharges. Therefore, it is within the discretion of the Regional Board to establish other, or additional direction on compliance with objectives of the Plan.”

Page 3-14, second paragraph under “Nondegradation” heading:

“...background water quality concentrations (the concentrations of substances in natural waters which are unaffected by waste management practices or contamination incidents) are appropriate water quality goals to be maintained.”

Page: 3-17, under “Application of Narrative and Numerical Water Quality Objectives to Wetlands” heading: *“However, the Regional Board recognizes, as with other types of surface waters such as saline or alkaline lakes, that natural water quality characteristics of some wetlands may not be within the range for which the narrative objectives were developed. ...As with other types of surface waters, such as saline or alkaline lakes, natural water quality characteristics of some wetlands may not be within the range for which the criteria [freshwater aquatic life criteria in the USEPA’s Quality Criteria for Water-1986] were developed.”*

The USEPA’s 1997 guidance for establishing site specific aquatic life criteria equal to natural background levels provides that: *“For aquatic life uses, where the natural background concentration for a specific parameter is documented, by definition that concentration is sufficient to support the level of aquatic life expected to occur naturally at the site absent any interference by humans.”* Under this interpretation, waters with natural high salinity and trace element concentrations should not be considered impaired for aquatic life uses, even if these constituents exceed the levels of aquatic life criteria.

Nine of the "naturally impaired" water bodies in question are proposed for delisting because the Regional Board has adopted Basin Plan amendments to remove potential Municipal and Domestic Supply (MUN) beneficial uses, and to remove the conflicts with drinking water standards on which the initial listings were based. These amendments have received state agency approvals and are currently under review by the USEPA. They may be approved and in effect before a final decision is made on California's 2002 Section 303(d) list.

During FY 1999-2000, the Lahontan Regional Board had funding to develop TMDLs for an additional nine "naturally impaired" waters. The goals were to document that salts and trace elements in these waters come entirely from natural sources and to adopt Basin Plan amendments allocating all constituent "loads" to natural sources. (It would be difficult or impossible to reduce natural loads from volcanic, geothermal, or evaporative sources to ensure attainment of drinking water standards *within* these water bodies, although domestic supplies taken from waters such as Hot Creek at Mammoth can be treated before use.) In discussions on the format for the Basin Plan amendments, USEPA staff subsequently expressed the opinion that TMDLs were not appropriate for these waters. The USEPA later withdrew federal funding for development of these TMDLs.

If the USEPA decides to retain "naturally impaired" waters on the Section 303(d) list, Regional Board staff will recommend that they be assigned very low priorities for TMDL development. Additional clarifying language may be inserted into the Basin Plan to allow delisting of these waters during a later list update cycle.

Comment: The USEPA comments requested that the staff report be revised to show how the Regional Board will monitor and assess the water bodies on the "watch list" and to provide a schedule for monitoring and assessment.

Response: Regional Board "watch lists" are not currently official components of California's Section 303(d) submittal to the USEPA. They are unofficial lists designed to focus state and federal attention on the need for additional resources for monitoring and assessment. (Current resources are extremely limited, and it will not be possible to monitor all waters on the watch list by 2004.) The Lahontan Region's watch list will be considered in preparation of annual workplans for the region's "SWAMP" monitoring program, and annual updates of the Watershed Management Initiative (WMI) Chapter. The list may also be brought to the attention of watershed stakeholders interested in monitoring and assessment. Based on the availability of resources and the nature of monitoring results, Regional Board staff will evaluate the watch list and consider 303(d) listing or removal from the watch list for specific waters as appropriate during the next list update cycle in 2004.

Comment: The USEPA asked that the staff report's discussion of listing criteria be revised to show how Regional Board staff assessed attainment of narrative water quality objectives such as "no toxics in toxic amounts."

Response: Some waters were recommended for listing based on violations of narrative objectives (e.g., Searles Lake for violations of objectives related to petroleum hydrocarbon discharges and various streams for violations of the regionwide narrative objective for fecal coliform bacteria). Many of the narrative water quality objectives in the Lahontan Basin Plan are related to protection of human health and aquatic life uses. Staff's experience with interpretation of narrative objectives in relation to TMDL development confirms that it can be a very difficult process. There was insufficient staff time available for an exhaustive literature review on criteria for protection of aquatic life uses during the development of the recommendations of update of the Section 303(d) list. Available numerical data for waters of the Lahontan Region were evaluated against the human health and aquatic life criteria summarized in the Central Valley Regional Board's *A Compilation of Water Quality Goals* and other summary criteria documents such as the California Office of Environmental Health Hazard Assessment's (OEHHA's) *Public Health Goals for Chemicals in Drinking Water* for specific chemicals. These criteria are largely concerned with toxic substances. Most waters in the Lahontan Region with recent ambient monitoring data for toxic substances (e.g., streams receiving acid drainage from the Leviathan Mine) are already Section 303(d) listed.

The Regional Board is sponsoring ongoing benthic macroinvertebrate studies by the University of California Sierra Nevada Aquatic Research Laboratory to define reference conditions in central Sierra streams and provide the basis for development of "biocriteria" objectives. Until these data and similar data for other surface waters of the region become available, assessment of aquatic life use support will remain a difficult process.

Comment: The USEPA notes the recommendation that water bodies not be listed based only on fish tissue concentrations of toxic substances from the Toxic Substances Monitoring Program (TSMP). The comment states that water bodies must be listed if TSMP tissue concentrations exceed the Maximum Tissue Residue Level (MTRL) criteria derived by the California Office of Health Hazard Assessment (OEHHA).

Response: Regional Board staff continue to believe that TSMP sample numbers for waters of the Lahontan Region are too small to support the conclusion that human fish consumption uses are impaired. Because sampled game fish may be hatchery plants, it is also possible that toxics in fish tissue come from the hatchery environment rather than from ambient waters. In staff's opinion, unless sample numbers are large, TSMP data exceeding MTRLs should be viewed as alerts that further monitoring is needed, rather than conclusive evidence of impairment.

The introduction to the State Board's 1982 annual report on TSMP results (pages 1-2) states:

"The reader is cautioned that there is no known definitive relationship between concentrations of toxic substances observed in tissue samples of fish and actual concentrations in the water itself."

... The reader is further cautioned that, because of limited program funding the numbers of samples obtained and analyzed at each station are generally too small to provide a statistically sound basis for making definitive statements on toxic substance concentrations. The values reported herein should be accepted as indicators of relative levels of toxic pollution in water, not as absolute values. In this sense, trends over time and comparison to statewide mean values of a toxic substance in a particular species provide an indication of areas where fish are evidently accumulating concentrations which are above "normal" based on past years' data."

Although statewide mean tissue concentrations for individual species could be computed from TSMP data, the State Board has concentrated on reporting "elevated data levels," the 85th and 95th percentiles of all samples collected statewide for freshwater and marine fish categories, within which data for multiple species are lumped. Because Regional Boards tend to locate TSMP sampling stations in areas with suspected problems, species-specific means based on statewide TSMP data would not necessarily define "normal" conditions.

The OEHHA is the state agency with responsibility to determine whether fish tissue concentrations of toxic substances are so high that advisories regarding fish consumption should be issued. The OEHHA has not, to Regional Board staff's knowledge, issued any fishing advisories in the Lahontan Region, even for waters where tissue samples exceeded MTRLS. Current advisories are available online at <http://www.oehha.ca.gov/fish/general/99fish.html>. The OEHHA's report on the use of TSMP data to develop fishing advisories for largemouth bass in Lake Pillsbury in Lake County repeats the assertion in TSMP annual reports that "Because the intent of the program is to evaluate water quality trends, the sampling design is not planned to provide data for human health evaluation." However, in the case of Lake Pillsbury, the OEHHA used TSMP data because repeated samples over a number of years were available. The report emphasizes the need for sufficient sample sizes for a particular species. In the case of Lake Pillsbury, OEHHA used 6 composite samples (of 3-4 individuals each) collected between 1991 and 1993, and 12 individual large mouth bass collected between 1993 and 1995. The Lake Pillsbury study is online at: <http://www.oehha.ca.gov/fish/pdf/adv4lkipill.pdf>.

There has not been sufficient time for an intensive scientific literature review on acceptable sample numbers for statistical significance in fish tissue studies. However, one paper (Anderson *et al.*, 2001) used tissue from 20 individuals of a given species from each of two reservoirs to draw conclusions about statistically significant tissue concentration differences related to treatment with the algicide copper sulfate.

Inspection of sample numbers in the TSMP database shows that samples collected in the Lahontan Region are on the low end of the spectrum (about 1-7 adult fish per composite sample). In some other regions, samples have included more than 50 individuals. Donner Lake and Stampede Reservoir are being proposed for delisting. The available data for Donner Lake are single composite samples of 7 Kokanee salmon and 6 lake trout in different years. Stampede Reservoir was listed on the basis of one composite sample of 7

Kokanee salmon. A few other TSMP samples with similar small sample numbers exceed OEHHA's recently revised mercury MTRL (0.37 ppb). For example, *one* Sacramento perch caught in June Lake in the Mono Basin had a mercury concentration of 0.84 ppb. Regional Board staff did not recommend listing for these waters; however, they have been placed on the watch list for further sampling.

As indicated in the November 2001 staff report, Lahontan Regional Board staff did not establish data quantity thresholds for listing to be considered. However, in its January 9, 2002 action, the Regional Board agreed with staff's amended proposal not to list a segment of the Mojave River based upon 5 samples. Listing based on one or two composite TSMP samples does not appear to be warranted.

Comment: The USEPA states that the staff report should address whether listing for border waters such as Lake Tahoe, the Walker River, and the Truckee River, is consistent with listing by the State of Nevada.

Response: During development of recommendations for border waters, Regional Board staff reviewed Nevada's online monitoring data for stations at or near the state line. Nevada has not yet released its 2002 recommendations for Section 303(d) listing and is still developing listing criteria. (See <http://ndep.state.nv.us/bwqp/303notice.pdf>) The Nevada Division of Environmental Protection (NDEP) was sent a notice of the availability of Lahontan Regional Board staff's draft recommendations. No written comments from Nevada were received, other than an email clarification of Nevada's iron standard in response to a comment by the Tahoe Regional Planning Agency.

Nevada's 1998 Section 303(d) list is available on the Internet at the following address: <http://ndep.state.nv.us/bwqp/nv303d98.pdf>). Notes in this document for many border waters indicate that exceedance of standards was probably due to high flows in 1996-1997 (particularly the January 1997 flood) and that additional monitoring is desirable to confirm impairment. Numerical water quality standards and historic listing criteria in California and Nevada are different. Nevada has historically listed waters if more than 25% of all measurements for a given parameter exceed Nevada standards. California's standards are generally expressed as annual means, and exceedance of the mean value in 25% of the samples would not necessarily result in exceedance of the standard. Nevada's "state line" stations are not necessarily located at the state line or representative of California conditions; the East Fork Carson River "state line" monitoring station is 12-13 miles downstream. Regional Board staff do not believe that inclusion of a water body on Nevada's 1998 Section 303(d) list should be grounds for listing in California in 2002 unless recent data are available to confirm the existence of impairment at the state line.

Discussions regarding listings and water quality standards with NDEP staff and the NDEP Administrator are ongoing. NDEP has indicated its intention to list Lake Tahoe as impaired for clarity. This proposed listing will bring consistency to the two states' listing of Lake Tahoe.

Responses to General Issues in Public Comments

Comment: Several comment letters and emails were received after the December 28, 2001 deadline for written comments or after the Regional Board's action on draft recommendations (Los Angeles County Sanitation Districts, Deirdre Flynn, USEPA, Ed G. Grimly).

Response: These written comments will be transmitted to the State Board as part of the administrative record of the list update process. Issues in these comments are summarized and responded to below.

