February 27, 2003

Mr. Randy Pahl Standards Branch Supervisor Nevada Division of Environmental Quality 333 W. Nye Lane, Room 138 Carson City, NV 89706

Dear Mr. Pahl:

On November 20, 2002, EPA partially approved and partially disapproved Nevada's 2002 §303(d) list. Specifically, EPA approved the State's decisions to list 84 waters and associated pollutants and set priority rankings for these waters. EPA disapproved the State's decisions not to list 15 water bodies and not to list additional pollutants for 38 waters already listed by the State for other pollutants. EPA further identified these additional water bodies and pollutants with appropriate priority rankings for inclusion on the 2002 §303(d) list.

EPA provided public notice and solicited public comment on its identification of additional waters and pollutants for inclusion on Nevada's list. The comment period closed January 13, 2003. EPA has carefully reviewed the written comments received from the State and other commenters. Pursuant to the requirements of federal regulations at 40 CFR 130.7, I am hereby transmitting to you the final 2002 §303(d) list for Nevada which includes additional waters and additional pollutants for several waters already listed by the State, in addition to the 84 waters listed by the State. The additional waters and pollutants included on the final list are listed in Enclosure 1 to this letter. A detailed responsiveness summary explaining public comments received and EPA's responses is also enclosed (Enclosure 2).

With one exception, the additional waters and pollutants added to the list are identical to those identified for listing by EPA on November 20, 2002. Las Vegas Bay is not being added to the final list for chlorophyll because the data relied upon to support the initial listing decision were collected in a single year that experienced unusual water quality conditions. EPA has concluded that these data are not sufficiently representative of receiving water conditions to support a determination that the lake is impaired. The final list being transmitted to Nevada contains each of the other waters and pollutants identified for listing by EPA on November 20, 2002.

EPA received 3 comment letters. Most of the comments focused on three issues- the application of current pH standards, the application of "requirements to maintain higher quality" standards, and the analysis of toxic pollutant exceedences. We concluded that none of the comments warrants modifying the list of additional waters and pollutants identified by EPA, except for the single modification discussed above.

We greatly appreciate the assistance rendered by NDEP in reviewing the comments received concerning EPA's listing decision and look forward to working with the State during the 2004 listing process. If you have questions on any aspect of this final listing decision, feel free to give me a call at (415) 972-3435 or call David Smith of my staff at (415) 972-3416.

Sincerely,

/original signed by/

Catherine Kuhlman Acting Director Water Division

Enclosures

# Enclosure 1: Final List of Waters and Pollutants Added to Nevada's 2002 Section 303(d) List

Table 1: Waters and Pollutants Added to Nevada's 2002 Section 303(d) List Based on Designated Use Exceedences

Water body ID	Water body	Reach Description	Pollutant
NV04-HR-07-C	Humboldt River	Woolsey to Rodgers Dam	pН
NV04-HR-27C	Maggie Creek	Confluence with Jack Creek to Humboldt River	pН
NV04-HR-101	Willow Creek (tributary to Pine Creek and Humboldt R. 445A.205)	Below Buckhorn Mine	Cn
NV04 <b>B</b> NF-16A	Sammy Creek (tributary to NF Humboldt River)	waste rock to confluence with NF Humboldt R.	Se
NV04-NF-17-B	North Fork Humboldt River	National Forest Boundary to Humboldt River	рН
NV06-SC-41-C	Steamboat Creek	Washoe Lakes to Sec. 33, T18N, R20E	pН
NV06-SC-52-C	Galena Creek	Sec. 2, T17N, R19E to Steamboat Creek	pН
NV06-SC-53-A	Whites Creek	Source to east line of Sec. 33, T18N, R19E	pН
NV06-SC-55-A	Thomas Creek	Source to National Forest Boundary	pН
NV08-CR-12	Carson River	Weeks to Lahontan Dam	рН
NV08-CR-17-A	Clear Creek	Origin to Gaging Station in Sec. 1, T14N, R19E	рН
NV13-CL-01	Colorado River	Lake Mohave Inlet to CA stateline	рН
NV13-CL-02	Colorado River	Hoover Dam to Lake Mohave Inlet	рН

Table 2: Waterbodies and Pollutants Added to Nevada = 2002 Section 303(d) List due to Exceedances of RMHQs (Requirements to Maintain Higher Quality Water)

Water body ID	Water body Name	Reach Description	Pollutant
NV03-SR-02	Salmon Falls Creek	Above stateline	Fecal coliform
NV03-JR-12	East Fork Jarbidge River	Above stateline	Fecal coliform
NV03-JR-13	Jarbidge River	Source to Town of Jarbidge	Total
			phosphorus
NV04-HR-01	Humboldt River	Origin to Osino	рН
NV04-HR-02	Humboldt River	Osino to Palisade	Chlorides
			рН
NV04-HR-03	Humboldt River	Palisade to Battle Mtn	рН
NV04-HR-04	Humboldt River	Battle Mtn to Comus	Chlorides
			рΗ
			Total dissolved
			solids
NV04-HR-05	Humboldt River	Comus to Imlay	Chlorides
			рН
NV04-HR-06	Humboldt River	Imlay to Woosley	Total dissolved solids
NV06-TB-09-00	1st Creek	Origin to Lake Tahoe	рН
			Total nitrogen
NV06-TB-10-01	2nd Creek	2nd Creek Drive to Lake Tahoe	pН
			Total nitrogen
NV06-TB-10-02	2nd Creek	Origin to 2nd Creek Drive	рН
			Total nitrogen
NV06-TB-12	3rd Creek	Lake Tahoe to EF 3rd Creek at Highway 431 and to WF 3rd Creek Origin	Chlorides
			Total dissolved solids
NV06-TB-14	WF Incline Creek	Origin to Highway 431	Chlorides
			рН
			Total dissolved solids
			Total nitrogen
			Turbidity
NV06-TB-15	EF Incline Creek	Ski resort to Origin	рН
			Total nitrogen
NV06-TB-16	Incline Creek	Lake Tahoe to EF Incline Creek at ski resort and to WF Incline Creek at Highway 431	Chlorides
			рН
			Total nitrogen
NV06-TR-02	Truckee River	Stateline to Idlewild	Total nitrogen
NV06-TR-03	Truckee River	Idlewild to East McCarran	Total nitrogen
NV06-TR-05	Truckee River	Lockwood to Derby Dam	Turbidity
NV08-CR-01	WF Carson River	At Stateline	pН
			Total nitrogen
			Total
			phosphorus

NV08-CR-02	Bryant Creek	Near Stateline	Total nitrogen
			Total
			phosphorus
NV08-CR-04	EF Carson River	Stateline to Highway 395	рН
			Total dissolved solids
			Total nitrogen
NV08-CR-05	EF Carson River	Highway 395 to Muller Lane	рН
			Total nitrogen
NV08-CR-06	EF/WF Carson River	Genoa Lane to EF Carson River at Muller Lane and to WF Carson River at Stateline	рН
			Total dissolved solids
NV08-CR-07	Carson River	Genoa Lane to Cradlebaugh Bridge	Chlorides
			рН
			Total dissolved solids
NV08-CR-08	Carson River	Cradlebaugh Bridge to Mexican Ditch Gage	Sulfate
NV08-