Comment: Several parties stated that they (or other stakeholders) had not been given adequate notice of the review process for the Section 303(d) list update, or adequate time for review and comment, and some requested that the deadline for comments be extended (City of Hesperia; Town of Apple Valley; Alpine County Board of Supervisors; Carson Water Subconservancy District; Deirdre Flynn; Victor Valley Wastewater Reclamation Authority).

Response: Regional Board staff's efforts to provide widespread notice of the list update process are described in the "Summary of Public Participation Process" section above. Some of these comments were from local governments and utilities included on one or more of the larger mailing lists used in the March 2001 mailing list update. Apparently these parties did not return forms to be included in the focused Section 303(d) mailing list.

It was not possible to extend the public review period before Regional Board action because of the State Board's then-proposed schedule for the statewide list update process. The Regional Board's mailing list and copies of comments are being provided to State Board staff, and all parties will have the opportunity to submit written comments directly to the State Board.

Comment: Some comments questioned whether specific water bodies are jurisdictional "waters of the United States," and, therefore, whether they are subject to the Clean Water Act and appropriate for inclusion on the Section 303(d) list (Legal Division, Los Angeles Department of Water and Power; Los Angeles County Sanitation Districts; IMC Chemicals, Inc.).

Response: Following the U.S. Supreme Court's "SWANNC" decision (*Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* [2001] 531 U.S. 159, 121 S. Ct. 675), the status of a number of internally drained or isolated intrastate water bodies in the Lahontan Region as waters of the U.S. has yet to be determined. The SWANCC decision was concerned primarily with the "migratory bird rule." Under the decision, isolated waters can no longer be considered waters of the U.S. on the sole basis of use by migratory birds. However, some isolated waters can be

considered waters of the U.S. on the basis of other criteria such as navigability and/or another connection with interstate commerce. The Lahontan Regional Board has recommended that the waters in question be included on the 2002 Section 303(d) list. If, in the future, a determination is made by an appropriate legal authority that any of these waters is not a water of the U.S., it will be removed from the list.

Comment: A number of comments were received on the potential adverse socioeconomic impacts of listing. Examples include concerns about impacts on the use of imported water to support new development in the Mojave River watershed, impacts on the livestock grazing industry in the Lake Tahoe Basin, impacts on tourism in the Carson River watershed, and impacts on use of iron compounds in stormwater treatment in the Lake Tahoe Basin (City of Hesperia; Deirdre Flynn, Alpine County Board of Supervisors, Caltrans District 3).

Response: Section 303(d) listing may have indirect socioeconomic impacts by affecting conditions in permits for discharges to listed waters and by leading to new pollution control requirements in TMDL implementation programs. However, the Section 303(d) list update process is a federally-mandated priority-setting exercise that does not currently require formal environmental or socioeconomic impact analysis at either the state or federal level. The purposes of the list update process are assessment of technical information and data to determine whether water quality standards are being attained and priority setting for TMDL development. The appropriate forums for consideration of socioeconomic impacts are the permitting processes for specific discharges to listed waters and the development and public review of TMDLs and TMDL implementation programs. Socioeconomic analysis is required under the California Water Code and the California Environmental Quality Act (CEQA) for Basin Plan amendments to incorporate TMDLs. The State Board is developing formal policy language on criteria to be used in the 2004 list update process; that policy will also undergo review under CEQA.

Comment: Several comments recommended that additional monitoring or assessment be conducted before listing is considered for specific waters (Alpine County Board of Supervisors, South Tahoe Public Utility District, Carson Water Subconservancy District, City of Hesperia, Mojave Water Agency).

Response: Regional Board staff's listing considerations related to data quality and quantity are summarized in the November 2001 staff report. Further information on data quantity is presented in fact sheets for specific water body pollutant combinations. As indicated in the staff report, recommendations were based on case by case evaluations. After review of public comments on the Mojave River, Regional Board staff decided to withdraw recommendations for new listings because sample numbers were relatively small. In staff's opinion, sample numbers for other water bodies proposed for listing are adequate to support the recommendations. Additional monitoring may be done before or during TMDL development.

Comments: A number of comments supported revisions of water quality standards for specific water bodies (Tahoe Regional Planning Agency, Caltrans District 3, Alpine County, South Tahoe Public Utility District, Carson Water Subconservancy, Legal Division of Los Angeles Department of Water and Power, IMC Chemicals, Inc., Los Angeles County Sanitation Districts).

Response: The fact sheets and tables in the staff report identify waters where revisions in water quality standards may be pursued as an alternative to developing TMDLs. Some of the other changes in standards advocated in written public comments may not necessarily be appropriate, or may not be permissible under federal regulations. However, the Section 303(d) list update process is not the best forum for a detailed debate on the adequacy of existing standards.

The Regional Board periodically conducts a formal review process to consider needs for revisions of water quality standards. (The process also affirms those standards that are appropriate and require no revision.) Information on continuing or new water quality problems may come from monitoring data, compliance inspections, discharger reports, and public suggestions. Changes in state or federal laws and regulations may also dictate the need for Basin Plan amendments. In formulating draft recommendations, Regional Board staff will estimate the time and staff resources required to investigate and prepare Basin Plan amendments to deal with each water quality issue. The priority-setting process involves circulation of staff recommendations for plan changes for public review, staff responses to written comments, a noticed public hearing, and Regional Board adoption of an updated priority list of Basin Plan amendment topics, and workplans for specific topics. The Regional Board's priority list and workplan(s), and the administrative record of the process are transmitted to the State Board, and made available to the USEPA. (This priority-setting process is not a regulatory action.)

Schedules for development of specific Basin Plan amendments depend on factors such as the availability of planning staff time and the need to collect additional monitoring data. The parties who requested changes in standards during the 2002 Section 303(d) list update process will be notified of the next scheduled Basin Plan review/priority setting process.

Comment: Some letters and emails requested further information on a specific watershed, the listing process, or the TMDL development process, or provided information, but did not include comments on staff's recommendations for specific water bodies (U.S. Fish and Wildlife Service; Eastern Sierra Advocates Network; Mojave Water Agency).

Response: Individual written responses, containing the requested information, were sent. Copies of these responses are included in the appendix to this document.

Responses to Public Comments Related to Specific Waters

Note: The summaries of comments and responses below are grouped by watersheds in north-to-south order.

Surprise Valley Watershed

Comment: An email from James Swinehart summarized personal observations that Mill Creek, a currently-listed stream in the eastern Warner Mountains (Modoc County), does not appear to be different condition with respect to sedimentation/siltation than neighboring Warner Mountains streams. Mr. Swinehart suggested that either Mill Creek should be delisted, or that most if not all of the other creeks on the east side of the Warner Mountains should be listed.

Response: Mill Creek was listed for sedimentation based on qualitative information from the U.S. Forest Service, Modoc National Forest, on stream conditions in the late 1980s. To Regional Board staff's knowledge, no recent quantitative monitoring data on Mill Creek or other Warner Mountains streams are available to facilitate listing or delisting. A number of these streams are known to have experienced severe erosion during the January 1997 flood incident. When monitoring data become available, listing may be considered for other Warner Mountains streams, or Mill Creek may be delisted.

Comment: An email from Matt Brown, facilitator for the Surprise Valley Watershed Group and watershed coordinator for the Surprise Valley Resource Conservation District expressed support from both groups for staff's recommendations for Upper, Middle and Lower Alkali Lakes, and Mill Creek. The email noted that the District is seeking funds to study and address any water quality problems in Mill Creek.

Response: The comments are noted; the Regional Board's January 9, 2002 action approved staff's recommendations regarding these water bodies. Regional Board staff expect to work with the District through the Board's nonpoint source, monitoring, and TMDL programs to evaluate and address water quality problems in Mill Creek.

Comment: See the comment from Sean Penders of Caltrans District 3 regarding naturally impaired waters under "Susan River Watershed" below.

Response: See the response below and the separate email response in the appendix.

Susan River Watershed

Comment: A letter from the Susanville Consolidated Sanitary District noted that the Susan River is currently Section 303(d) listed and offered the District's bioassay data for its outfall for use in TMDL development. The outfall is tributary to an agricultural ditch; the ditch is tributary to Jensen Slough, a tributary of the Susan River.

Response: TMDL development for the Susan River is tentatively scheduled to begin in 2004. A separate response was sent stating that Regional Board staff will contact the District for the latest bioassay data when TMDL development begins (see the appendix).

Comment: Sean Penders of Caltrans District 3 questioned why the "naturally impaired" waters in the Surprise Valley and Susan River watersheds, now recommended for delisting, had been listed at all. He also asked why some apparently "naturally impaired" waters have TMDL end dates.

Response: As explained in the staff report and in a separate email reply to Mr. Penders, previous state and federal guidance directed the listing of all surface waters in violation of standards regardless of the source of impairment. This guidance led to listing of waters with high levels of salinity and/or trace elements (e.g., arsenic) from natural sources such as geothermal and volcanic activity, or evaporative concentration over geologic time. Regional Board staff are recommending delisting for waters where the "impairment" is entirely natural; see the response to the USEPA's comments above. Some currently listed waters in the Honey Lake watershed are affected primarily by natural geothermal sources of trace elements; however, the situation is complicated because they are also affected by discharges from geothermal power plants. These waters are recommended for retention on the Section 303(d) list, with tentative end dates for TMDL development, pending further study.

Lake Tahoe Watershed

Comment: Comments were received from the Tahoe Regional Planning Agency (TRPA) and Sean Penders of Caltrans District 3 regarding the proposed listing of several streams in the Lake Tahoe Basin for violations of the iron standard. TRPA supported the development of a uniform protective iron standard for all Lake Tahoe tributaries in California and Nevada. TRPA also noted that chloride standards might need revision but that potential sources might be anthropogenic and subject to decrease over time. Sean Penders of Caltrans expressed concern about the impacts of listing in relation to the use of iron in several stormwater treatment methods and the hope that revision of standards would permit delisting. Randy Pahl of the Nevada Division of Environmental Protection provided clarification on Nevada's iron standard in response to TRPA's comments..

Response: (A separate email response, dated 12/12/01, was sent to Sean Penders of Caltrans.) As stated in the water body fact sheets for the stream in question, Regional

Board staff intend to pursue revision of water quality objectives for iron and chloride in tributaries of Lake Tahoe. The current California standards are based on data collected during the early 1970s for tributaries with disturbed and undisturbed watersheds and summarized in TRPA's 1977 draft "Section 208" water quality plan (California State Water Resources Control Board, 1980). Regarding impacts of listing on stormwater treatment, see the response regarding socioeconomic impacts in the "General Issues" section above. No technical response to the clarification of Nevada's standard is necessary.

Comment: Sean Penders of Caltrans District 3 requested information on the potential sources of bacteria loading to the Lake Tahoe Basin streams proposed to be listed for "pathogens", and asked whether the pathogens were natural. Deirdre Flynn asked why cattle were being blamed as the source of the pathogens when monitoring showed high levels of coliform bacteria in Big Meadow Creek when cattle were not present.

Response: As indicated in the water body fact sheets, monitoring shows the highest numbers of bacteria at times and locations when livestock are present. However, other sources including humans, dogs, pack animals, and wildlife (including beavers) may contribute to total bacteria loading. (In the Lake Tahoe Basin, there is debate as to whether beavers are natural or introduced wildlife.) Ms. Flynn's January 9 comments were based on a media report, rather than on review of the fact sheets. Staff sent separate email responses to both parties and copies of the staff report and relevant fact sheets to Ms. Flynn.

Comment: Deirdre Flynn's comments expressed concern about the impacts of listing Tahoe Basin streams for pathogens on the Meiss Grazing Allotment permit.

Response: See the discussion of socioeconomic impacts of listing in the "General Issues" section, above.

Carson River Watershed

Note: Most of the comments from Carson River watershed stakeholders centered on the proposed listing of three different segments of the West Fork Carson River for several different pollutants.

Comment: Comments from the Alpine County Board of Supervisors oppose the continued listing of Indian Creek Reservoir, note that it was not discussed in the November 2001 staff report, and ask that Alpine County's May 2000 letter be incorporated into the record.

Response: At the direction of State Board staff, Regional Boards did not prepare fact sheets or other detailed justification for retaining currently listed water bodies on the Section 303(d) list. If review of available information and data showed that these waters

are still violating standards, or if no recent data were available, listed waters were generally recommended for retention. (Exceptions include the "naturally impaired" waters discussed above.)

Copies of Alpine County's May 8 and May 10, 2000 letters (in response to a revised Notice of Preparation of an environmental document for the Indian Creek Reservoir TMDL), will be included in the record. The May 8, 2000 letter from the Board of Supervisors was concerned with socioeconomic impacts of TMDL development. The May 10, 2000 letter from the Alpine County Department of Public Works questioned whether the reservoir should be listed and whether TMDL implementation would be technically and economically feasible. It also recommended that a technical advisory team sensitive to the interests of the various stakeholders be developed.

Regarding socioeconomic impacts, see the response under "General Issues" above. The basis for listing and the technical feasibility of implementation were addressed in Regional Board technical staff reports for the Indian Creek Reservoir TMDL. The first preliminary draft of the TMDL was reviewed by an outside scientific peer reviewer, and Regional Board staff have held meetings with stakeholders and their technical staff and consultants throughout the TMDL development process.

Throughout the TMDL development process, Alpine County has argued that Indian Creek Reservoir should not be listed because it supports a recreational fishery based on annual trout planting, even though it is eutrophic. However, there is clear evidence of impairment. Ambient concentrations of total phosphorus in the reservoir are about twice the numerical water quality objective in the Lahontan Basin Plan. That objective (0.04 milligrams per liter total phosphorus) dating from 1975 and based on the quality of tertiary wastewater effluent) is, in turn, about twice as high as the current scientific literature threshold between mesotrophic and eutrophic conditions and the U.S. Environmental Protection Agency's currently recommended phosphorus criterion (8.75 micrograms per liter or 0.00875 milligrams per liter) for lakes and reservoirs in the "ecoregion" that includes the Sierra Nevada. (Nutrient criteria are discussed at <http://www.epa.gov/waterscience/criteria/nutrient/ecoregions/index.html>.) The current water quality objective for phosphorus is clearly inadequate to protect aquatic life and recreational uses of the reservoir. A number of other water quality standards (including the objective for dissolved oxygen) are being violated, and continued listing is obviously justified. Revised draft Basin Plan amendments to incorporate a TMDL and TMDL implementation plan for Indian Creek Reservoir are currently expected to come before the Lahontan Regional Board in July 2002. Once the standards have been attained, the reservoir may be delisted.

Comment: "Alpine County contends that no data was provided or reference material cited providing Regional Board staff evaluation of water for inclusion in the proposed Watch List. Alpine County requests that the decision to add water bodies to the list be performed only when compelling reasons to place a well defined water body reach thresholds based on current data." The county also contends that water bodies should not

be placed on the watch list until formal guidance for the listing/delisting process is available.

Response: Alpine County may be confusing the watch list with the Section 303(d) list. References for the watch list are included in the November 2001 staff report; see the note in italics under the "References" heading on page 13. The watch list is comprised of waters having some evidence of impairment but requiring further study to determine whether Section 303(d) listing is justified. The "watch" list includes waters identified as "threatened" or "partially supporting" beneficial uses in earlier Section 305(b) water quality assessment updates. (The Clean Water Act Section 305(b) reporting process has historically been coordinated with Section 303(d) list updates in California.) The technical references used in earlier Section 303(d)/Section 305(b) assessments are summarized in earlier Regional Board staff reports (from 1989, 1991, 1994 and 1997). The "watch list" is not currently a formal part of California's required Section 303(d) list submittal to the USEPA and does not trigger TMDL development or have other regulatory consequences. It will serve primarily to identify needs for further monitoring and assessment. Identification of such needs is not dependent on the development of formal listing/delisting criteria.

Comment: Alpine County expresses concern about the potential impacts of Section 303(d) listing of the West Fork Carson River on its tourism-based economy.

Response: See the discussion of the socioeconomic impacts of listing under the "General Issues" heading above. Other Lahontan Region waters that support tourist economies (including Indian Creek Reservoir in Alpine County and Lake Tahoe, the Truckee River, and Crowley Lake) have been Section 303(d)-listed for years, with no known adverse impacts on tourism.

Comment: Several comments recommended increased cooperation between the Regional Board and other stakeholders, including the Alpine County watershed group, in assessment, monitoring, and standards setting (Alpine County Board of Supervisors, South Tahoe Public Utility District, Carson Water Subconservancy District).

Response: The Carson River watershed is one of the Regional Board's five currently designated "Watershed Management Initiative" watersheds, and staff are committed to work with stakeholders in all of the activities above.

Comment: The Alpine County Board of Supervisors and the South Tahoe Public Utility District criticized the data (and staff's evaluation of the data) used in recommendations for listing in the West Fork Carson River watershed. Alpine County pointed out that some violations "were barely over the objective" and stated that data were not reviewed for data quality.

Response: The data in question have been collected by the South Tahoe Public Utility District (STPUD) at approximately monthly intervals, for most parameters, beginning in 1980. (See the separate response below on frequency of pathogen samples.) STPUD's

field collections and laboratory analyses are done using Quality Assurance/Quality Control procedures acceptable to the Regional Board. The purpose of STPUD's data collection (discharger self monitoring) has no bearing on its use in the listing process. Federal regulations direct states to use all "existing and readily available" information in listing decisions. STPUD's long term, quality-assured dataset is probably one of the better sets available for use in Section 303(d) assessments statewide. Sampling more often than monthly would of course be useful; however, some Regional Boards are currently planning to adopt or revise standards based on the results of *quarterly* water quality monitoring.

Staff's analysis of the data for chemical parameters is explained in the staff report, fact sheets, and in a June 2001 Regional Board internal memo (cited in the fact sheets) containing calculations of compliance with water quality objectives expressed as "means of monthly means." Staff recognized that some of the violations of standards were relatively slight; however, they are violations.

If funding becomes available, more precise monitoring will be done as the basis for TMDL development and/or update of water quality standards in the West Fork Carson River watershed. This monitoring would be used to determine the extent of impairment in each listed reach, to quantify the range of natural variability in water quality, and to identify sources of pollutants, including natural sources.

Comment: Alpine County requested that the West Fork Carson River and its tributaries be placed on the watch list and that a decision on listing be deferred for two years until completion of a recently funded study by the Alpine County Watershed Group.

Response: The watershed group's grant is for watershed assessment, including a fluvial geomorphological assessment, a riparian corridor survey, and setup of a Geographic Information System (GIS) database. This project will help to assess watershed health and may serve as a foundation for future planning and watershed projects. However, it will not include any ambient water quality monitoring and will, thus, not provide any additional information for use in evaluating compliance with numerical water quality objectives. As outlined above, currently available data are considered adequate to demonstrate that water quality objectives for some parameters are being violated and that the West Fork Carson River should be listed for these parameters during the 2002 cycle. If additional data become available by 2004 to show that the water quality objectives are in attainment by that time, delisting will be recommended.

Comment: Several stakeholders (Alpine County Board of Supervisors, Carson Water Subconservancy District, STPUD) supported Regional Board staff's intent to consider revision of standards as an alternative to development of TMDLs for some of the water body-pollutant combinations recommended for listing in the Carson River watershed. They also commented that standards should be reviewed and/or revised before listing is done. Alpine County requested information or a schedule for the standards review process, and expressed interest in review of the designated beneficial uses for Indian Creek Reservoir. The County also implied that the existing water quality objectives for

the West Fork Carson River are too stringent because they “are similar to those applied in the Tahoe watershed rather than other eastern Sierra standards (i.e., California West Fork Carson River Nitrogen Objectives as compared to Carson River Downstream Nevada standards, Walker River standards).” The STPUD also commented that revised standards should be based on more precise monitoring data.

Response: Decisions to list or delist water bodies must be based on violations of existing water quality standards, even if those standards are believed to be in need of revision. See the discussion of priority setting for revision of standards under “General Issues” above. If resources are available, more precise monitoring data may be collected as the basis for revisions of standards. It is unlikely that the currently designated aquatic life and recreational uses of Indian Creek Reservoir can be removed, since they have been “existing” uses of the reservoir since 1975, the effective date of the federal water quality standards regulation. Federal regulations do not permit removal of existing uses. Regarding the comparability of water quality objectives for the West Fork Carson River with water quality standards in Nevada and in the Walker River watershed, some of the latter standards may reflect degradation due to agricultural runoff and may not be protective of beneficial uses. See the introduction to the group of fact sheets for the East and West Walker River Hydrologic Units entitled “Notes on Numerical Water Quality Objectives for Nitrogen and Phosphorus in the East Walker River Watershed.” The eastern Sierra Nevada and the Great Basin are also different nutrient “ecoregions,” and differences in natural nutrient concentrations and ecosystem processes may occur for this reason.

Comment: The STPUD commented that the Regional Board should specifically evaluate whether the application of technology-based effluent limitations, Best Management Practices (BMPs), and other existing pollution controls is likely to bring waters of the Carson River watershed into compliance with standards within the next two years and therefore, void the need for listing.

Response: Regional Board staff are not aware of any specific “new” control measures recently implemented, or proposed for implementation within the next two years, that would lead to attainment of standards within the near future and, thus, justify delisting. Measures implemented under STPUD’s pending Alpine County facilities plan, ongoing watershed planning efforts, the CERCLA remediation programs for Monitor Creek and the Leviathan Mine, and the California Nonpoint Source Management Plan may lead to attainment of some standards *after* 2004, and delisting may be possible during a later update cycle.

Comment: The STPUD believes that the extent to which natural background conditions and atmospheric deposition contribute to impairment should be documented *before* listing is considered. “Alpine County pointed out that water quality is potentially affected by natural perturbations such as fire, flood, and erosive bank impacts.” The Carson Water Subconservancy District commented that the phosphorus standards for the West Fork Carson river are based on a limited dataset and that sources of phosphorus may be largely natural.

Response: Based on staff's knowledge of past and present land uses, and of other potential sources of pollutant loading in the Carson River watershed, it is not possible to conclude that violations of water quality objectives are due entirely to natural sources and that affected waters should not be listed for that reason. The contribution of natural sources and atmospheric deposition to violations of standards will be estimated during the development of TMDLs and/or the revision of water quality standards.

Comment: STPUD's comment letter asks that the water body fact sheets be revised to document which of the six listing considerations on page 6 of the November 2001 staff report were used to justify additions to the list.

Response: In all cases, new listings for the Carson River watershed were proposed based on violations of water quality objectives (Listing Consideration # 1 on page 6 of the staff report). The "Evaluation Approach" section of the staff report, beginning on page 9, explains the general procedures used in evaluating data to determine whether standards were being violated. The "Water Quality Standards Not Attained" sections of the fact sheets cite or summarize the applicable water quality standards, and the "Evidence of Impairment" sections summarize the data showing violation of standards.

Comment: Both the STPUD and Alpine County commented that the reaches of the West Fork Carson River proposed for listing are too long and should be subdivided.

Response: The reaches proposed for listing are based on the locations of monitoring stations providing long term data. Water quality measured at Woodfords is not necessarily representative of water quality at the headwaters of the river; however, no recent data are available above Woodfords to facilitate definition of smaller reaches. When better data become available to refine the extent of impairment, Regional Board staff will recommend revision of the Section 303(d) list to include smaller reaches. Monitoring to define pollutant loading in smaller reaches may also be necessary for source analysis during TMDL development.

Comment: The STPUD requested that the analysis of compliance with pathogen objectives be done using all historical data. The Alpine County Board of supervisors stated that the frequency of data collection for listing for pathogens was "insignificant" for purposes of listing.

Response: As noted on page 9 of the staff report, the Section 303(d) assessment, as a whole, focused on data collected since the last assessment cycle began in 1997, and the fact sheets for pathogen listings emphasize data from 2000 and 2001. However, STPUD has collected pathogen data for the West Fork Carson River and Indian Creek since 1980. Inspection of STPUD's data from 1980-1998 (from a printout used in development of the Indian Creek Reservoir TMDL) shows violations of the current narrative water quality objective for fecal coliform bacteria in both streams throughout the historical period. Copies of these data will be included in the reference material transmitted to the State Water Resources Control Board.

Regarding sampling frequency, the water quality objective for fecal coliform bacteria is based on violations within a 30-day period, not on an annual mean or long-term "mean of monthly means." For the Carson River watershed, the most important part of the objective is the provision that no more than 10 percent of all samples collected during any 30-day period shall exceed 40 bacterial colonies per 100 milliliters. If only one sample is collected during a given month and there are more than 40 colonies, this sample is in violation of the objective. The objective does *not* specify that a minimum number of samples (or monthly violations) per year are needed to determine compliance.

Comment: The STPUD requested that the phosphorus content of the West Fork Carson River be considered when developing the TMDL for Indian Creek Reservoir.

Response: Assumptions about phosphorus loading from the West Fork Carson River are included in the current (November 2000) draft TMDL for Indian Creek Reservoir, based on monitoring data from 1999. The justification for the use of data from this year is discussed in the May 2001 "Response to Comments" document for the TMDL and in subsequent correspondence with the Carson Water Subconservancy District. Because of concerns expressed in public comments on the November 2000 draft TMDL, the numeric target for total P concentration in the tributary inflow ditch will be dropped from the revised 2002 draft. The TMDL load allocations (including the allocation to the tributary inflow) are proposed to be expressed as 10 year rolling averages to account for seasonal and annual variability. The TMDL implementation program will involve periodic review of monitoring data and refinement of TMDL numbers, if appropriate.

Comment: The STPUD supports the development of better listing/delisting criteria by the State Board.

Response: Regional Board staff are participating in a statewide workgroup for development of draft policy language on listing/delisting criteria. If approved, this policy will be used in the next (2004) list update cycle. While the new policy may have more specific requirements concerning data quality and quantity, it will probably still require listing when there is clear evidence of standards violations such as those outlined in fact sheets for the West Fork Carson River.

Comment: An email from David Senesac expressed concern, based on personal observations, about the impacts of cattle on water quality and riparian areas in the upper watershed of Silver Creek, a tributary of the East Fork Carson River. (Affected tributaries of upper Silver Creek include Raymond Meadows Creek, Eagle Creek, and Pennsylvania Creek.)

Response: Regional Board staff sent a separate email response, mentioning the Regional Board's authority to regulate livestock grazing to control impacts on water quality and beneficial uses, and its work with the U.S. Forest Service and other stakeholders under the Carson River Watershed Management Initiative. (See the appendix.) Because the

Regional Board currently lacks quantitative monitoring data on the streams mentioned in Mr. Senesac's email, their listing is not being recommended at this time. Listing may be considered in 2004 if supporting data become available.

Walker River Watershed

Comment: Stanley Wiemeyer of the U.S. Fish and Wildlife Service requested information about past mining activity and metals sampling in the Walker River watershed in connection with a USFWS study of mercury.

Response: A separate email response was sent; see the appendix to this response document.

Owens River Watershed

Comment: Sue Burak, leader of a citizen's monitoring group in the Mammoth Lakes area, requested information on "what is required to get Mammoth Creek into the TMDL program" for use in preparation of a grant application for a study on turbidity in the creek.

Response: A separate email response was sent, explaining the Regional Board's turbidity standard and the need for additional monitoring to define natural background turbidity conditions and/or reference aquatic life conditions. See the appendix to this document.

Comment: The Legal Division of the Los Angeles Department of Water and Power (LADWP) submitted comments contending that Haiwee Reservoir should not be considered a water of the United States and, therefore, should be delisted.

Response: See the discussion of the "waters of the United States" issue and the U.S. Supreme Court "SWANCC" decision in relation to listing under "General Issues" above. Regional Board staff believe that Haiwee Reservoir is a water of the United States under criteria (e.g., navigability, interstate commerce nexus related to fishery use) not affected by the SWANCC decision.

Comment: The LADWP stated that Haiwee Reservoir should be delisted on the grounds of "faulty data" and summarized its criticisms of data collected by the California Department of Fish and Game and used as the basis for the Regional Board's (now rescinded) Cleanup and Abatement Order.

Response: Regardless of the quality of the fish tissue data, the LADWP's monitoring data show that total recoverable copper levels in Haiwee Reservoir exceed California Toxics Rule criteria. The reservoir is also in violation of the Regional Board's narrative water quality objective for pesticides, which provides that pesticides shall not be present in

detectable amounts. (While the State Board's emergency, short term NPDES permit for aquatic herbicide use allows discharges in violation of Regional Board objectives and prohibitions, the permit did not repeal these Basin Plan provisions.) The violations of standards are sufficient to warrant continued listing for Haiwee Reservoir until the standards are changed or herbicide applications are modified to ensure attainment.

Comment: The LADWP commented that Haiwee Reservoir should be delisted because there is adequate regulatory oversight of the current copper sulfate application program, because state and federal standards are attained in the drinking water obtained from Haiwee Reservoir, and because there is no "reliable" evidence of impairment of other beneficial uses.

Response: As noted above, the reservoir is in violation of the Regional Board's "no detectable pesticides" water quality objective for ambient surface waters. A control program sufficient to ensure attainment of drinking water standards, but not attainment of the objective, is not grounds for delisting. Regional Board staff are currently drafting revisions to the pesticide objective to specify conditions under which the use of algicides (including copper sulfate) may be permissible in drinking water reservoirs, providing that aquatic life uses are adequately protected.

Comment: The LADWP urged that the Lahontan Basin Plan be amended to revise the beneficial use designations for Haiwee Reservoir, and cited case law indicating that municipal use is a "higher" use than the "right to fish."

Response: See the discussion of priority setting for standards revisions in the "General Issues" section above. The Lahontan Basin Plan does assign not priorities to different beneficial uses *per se*, although protection of the most sensitive use is a consideration in establishing numerical water quality objectives. Criteria for protection of aquatic life uses may be more stringent than drinking water standards. Because Haiwee Reservoir does support aquatic life and has supported a recreational fishery since the mid-1990s, it is unlikely that beneficial uses can be changed to make municipal and domestic supply the *only* designated beneficial use for Haiwee Reservoir.

Comment: The LAWDP concurs with staff's recommendation to delist water bodies in the Mono and Owens Hydrologic Units because the arsenic impairment is natural and there are no "pollutants." The comment states that this decision is supported by case law under the Clean Water Act.

Response: The comment is noted: no technical response is required.

Comment: The LADWP commented that there is inadequate evidence to retain Tinemaha Reservoir on the Section 303(d) list for copper and that it should be placed on the watch list until such evidence is available. The comment also cites Tinemaha

Reservoir's "priority of beneficial uses," implying that municipal use should be considered the highest use for purposes of listing.

Response: The LADWP's routine monitoring data for Tinemaha Reservoir show that total copper levels consistently exceed the California Toxics Rule criteria (established for aquatic life protection). The presence of detectable copper is a violation of the Regional Board's narrative "no detectable pesticides" water quality objective. Both of these violations warrant continued listing. Regional Board staff are currently drafting revisions to the pesticide objective to specify conditions under which the use of algicides (including copper sulfate) may be permissible in drinking water reservoirs, providing that aquatic life uses are adequately protected. Regarding priority of uses, see the response to a similar LADWP comment about Haiwee Reservoir, above.

Comment: The LADWP recommends that waters listed for impairment by flow and habitat alterations should be removed from rather than retained on the Section 303(d) list.

Response: Regional Board staff considered recommending delisting for these waters. However, legal counsel advised that, under the current federal regulations for implementation of Section 303(d), they should be retained.

Comment: The LADWP recommends that listed waters, including Mammoth Creek, having the notation in the summary table of staff recommendations "Needs further study to verify need for TMDL," should be placed on the watch list and that 303(d) listing should take place in a uniform fashion.

Response: Although Regional Board staff agree that uniform criteria for listing and delisting would be desirable, state and federal guidance has changed over time. Currently, more rigorous justification may be required for delisting than for listing. No recent data are available for most of the water bodies with the note cited in the comment. Mammoth Creek was originally listed for elevated metals levels in fish tissue, and the most significant sources of metals are probably the natural volcanic/geothermal sources in the Long Valley Caldera. However, Mammoth Creek is also affected by urban stormwater and is recommended for continued listing until the relative contribution of natural and man-made sources can be ascertained or until monitoring shows lack of impairment by metals.

Comment: A January 24, 2002 email from Ed G. Grimly provided a reference to an online summary of scientific research on arsenic in the Owens River system and questioned why Haiwee Reservoir was not recommended for listing due to increased accumulation of arsenic in the sediment as a result of treatment by the Los Angeles Department of Water and Power (LADWP). (Mr. Grimly sent a similar email to the Regional Board's webmaster on November 15, 2001, shortly before the staff recommendations were released for public review.)

Response: Copies of the comments, and the referenced Internet paper, will be transmitted to State Board staff for consideration in formulation of statewide recommendations for listing. A separate email response to the January 24, 2002 email was sent.

Comment: The Owens Valley Indian Water Commission opposed the proposed delisting of Keough Hot Springs that is based on the grounds that it is naturally impaired. They note that the developed resort pool is chlorinated and may affect the quality of downstream waters. The Commission also asked to be placed on the Regional Board's mailing list.

Response: Regional Board water quality assessment staff have no quantitative data on chlorine or other chemical applications to the resort pool and no information that they affect the water quality and beneficial uses of downstream waters. (Chlorine compounds used as swimming pool disinfectants are unstable at high temperatures, and bromine compounds may be used in hot pools instead.)

In July 2000, the Regional Board adopted Basin Plan amendments to remove the potential beneficial use designation for "Municipal and Domestic Supply" from Keough Hot Springs. These amendments are currently awaiting final USEPA approval. If they take effect, the conflict with drinking water standards that led to listing of the springs will be removed.

The Commission will be placed on the Regional Board's Section 303(d), Basin Plan, and agenda announcement mailing lists.

Searles Lake Watershed

Comment: IMC Chemicals, Inc. (IMCC) states its assumption that listing applies to waters of the state.

Response: As outlined in the staff report, listing is a requirement of the federal Clean Water Act, and applies to waters of the United States. IMCC has contended in other contexts that Searles Lake is not a water of the United States. See the discussion of this matter in the "General Issues" section, above.

Comment: IMCC commented that the data on which staff's recommendations are based "supports the recommended removal of Searles Lake from the Section 303(d) list for salinity, Total Dissolved Solids (TDS) and chlorides."

Response: The comment is noted. No technical response is necessary.

Comment: IMCC's comment letter summarizes its efforts to study and rescue distressed waterfowl at Searles Lake and encloses copies of recent necropsy results, indicating that bird deaths were not due to petroleum hydrocarbons. On the basis of these results, IMCC

opposes the recommended addition of Searles Lake to the Section 303(d) list for petroleum hydrocarbons.

Response: After reviewing the necropsy results, staff deleted references to bird deaths from petroleum hydrocarbons from the Searles Lake fact sheet. However, Searles Lake is still recommended to be listed for petroleum hydrocarbons based on violations of several narrative water quality objectives (chemical constituents, floating material, oil and grease, and toxicity).

Comment: IMCC comments on a statement in the fact sheet that “Regional Board staff are proposing Basin Plan amendments to define beneficial uses for the brine ponds separate from the natural ephemeral waters of the lake as a whole,” and states that it is more appropriate to consider the larger area of the Searles Lake bed rather than only the brine ponds.

Response: The scope of the Basin Plan amendments is a separate issue from Section 303(d) listing and will be addressed during development of the amendments.

Mojave River Watershed

Note: The Lahontan Regional Board voted on January 9, 2002 not to recommend listing for the segment of the Mojave River addressed in the public comments summarized below. The three water body-pollutant combinations involved were placed on the Region's informal “watch list” for further study.

Comment: The City of Hesperia opposed listing for the Mojave River and recommended that it be placed on the watch list. The City expressed concern that a TMDL implementation plan could “stymie groundwater recharge efforts in the channel” using imported State Water Project water, “stifle growth in the Victor Valley,” and affect implementation of the stipulated water rights judgment overseen by the Mojave Water Agency. The City stated that “the development of TMDL’s for the Mojave River Narrows would have a disparate impact on the City of Hesperia and cause undue economic hardship relevant to mitigation measures.” The Victor Valley Wastewater Reclamation Authority (VWVRA) also opposed listing and noted potentially significant economic impacts to the Authority and its customers, particularly impacts on VWVRA’s ability to recycle and reuse fully treated wastewater and on potential recharge of the river aquifer system using State Water Project water.

Response: The Regional Board voted not to recommend listing for the Mojave River and to place it on the watch list. See the discussion of the socioeconomic impacts of listing under “General Issues” above.

Comment: The VWVRA stated that the proposed listing of the Mojave River was inconsistent with findings of the 1997 Mojave River Upstream Discharge study.

Response: The results of this study were not readily available to water quality assessment staff in the Regional Board's South Lake Tahoe office. The November 2001 recommendation for listing was based on sampling results from the "Mojave River -D Street Study" provided by the Regional Board's Victorville office staff. Most of the samples in the latter study were of ground water.

Comment: The VVWRA opposed listing for the Mojave River and asked for more intensive public participation (stakeholder meetings and public hearings) before listing is considered.

Response: See the discussion of scheduling constraints for the 2002 list update process in the "General Issues" section above. The format and extent of public participation for the next (2004) list update process will probably be addressed in the State Board's forthcoming policy direction.

Antelope Valley Watershed

Comment: The Los Angeles County Sanitation Districts (LACSD) expressed support for the Regional Board's "documented procedural basis" for its recommendations on listing and delisting, and also expressed support for the use of a "watch list."

Response: These comments are noted; no technical response is necessary.

Comment: The LACSD criticized the proposed placement of Littlerock Reservoir on the Regional Board's informal "watch list," contending that it is not a water of the United States and, therefore, not subject to Section 303(d), and requested clarification of the rationale for inclusion of the reservoir on the watch list.

Response: Littlerock Reservoir was placed on the recommended "watch list" for sediment, iron, and manganese on the basis of online reports by the Palmdale Water District (see the references on page 15 of the staff report). The reports indicated that violations of standards for iron and manganese occur in the District's source water, but not in its treated water, and that a large project to remove sediment from the reservoir was proposed. (The project has not yet been implemented.) In the case of the reported standards violations, the reservoir was recommended for the watch list rather than for Section 303(d) listing because Regional Board staff did not have access to the original data within the limited time available to formulate recommendations. Regarding Littlerock Reservoir's status as a water of the United States, an internet search indicates that the reservoir supports recreational boating to the extent that there is a speed limit. (For example, see http://www.wrightwood.homestead.com/pg8_fishingAreas.html.) The reservoir can, therefore, be considered navigable and a water of the U.S. Also see the discussion of waters of the U.S. under the "General Issues" heading above.

Comment: LACSD also expressed concern about Section 303(d) assessments based on the application of beneficial uses and water quality objectives from "blanket" categories to specific waterbodies and urged the Board to "pursue refinements of beneficial uses and

water quality objectives based on the presence of effluent-dominated waters (EDW), site specific objectives or other site specific conditions.”

Response: Ideally, all water bodies should have site-specific standards. However, due to resource constraints and the large number of water bodies in the Lahontan Region, it is likely that “blanket” beneficial use designations and narrative water quality objectives will continue to apply to many waters. Lahontan Regional Board staff are currently attempting to address LACSD’s concerns with respect to effluent dominated waters within its jurisdiction by drafting Basin Plan amendments to define site-specific beneficial uses for Paiute Ponds. Also see the discussion of priority setting for standards changes in the “General Issues” section above.

References

Anderson, M.A., M.S. Guisti, and W.D. Taylor, 2001. Hepatic Copper Concentrations and Condition Factors of Largemouth Bass (*Micropterus salmoides*) and Common Carp (*Cyprinus carpio*) from Copper Sulfate-Treated and Untreated Reservoirs. *Lake and Reservoir Management* 17(2): 97-104.

California Department of Water Resources, 1964. *Ground Water Occurrence and Quality, Lahontan Region*. Bulletin No. 106-01.

California Office of Environmental Health Hazard Assessment, 1999. *Advisories on Sport Fish Consumption in California*. Available online at: <http://www.oehha.ca.gov/fish.html>.

California Office of Environmental Health Hazard Assessment, 2000. *Methylmercury in Fish from Lake Pillsbury (Lake County): Guidelines for Sport Fish Consumption, September 2000*. Available online at : <http://www.oehha.ca.gov/fish/pdf/adv41kpill.pdf>.

California Office of Environmental Health Hazard Assessment, 2000. *Public Health Goals for Chemicals in Drinking Water*. Available online at: <http://www.oehha.ca.gov/water.html>.

California Regional Water Quality Control Board, Central Valley Region, 2000. *A Compilation of Water Quality Goals*.

California Regional Water Quality Control Board, Lahontan Region, 1989. *Staff Report on Draft 1990 Water Quality Assessment and Clean Water Strategy Priority Recommendations for the Lahontan Region*. December 1989.

California Regional Water Quality Control Board, Lahontan Region, 1991. *Staff Report on Proposed 1991 Revisions to the Regional Water Quality Assessment*. September 1991.

California Regional Water Quality Control Board, Lahontan Region, 1994. *Staff Report on Proposed Changes to Regional Water Quality Assessment*. February 1994.

California Regional Water Quality Control Board, Lahontan Region, 1995. *Water Quality Control Plan for the Lahontan Region*, as amended in 1995.

California Regional Water Quality Control Board, Lahontan Region, 1997. *Staff Report: Proposed Revisions to Section 303(d) List and Priorities for Development of Total Maximum Daily Loads for the Lahontan Region*. November 1997.

California Regional Water Quality Control Board, Lahontan Region, 2000. *Use Attainability Analysis for Nine Naturally Impaired Waters of the Lahontan Region*. April 2000.

California Regional Water Quality Control Board, Lahontan Region, 2000. *Draft Amendments to the Water Quality Control Plan for the Lahontan Region Concerning Total Maximum Daily Load and Implementation Plan for Indian Creek Reservoir, Alpine County California*.

California Regional Water Quality Control Board, Lahontan Region, 2001. *Response to Written Public Comments on Total Maximum Daily Load for Indian Creek Reservoir, State Clearinghouse #2000112024*, May 2001.

California Regional Water Quality Control Board, Lahontan Region, 2001. Internal Memo from John Steude and Alan Miller to Judith Unsicker, "Summary of water quality analysis for potential CWA 303(d) listing of the lower (sic) of the West Fork Carson River, Alpine County." June 7, 2001.

California Regional Water Quality Control Board, Lahontan Region, 2001. *Technical Support Document: Total Maximum Daily Load for Indian Creek Reservoir, Alpine County, California*.

California Regional Water Quality Control Board, Lahontan Region, 2001. *Staff Report on Recommended Changes to Lahontan Region's Section 303(d) List of Impaired Surface Water Bodies*, November 2001. Available online at: www.swrcb.ca.gov/rwqcb6

California Regional Water Quality Control Board, Lahontan Region, 2001. *Water Body Fact Sheets (grouped by watersheds)*. Available online at: www.swrcb.ca.gov/rwqcb6.

California State Water Resources Control Board, 1983. *Lake Tahoe Basin Water Quality Plan* (as amended 1983).

California State Water Resources Control Board, Toxic Substances Monitoring Program database. Available online at: <http://www.swrcb.ca.gov/programs/smw/index.html>.

California State Water Resources Control Board, 1983. *Toxic Substances Monitoring Program 1982*.

Hering, J. G., 2001. *Final Report: Assessment and Control of Arsenic Mobility in Contaminated Sediments*. USEPA National Center for Environmental Research. Available online at: <http://es.epa.gov/ncer/final/grants/97/sediment/hering.html>.

Nevada Division of Environmental Protection. *Nevada's 1998 303(d) List*. Available online: <http://ndep.state.nv.us/bwqp/riv303d98.pdf>.

U.S. Environmental Protection Agency, 1997. "Establishing Site Specific Aquatic Life Criteria Equal to Natural Background." Memorandum dated November 5, 1997 from Tudor T. Davies, Director, Office of Science and Technology, USEPA Office of Water.

U.S. Environmental Protection Agency, 2001. *Ecoregional nutrient criteria*. Available online at: <http://www.epa.gov/waterscience/criteria/nutrient/ecoregions/index.html>.

APPENDIX

Copies of Separate Written Responses

(See Table 1)

From: Judith Unsicker
To: "Stanley_Wiemeyer@r1.fws.gov".mime.Internet
Date: Thu, Dec 6, 2001 8:59 AM
Subject: Re: Water body fact sheets - Walker River

Thanks for your email. I have responded to some of your questions below in bold type, and I am copying this response to Alan Miller, the chief of our Carson/Walker Watersheds Unit, with the hope that he and his staff can answer the others or amplify on my responses. We would appreciate a copy of your report when it is available.

On mercury in general, the Toxic Substances Monitoring Program has found high mercury levels in fish from several areas in the Lahontan Region with volcanic geology/soils but without significant known mining activity (e.g., June Lake, Susan River). The California Department of Water Resources is monitoring mercury in water, sediment and tissue from Eagle Lake in Lassen County, and has found fairly high levels. The Eagle Lake watershed is relatively undisturbed, and I'm not aware of any significant mining history. The U.C. Davis Tahoe Research Group has documented increased mercury in sediment cores from Lake Tahoe since the mid 19th Century, probably from atmospheric deposition. Also possibly relevant is a recent news item on a study of mercury volatilization in wildfires:

<http://www.enn.com/direct/display-release.asp?id=5159>

I have also come across an anecdotal report that early ornithologists in the Mono Basin shot birds with 22 shells filled with mercury so that the resulting "mist" would kill them without damaging their skins. See <http://www.monobasinresearch.org/historical/interviews/mcphersonint.htm>

and use your browser's "Edit >Find" feature to search for "mercury". I don't know how widespread this practice was, but it might account for some mercury loading to streams and riparian areas away from mines.

Judith Unsicker
Staff Environmental Scientist
Lahontan Regional Water Quality Control Board
Phone: (530) 542-5462
FAX: (530) 542-5470
Email: unsij@rb6s.swrcb.ca.gov

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>>> <Stanley_Wiemeyer@r1.fws.gov> 12/04/01 05:00PM >>>

I have reviewed the fact sheets for this basin because of our recent interest in possible mercury source areas in the basin related to past mining. This came about as the result of finding (by others) elevated concentrations of mercury in blood of common loons that use Walker Lake as a migratory stop over during both spring and fall. We have collected samples of macroinvertebrates and some fish from various sites throughout the Walker River basin, including sites in California, and have had the samples analyzed for total mercury. The field work was conducted primarily in the Fall of 2000. We will provide you with a copy of the report upon its completion. In the interim I have a few questions in relation to the fact sheets and other information you may be aware of for this basin.

1. In reviewing USGS topographic maps of the basin, I noted the presence of tailings along Dog Creek which flows into Virginia Creek, south of Bridgeport, CA. Do you have any information as to their source, including type of mining that may have been involved as well as when the mining may have occurred?

Placer gold was discovered at Dog Creek in 1857, and there was a settlement called Dogtown that lasted only a few years. The tailings are probably from a dredge mining operation in the 1930s. A Google Internet search for the keywords "Dogtown" and "Mono" will take you to several sites with additional historical information.

We found slightly elevated (above background) mercury concentrations in stonefly larvae and juvenile crayfish from Virginia Creek. We also found an even higher mercury concentration in a sample of stonefly larvae from Green Creek, south of Bridgeport. However, I saw little evidence of mining activity in Green Creek's watershed from examination of topographic maps. Are you aware of any mining inputs into this watershed?

I'm not aware of anything specific- there may have been small scale prospecting that didn't result in mines large enough to show on a topo map.

2. Do you have additional information on the Superfund site on Aurora Canyon Creek where you indicated that a mercury ore mill was present. Is active cleanup ongoing at this site or is it just on the CERCLA list and not an active Superfund site? Who in EPA is the project manager for this site if it is active? **As far as I know it is an inactive site; the report I cited was the latest detailed information in our files. The Regional Board's watershed unit may have more information. I can send you a copy of the report if you wish.**

3. I was aware of the mining activity in the Bodie area, the Aurora area to the east of Bodie in Nevada, mining on the east side of the Sweetwater Range, and also the Masonic Gulch area (to the east or NW of Bridgeport). Do you have information on mining in any other areas of the basin, especially where mercury may have been involved, either involving its use in precious metal recovery (as was the case in the Carson River basin in Nevada during the 1860s to 1900) or in mercury mining?

Around 1998 Toiyabe National Forest conducted a survey of inactive mines in the upper Carson and Walker River watersheds in California to identify potential acid mine drainage problems. Maureen Joplin of the USFS was the contact person. I believe that she is now with their Reno headquarters office. There may be additional information in some of the mineral resources publications of the California Division of Mines and Geology; see:

http://www.consrv.ca.gov/dmg/pubs/pub_idx/mno.htm

USGS has also collected water and sediment samples in relation to the concern regarding mercury source areas in the Walker River basin. Many of their sampling sites correspond with those where we collected biota. Their field work was conducted in both 2000 and 2001. EPA REMAP also collected water and sediment throughout the basin in the fall of 2000 for various metal and trace element analyses.

Is Toxic Substance Monitoring Program data available on the web? How recent have samples been collected in the Walker River Basin? I noted the mercury results for fish from the Bridgeport area for samples collected in the 1980s in the fact sheet. Have there been more recent collections? If so, how can I obtain access to the data?

There have been a few more recent TSMP samples in this area. In addition to the East Walker River, we have had sampling done at Twin Lakes, Virginia Creek, Dog Creek, Robinson Creek, and Bodie Creek. All had "elevated" levels of one or more metals; I don't remember whether mercury was analyzed in all of them. There were also elevated metals in trout from Slinkard Creek in the West Walker River watershed; there is a large inactive mine on the

saddle between the Slinkard Creek and Mill Creek watersheds.

Here is the address for TSMP results through 1996. They are in Lotus or dBase format but can be opened in Excel.

<http://www.swrcb.ca.gov/programs/smw/index.html>

These are statewide files; they are very large and it's time consuming to find the Lahontan Region data. (Identification numbers for our sites start with "6"). You might want to call the database administrator, Del Rasmussen of the California State Water Resources Control Board, at (916) 341-5545 to see whether he can provide you with a file or printout of data (through 2000) for the Walker River watershed only.

Thanks for your help. I look forward to hearing from you.

Stan Wiemeyer
Resource Contaminants Specialist
U.S. Fish and Wildlife Service
Nevada Fish and Wildlife Office
1340 Financial Blvd., Ste. 234
Reno, NV 89502-7147
Phone: (775) 861-6326
stanley_wiemeyer@fws.gov

CC: Curtis, Chuck; Miller, Alan; Suk, Thomas

From: Judith Unsicker
To: "Sean_Penders@dot.ca.gov".mime.Internet
Date: Wed, Dec 12, 2001 2:05 PM
Subject: Re: TMDL's

Thank you for your comments. I have responded to specific questions and comments in bold type within the text of your comments below. Copies of your comments and this response will be placed in the administrative record of the Section 303(d) list update process.

Judith Unsicker
Staff Environmental Scientist
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe CA 96150
Phone: (530) 542-5462
Email: unsij@rb6s.swrcb.ca.gov

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>>> <Sean_Penders@dot.ca.gov> 12/11/01 11:03AM >>>

Ms. Unsicker,

I received the Notice of Availability of and Request for Comments on Draft Recommendations for Changes in Lahontan Region's Section 303-D list. In regards to the Lake Tahoe HU 634.00, many of the tributary streams are listed for Iron. The Comments line mentions the standard needs revision. I hope this means that Iron will be removed from the list of impairments because most of the iron is generated from background sources and the levels do not cause impairment to any beneficial uses. In fact many of the possible stormwater treatment BMP's use Iron media to remove phosphorous. It would be very helpful to the regulated community if Iron was removed from the list 303-D pollutant list, because it would allow the use of Iron media as one possible stormwater treatment device.

A number of water bodies in the Lake Tahoe watershed are proposed to be listed for iron because the current water quality objectives are consistently being violated. The iron is believed to come largely from natural sources, since violations occur even in General Creek, with a relatively undisturbed watershed. Once the iron standards are revised, it should be possible to remove these waters from the Section 303(d) list.

I am also curious on the listing of pathogens in some of the streams in the Lake Tahoe Unit and I am wondering if the sources have been identified and if so are they naturally occurring pathogens?

As indicated in the water body fact sheets for these waters, monitoring by Regional Board and U. S. Forest Service staff shows the highest bacteria numbers at times when livestock grazing occurs. (Most sites involve cattle grazing; Tallac Creek is affected by horses and mules.) Human backcountry users or transients, dogs, pack animals, and wildlife are possible sources of the bacteria observed in much lower numbers when intensive grazing is not a factor.

In some of the Northern Units (Surprise Valley, Susanville), why are water bodies with naturally occurring pollutants listed at all? and some of these have TMDL end dates, which does not seem logical?

State and federal guidance for listing has varied over time since the Regional Boards first became involved in the listing process in the 1980s. At one time, listing was mandated for all water

bodies where violations of standards occurred, even if the sources were entirely natural. During this list update cycle, Regional Board staff's position is that, because the Clean Water Act defines "pollutants" in terms of human sources, previously listed "naturally impaired" waters can be delisted. (See the staff report on the Regional Board's webpage at <<http://www.swrcb.ca.gov/rwqcb6>> for additional discussion.)

Honey Lake and several associated water bodies in Lassen County are impaired largely by natural sources of salts and trace elements. However, the situation is complicated because these waters are also affected by discharges from geothermal power plants. We are recommending that they continue to be listed with tentative TMDL end dates, pending further study.

Thanks, Sean Penders
Caltrans Dist 3, NPDES

From: Judith Unsicker
To: "tenney@qnet.com".mime.Internet
Date: Fri, Dec 14, 2001 12:21 PM
Subject: 1) query re: impaired waters / 2) PLEASE FORWARD - mailing list update

Thank you for your email. Our mailing list will be updated as you requested.

Total Maximum Daily Loads (TMDLs) are a complex subject. Basically, they are strategies required by the Clean Water Act to ensure the attainment of water quality standards in significantly impaired surface waters. The most important components of a TMDL involve: (1) calculating the amount of existing pollutant loading from all point and nonpoint sources; (2) determining the maximum amount of pollutant loading which can be permitted if standards are to be attained; (3) dividing the allowable maximum load among all sources, with a margin of safety to account for uncertainty in the analysis; and (4) providing "reasonable assurance" that existing pollutant loads will be reduced over time to ensure attainment of standards. Federal regulations do not currently require TMDL implementation plans, but California law requires that they be included in Regional Board TMDLs. These plans summarize control actions and schedules, and include monitoring programs.

More detailed background information on TMDLs is available on the California State Water Resources Control Board's webpage at:

<http://www.swrcb.ca.gov/tmdl/tmdl.html>

In particular, see the "Background" and "Total Maximum Daily Loads Questions and Answers" links.

The links to Lahontan Region TMDL documents on the State Water Board's "TMDL Documents" page are currently not functioning. You can view the November 2000 drafts of two of our "in progress" TMDLs on the Regional Board's webpage at:

<http://www.swrcb.ca.gov/rwqcb6/files/BPA2000.pdf>

The Heavenly Valley Creek TMDL has been approved by the Lahontan Regional Board and State Water Resources Control Board (with several changes from the November 2000 draft) and is awaiting final approvals from other agencies. Regional Board consideration of the Indian Creek Reservoir TMDL was postponed due to lack of a quorum. This TMDL may come before the Board in 2002.

Please contact me if you have further questions.

Judith Unsicker
Staff Environmental Scientist
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Phone: (530) 542-5462
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>>> "Elizabeth Tenney" <tenney@qnet.com> 12/12/01 06:33PM >>>
Dear Ms. Unsicker:

1) We have received the Draft Recommendations for Changes in Lahontan Region's Section 303(D) List. Could you please tell us what TMDL refers to? Not knowing that makes the list of recommendations difficult to interpret.

2) Would you also please forward this message to your mailing list person? Our Board of Directors voted in November to change our name from P.E.S.T.E.R. (Preserving the Eastern Sierra Tradition of Environmental Responsibility) to ESAN (Eastern Sierra Advocates Network). Please update your records as follows:

ESAN
PO Box 3511
Mammoth Lakes, CA 93546-3511
Ph/FAX: 760-924-8475
Web: www.easternsierraadvocates.org
Email: et@easternsierraadvocates.org
or tenney@qnet.com

The Website is under construction. The new email address will be activated shortly.

Thank you.

Elizabeth Tenney

CC: Chuck Curtis

From: Judith Unsicker
To: "dsenesac@cisco.com".mime.Internet
Date: Mon, Dec 17, 2001 11:35 AM
Subject: Re: public comments for Clean Water Act

Thank you for your comments, recommending Section 303(d) listing for the headwaters of Silver Creek in the Carson River watershed, due to the impacts of cattle grazing on water quality and riparian habitat. I have forwarded your message to Alan Miller, the head of the Lahontan Regional Board's Carson/Walker Watersheds Unit, and to Thomas Suk, the coordinator of the Regional Board's monitoring programs. Your message will also be sent to California State Water Resources Control Board staff for consideration in the statewide Section 303(d) list update.

Whether or not TMDLs are developed, the Lahontan Regional Board has the authority and responsibility to ensure that Best Management Practices to control the impacts of livestock grazing in the Carson River watershed are implemented under the statewide California Nonpoint Source Management Plan. Regional Board staff are also working with U.S. Forest Service staff and other stakeholders in a Carson River watershed planning effort, the "Watershed Management Initiative".

During this Section 303(d) list update cycle, we are recommending listing only on the basis of quantitative data showing violations of water quality standards, such as chemical/physical monitoring, fecal coliform bacteria monitoring, invertebrate biomonitoring, or scientific indices of riparian/wetland impairment (e.g., the "Properly Functioning Condition" method). Listing is recommended for a number of waters affected by livestock grazing (in the Lake Tahoe, Carson River, and Walker River watersheds) on the basis of such data. Unfortunately, we do not currently have equivalent data for the upper Silver Creek watershed. If additional data become available before the next Section 303(d) list update cycle in 2004, Regional Board staff will consider recommending listing at that time. Meanwhile, our watershed staff will continue to investigate and deal with the water quality impacts of livestock grazing under the nonpoint source plan and Carson River Watershed Management Initiative.

Please contact me if you have any questions about the Regional Board's water quality assessment program.

Judith Unsicker
Staff Environmental Scientist
Lahontan Regional Water Quality Control Board
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South Lake Tahoe CA 96150
Phone: (530) 542-5462
Email: unsij@rb6s.swrcb.ca.gov

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>>> David Senesac <dsenesac@cisco.com> 12/12/01 02:41PM >>>
Lahontan Regional Water Quality Control Board
Judith Unsicker,

Hello,

I have a few comments per the public comments for the federal Clean Water Act under Section 303(d) as shown on your web site. After looking at the current list I noticed an area I am concerned about which is not so included. My concern is with some of the headwater areas of Silver Creek which probably have water that has been measured as clean but which has grazing which is degrading the

area and which will eventually end up effecting water quality. Currently cattle are allowed to graze the headwaters of Silver Creek. This includes Raymond Meadows Creek, Eagle Creek, Pennsylvania Creek, and Silver Creek itself. Each summer cattle are allowed to range freely in this Mokelumne Wilderness zone which does not have fences and they trample wet riparian zones next to streams and in meadows, particularly Raymond Meadow. And of course they being the animals they are, pollute the streams where ever they stand. Now my reason for bringing up this particularly area versus the many other lower national forest areas where they also graze is that it is an absolutely spectacular scenic treasure though little known. For example the volcanic formations of Eagle Ridge. Additionally there are areas of considerable wildflower displays and the trampling hooves of cattle make an absolute ruined mess of some of them. Some of the streams contain trout.

I would like to see grazing eliminated from both sides of the Sierra Crest in that area and realize it is a Toyabe National Forest issue and not one involving your agency. However I am bringing this up as impacts to water quality in these streams is in fact impacted by grazing. If cattle people wish to graze their live stock in lower areas that is fine with me but they ought to prevent cattle from entering these higher areas whether that might require fencing or whatever.
-David Senesac davesenesac@msn.com (408) 8666094

CC: Alan Miller; Chuck Curtis; Thomas Suk

From: Judith Unsicker
To: "sburak@qnet.com".mime.Internet
Date: Wed, Dec 19, 2001 9:38 AM
Subject: Re: TMDL for Mammoth Creek

Thank you for your email. You requested information on how Mammoth Creek can be made part of the Total Maximum Daily Loads (TMDL) program.

To be made part of the TMDL program, a water body must first be placed on the Clean Water Act Section 303(d) list of impaired water bodies. Mammoth Creek is already on the Section 303(d) list for metals, with TMDL development tentatively scheduled between 2005 and 2008. If there is evidence to show that the turbidity standard for Mammoth Creek is being violated, the Creek could also be listed for turbidity, with TMDL development scheduled at a later date. (Because of resource constraints and a backlog of waters needing TMDLs, TMDL development for water body-pollutant combinations added to the Lahontan Region's Section 303(d) list in 2002 will probably not begin until after 2011.) Because turbidity units are not concentration units, it would be difficult to calculate loads for turbidity per se. The TMDL would probably need to be developed for suspended sediment concentration or some other sediment-related parameter.

The applicable water quality objective for turbidity in Mammoth Creek is the regionwide narrative objective, as follows:

"Waters shall be free of changes in turbidity that cause nuisance or adversely affect the water for beneficial uses. Increases in turbidity shall not exceed natural levels by more than 10 percent".

To assess compliance with this objective, it would be necessary to collect enough monitoring data at a reference station to define natural turbidity levels (including seasonal and annual variations) and/or reference aquatic life conditions (e.g., benthic invertebrate, periphyton and fish communities) for Mammoth Creek. The Regional Board is sponsoring a study of eastern Sierra benthic invertebrate communities by Dr. David Herbst of the University of California to define reference conditions and aid the development of "biocriteria" water quality standards that define desirable aquatic life conditions, but it will be several years until we can consider adopting such standards. Very high turbidity could affect other beneficial uses, including the drinking water use and the "aesthetic enjoyment" component of the Non-Contact Water Recreation use.

Your email references large increases in turbidity over background levels during storm events. Such variation can occur naturally. In order to separate the impacts of natural stormwater runoff from those of stormwater from disturbed areas, it would be desirable to collect samples above and below disturbed areas during the same storm event.

As part of the Lahontan Regional Board's Surface Water Ambient Monitoring Program (SWAMP), the U.S. Geological Survey is sampling suspended sediment and turbidity quarterly at two stations above and below the town of Mammoth Lakes (Twin Lakes and Highway 395). You may want to coordinate your proposed in-depth turbidity study with the SWAMP program. The Regional Board's regionwide monitoring/SWAMP coordinator is Tom Suk; his telephone number is (530) 542-5419, and his email address is Sukt@rb6s.swrcb.ca.gov.

Please contact me if you have further questions about the Regional Board's Section 303(d) list update process. I will be on vacation from December 20-January 1, and will be back at work on January 2.

Judith Unsicker
Staff Environmental Scientist
Lahontan RWQCB
2501 Lake Tahoe Boulevard
South Lake Tahoe CA 96158
Phone: (530) 542-5462

Email: unsij@rb6s.swrcb.ca.gov

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>>> "Sue Burak" <sburak@qnet.com> 12/15/01 12:34PM >>>

Hello Judith;

I am in charge of the citizen's water quality monitoring group in Mammoth Lakes. I am thinking of applying for some grant money to do an in depth study of turbidity in Mammoth Creek. Our WQ monitoring shows turbidity levels spike to 10-24 times background levels whenever there is a summer rainstorm event, or as happened over Thanksgiving, a rain on snow event. I am very interested in learning about what is required to get Mammoth Creek into the TMDL program.

Thank you very much,
Sue burak

Sue Burak
Snow Survey Associates
P.O. Box 8544
Mammoth Lakes, CA 93546
760.934.1707

CC: Chuck Curtis; Cindi Mitton; Thomas Suk

From: Judith Unsicker
To: dcron@applevalley.org
Date: Wed, Dec 19, 2001 12:57 PM
Subject: Your Request for Time Extension on Section 303(d) Comments

Jay Cass of the Regional Board's Victorville office has forwarded your request to me. We cannot postpone consideration of Regional Board action on the recommendations for update of the Section 303(d) list to our February meeting because of the schedule set by California State Water Resources Control Board staff. The Regional Board's action is only advisory, and State Water Board action on a statewide Section 303(d) list is currently planned for early 2002. There will be a separate public participation process for the State Water Board's action, and you will have the opportunity to submit written comments then. The contact person for the list update process at the State Board is Diane Beaulaurier, at (916) 341-5549.

I will be attending a meeting this afternoon and will be on vacation from December 20 until January 1. Please contact me on or after January 2 if you have further questions about our list update recommendations or the listing process.

Judith Unsicker
Staff Environmental Scientist
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe CA 96150
Phone: (530) 542-5462
Email: unsij@rb6s.swrcb.ca.gov

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CC: Chuck Curtis; Diane Beaulaurier; Jehiel Cass



California Regional Water Quality Control Board

Lahontan Region



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Internet Address: <http://www.swrcb.ca.gov/rwqcb6>
2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150
Phone (530) 542-5400 • FAX (530) 544-2271

Gray Davis
Governor

December 20, 2001

Logan Olds, General Manager
Susanville Consolidated Sanitary District
P.O. Box 152
Susanville, CA 96130

RESPONSE TO COMMENTS ON DRAFT RECOMMENDATIONS FOR LAHONTAN SECTION 303(D) LIST

Thank you for your letter of December 6, 2001, mentioning the availability of bioassay data for Jensen Slough for possible use in a Total Maximum Daily Load (TMDL) for the Susan River. The Susan River is one of many water bodies recommended for high priority ranking. However, the Regional Board's schedule for development of TMDLs depends on the availability of staff and contract resources. Work on the Susan River TMDL is tentatively planned to begin in 2004. Your letter will be placed in our files for future reference, and Regional Board staff will contact your office to obtain the latest bioassay data once TMDL development begins.

Please contact me at (530) 542-5462 or unsij@rb6s.swrcb.ca.gov, if you have any questions on the Lahontan Regional Board's Section 303(d) list recommendations or the list update process.

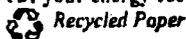
Sincerely,

Judith Unsicker
Staff Environmental Scientist

JEU/cgT: 303d/scsdresp

California Environmental Protection Agency

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From: Jehiel Cass
To: "norm.tc@gte.net".nonmime.Internet
Date: 12/30/01 4:20PM
Subject: Re: Mojave River 303(d) Possible Listing

Norm - I have been on vacation and will return to the office on January 2, 2002. Very good questions. I will give a brief answer in bold, below. Jay

Jehiel (Jay) Cass
CA Regional Water Quality Control Board
15428 Civic Dr. Ste 100
Victorville CA 92392
phone (760) 241-2434
fax (760) 241-7308
email jcass@rb6v.swrcb.ca.gov

>>> norm.tc@gte.net 12/26/01 11:06AM >>>
From: Norm Caouette <norm.tc@gte.net>
Subject: 303(d) Listing Questions
Cc: unsij@rb6s.swrcb.ca.gov;; kirbyb@mojavewater.org
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Hello Jay and Hisam:

I attempted to contact Judith Unsicker as recommended on the Board's web page regarding the recommended 303(d) listings, but according to her voice mail she is out of the office until January 2, which is after the December 28 deadline to respond. I have a couple of questions and a request regarding the proposed listing of the Mojave River from the Upper to Lower Narrows.

1. What are the practical implications to the Mojave Water Agency of listing the Upper to Lower Narrows for TDS, Chlorides and Sulfates, particularly since the recommendations identify imported State Water Project water as a source for each of these constituents. Will this prohibit or place limits upon recharge with State Project Water upstream of or within the Narrows?

Listing a water body on the Clean Water Act's Section 303(d) list is required if **State Water Quality Standards are being violated**. Listing alone will have no immediate impact but will begin a series of actions to determine what the probable causes are and development of a **Total Maximum Daily Load or TMDL**. One component of the TMDL is an **Implementation Plant to assess a load reduction plan between Point sources, Non-Point sources, Natural sources, and a Safety Factor to restore the Water Quality Standards**. It may also trigger a review of the standards in question. Staff here have appreciated the stakeholder support during the Mojave Watershed data collection program. So - the long term results range between the two extremes of 1) the water body is delisted and 2) a very stringent implementation plant to restore the water body. **PS** - the recent Daily Press article illustrates that the reduced flow between the narrows may be reflected in the data we have.

2. The staff report indicates that the "Update of the Section 303(d) list is not a regulatory or policy action, but an administrative procedure to prioritize water bodies for action." The staff report identifies the "TMDL

End Date" as "After 2015" which is footnoted to explain that TMDL end dates are the estimated years for Regional Board adoption of Basin Plan amendments incorporating TMDLs. Should I interpret this to mean that whatever the practical implications of the listing, they will not be in effect until sometime after 2015, or are there interim implications by virtue of being listed?

We need to verify this with Judith, but the answer is there would be no real implications for some time. I believe the listing is appropriate if 1) the data support it and 2) the listing criteria are met. This will drive the debate on issues because as you know the Mojave River system is under a great deal of stress. Staff would not be working on this for some time and have a long list of TMDLs to go through first.

3. One of the data references identified as supporting the listing includes "Maxwell, C.R., A Watershed Management Approach to Assessment of Water Quality and Development of Revised Water Quality Standards for the Ground Waters of the Mojave River Floodplain. Paper presented at the National Water Quality Monitoring Council Conferences, April 25-27, 2000, Austin TX." We do not have that document available to us and would appreciate a copy sent to the MWA.

I have not seen this paper either so I would have to defer to Judith if she has a copy.

Please note that this inquiry is not in-lieu of an Agency comment letter to the Regional Board, which will be transmitted by 12/28.

Thank you for your assistance.

Norm Caouette

CC: Baqai, Hisam; Unsicker, Judith

From: Judith Unsicker
To: norm.tc@gte.net
Date: Thu, Jan 17, 2002 2:43 PM
Subject: Chris Maxwell's Mojave River Paper

In your December 26, 2001 email to Jehiel Cass of the Lahontan Regional Board's Victorville office, you requested a copy of a paper cited in our Mojave River waterbody fact sheets, by former Regional Board staffer Chris Maxwell.

The paper, from the 2000 National Water Quality Monitoring Council conference proceedings, is available online at:

http://www.nwqmc.org/2000proceeding/papers/pap_maxwell.pdf

I believe that there is an underline between "pap" and "maxwell." If you want a paper copy, please let me know and I will have one sent to you.

Judith Unsicker
Staff Environmental Scientist
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe CA 96150
Phone: (530) 542-5462
Email: unsij@rb6s.swrcb.ca.gov

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CC: Chuck Curtis; Jehiel Cass

From: Judith Unsicker
To: Deirdreflynn@innercite.com
Date: 1/22/02 9:40AM
Subject: Re: Polluted River Status

Dear Ms. Flynn:

Thank you for your emails. Your email of January 9 was noted in staff's presentation at the Lahontan Regional Board's Wednesday, January 9, 2002 meeting, and will be made part of the administrative record of the Board's action. (The Board voted in support of staff's draft recommendations except for changes in proposed Section 303(d) listings for the Mojave River.)

The Lahontan Regional Board's action was only advisory; the final decision on statewide recommendations to the U.S. Environmental Protection Agency regarding Section 303(d) listing will be made by the California State Water Resources Control Board later this year. The State Water Board will provide further opportunities for public comments. If you wish to send me a mailing address, I will see that you are added to the State Board's mailing list for this item. I am also preparing a "response to comments" document to address all written public comments received during the Regional Board's public review period, for inclusion in the administrative records of the Regional and State Board actions. A copy of the response document will be sent to you if you provide an address.

Your January 9 email requests information about the notification process for the Lahontan Regional Board's Section 303(d) list update. In March 2001, Regional Board staff mailed letters on the pending list update process to several of the Board's large mailing lists (water quality assessment, basin planning, and agenda announcement lists), probably about 1,200 addresses. The March 2001 mailing included a form to be returned to be placed on a focused mailing list for the Section 303(d) list update. The letter about the list update process was published in newspapers throughout the Lahontan Region and made available on the Internet. A press release was also sent to the media.

Regional Board staff reviewed information provided by the public in response to the March 2001 solicitation process, and information available in-house, including the data collected in the Regional Board/U.S. Forest Service cooperative monitoring program for fecal coliform bacteria in Lake Tahoe Basin streams. These data were used to formulate draft recommendations for changes in the Section 303(d) list of polluted waters. The availability of draft recommendations for listing of specific waters was noticed to the focused mailing list in November 2001; and another press release was sent to newspapers and other media serving the Lahontan Region.

For more information on the technical rationale for the Regional Board's recommendations regarding Section 303(d) listing of Lake Tahoe Basin streams, please see the online staff report and "Water Body Fact Sheets" at <http://www.swrcb.ca.gov/rwqcb6>. The November 27, 2001 "News" link in the center of the page will take you to an index page with further links to different documents, including a group of fact sheets for the Lake Tahoe watershed. The fact sheets for listings related to "pathogens" include summaries of applicable water quality standards and monitoring data for fecal coliform bacteria. The discussions of potential sources recognize that livestock are not necessarily the only sources of bacteria in the streams, and that recreational users of the watershed and wildlife may be involved. I will have paper copies of the staff report and Lake Tahoe Basin fact sheets sent to you if you wish.

In general, Regional Board staff proposed listing for waters with sufficient data, collected with good Quality Assurance/Quality Control procedures, to show that water quality standards are being violated. The listing process does not require a detailed analysis of sources; rather, source analysis is part of the Total Maximum Daily Load development process.

Please contact me if you have further questions on the listing process. Dr. Bruce Warden (telephone 530 542 5416, email BWarden@rb6s.swrcb.ca.gov) is the Regional Board's contact person for fecal coliform bacteria monitoring in the Lake Tahoe Basin.

Judith Unsicker
Staff Environmental Scientist
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe CA 96150
Phone: (530) 542-5462
Email: unsij@rb6s.swrcb.ca.gov

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>>> deirdreflynn <deirdreflynn@innercite.com> 01/09/02 03:49PM >>>

Judith Unsicker - I am deeply distressed at the article I just read in the December 14th Capitol Press regarding Polluted River Status in the Lake Tahoe Basin. Once again our cattle are blamed solely for the alleged contamination of waters in Big Meadow Creek. It is disturbing that in the article no mention was given to data showing that fecal coliform levels were as high if not higher on the Big Meadow range without cattle, and that no mention is given to the other potential users of the area (recreation, etc.) are we being targeted again and discriminated against again? Why were the permittees not invited to comment on the proposed listing when you yourself say the "It's more likely to impact ranchers..."? I would appreciate your comments and sincerely hope that the decision made today and tomorrow will not eliminate the grazing of livestock on the Meiss Meadow Allotment (considering that in 2001 there were again zero cattle on the Big Meadow Creek). As a 4th generation producer I dread having to explain to my nephews why we no longer take cattle to the Sierra Nevada Mountains.

Respectfully,
Deirdre E. Flynn
916-425-3815

From: Judith Unsicker
To: "egrimly@lycos.com".mime.Internet
Date: 1/31/02 12:47PM
Subject: Re: Haiwee Reservoir-Section 303(d) List

Thank you for your email. It will be transmitted to State Water Resources Control Board (State Board) staff for their consideration in formulation of recommendations for a statewide Section 303(d) list. The Regional Board's Total Maximum Daily Load (TMDL) unit is aware of Dr. Hering's research, summarized in the online report that you referenced.

The Lahontan Regional Water Quality Control Board (Regional Board) has already acted (on January 9, 2002) on recommendations to the State Board for update of the Section 303(d) list. The Regional Board approved the November 2001 staff recommendations posted on our webpage (www.swrcb.ca.gov/rwqcb6), with the exception of proposed new listings for the Mojave River.

The Section 303(d) listing process applies only to surface waters, and there is some debate as to whether sediment pore water should be considered surface or ground water. The State Board is developing formal policy language on listing/delisting criteria for the next (2004) Section 303(d) list update cycle. If that policy includes direction that pore water should be considered surface water for purposes of listing, Regional Board staff will evaluate the latest data and consider whether to recommend that Haiwee Reservoir be listed for arsenic in 2004.

I am preparing a "response to comments" document for inclusion in the Regional Board's administrative record for this year's Section 303(d) list update. If you would like a copy, please send me a mailing address. I can also have you placed on the State Board's mailing list for its 2002 list update action if you wish.

Please note my new email address below, effective January 30, 2002.

Judith Unsicker
Staff Environmental Scientist
Lahontan Regional Water Quality Control Board
2501 Lake Tahoe Boulevard
South Lake Tahoe CA 96150
Phone: (530) 542-5462
FAX: (530) 542-5470
Email: JUnsicker@rb6s.swrcb.ca.gov

>>> "Ed G Grimly" <egrimly@lycos.com> 01/24/02 02:10PM >>>

While the source of arsenic at Haiwee is natural, the high arsenic sediment concentration at Haiwee Reservoir is in part due to treatment by LADWP. Why isn't Table 1: Recommendations for Update of the Section 303(d) List for the Lahontan Region updated to include arsenic as a "Pollutant(s)/Stressor(s)" for Haiwee Reservoir?

Link to article on arsenic
<http://es.epa.gov/ncer/final/grants/97/sediment/hering.html>

CC: Chuck Curtis; Diane Beaulaurier

**REGIONAL
WATER QUALITY
CONTROL
BOARD**

DATE: 12/6/01
FROM:

SLT/R6

TO: Diane Beaulaurier

1st Floor	15th Floor	18th Floor	18th Floor
Reproduction	Water Quality	Accounting	Business Services
2nd Floor	16th Floor	Personnel	Admin Svs.
Water Rights	OEA	Training	Budget Office
8th Floor	Statewide Initiatives	Contracts	Health & Safety
OIT	Clean Water Programs		
14th Floor	17th Floor	22nd Floor	25th Floor
Water Rights	Clean Water	Chief Counsel	SWRCB Exec

ACTION

- | | |
|--|--|
| <ul style="list-style-type: none"> ◇ Action /Process Per Request ◇ Review/Rtn/Rte ◇ Reply ◇ File | <ul style="list-style-type: none"> ◇ Distribute ◇ Approval ◇ Signature ◇ Information |
|--|--|

REGIONAL WATER QUALITY CONTROL BOARDS

R1 <i>Santa Rosa</i>	R4 <i>Los Angeles</i>	R7 <i>Palm Desert</i>
R2 <i>Oakland</i>	R5 <i>Sacramento Fresno/Redding</i>	R8 <i>Riverside</i>
R3 <i>San Luis Obispo</i>	R6 <i>VVL South Lake Tahoe</i>	R9 <i>San Diego</i>



California Regional Water Quality Control Board

Lahontan Region



Winston H. Hickox
Secretary for
Environmental
Protection

Internet Address: <http://www.swrcb.ca.gov/rwqcb6>
2501 Lake Tahoe Boulevard, South Lake Tahoe, California 96150
Phone (530) 542-5400 • FAX (530) 544-2271

Gray Davis
Governor

December 7, 2001

Raymond C. Miller, Executive Director
Southern California Association of Publicly Owned Treatment Works
30200 Rancho Viejo Road, Suite B
San Juan Capistrano CA 92625

SCAP'S RECOMMENDATIONS FOR THE SECTION 303(D) LISTING PROCESS FOR 2002

Your letter of November 1, 2001 to Hisam Baqai of the Lahontan Regional Board's Victorville office has been referred to Judith Unsicker of my staff for a response. You requested comments on a list of recommendations regarding the 2002 update process for California's statewide Clean Water Act Section 303(d) list of impaired surface water bodies.

The criteria used by Lahontan Regional Board staff in developing recommendations to the State Water Resources Control Board (State Board) for the 2002 list update are explained in a November 2001 staff report, available on the Regional Board's Internet webpage at <http://www.swrcb.ca.gov/rwqcb6>. Lahontan Regional Board action on the recommendations is scheduled at the Board's January 9-10, 2002 meeting in South Lake Tahoe. We have no specific comments on your recommendations at this time. Discussion with State Board staff indicates that a single statewide response will be prepared for your letter and similar requests for comments sent to other Regional Boards.

Please contact Judith Unsicker at (530) 542-5462 if you have any questions about the Lahontan Regional Board's Section 303(d) list update process.

Sincerely,

Chuck Curtis, Supervising WRCE
Chief, Planning and Toxics Division

cc: Diane Beaulaurier, Division of Water Quality, SWRCB
Hisam Baqai, Lahontan RWQCB, Victorville office

JEU/crT: 303d/scapresponse.doc
[File: JEU]

California Environmental Protection Agency

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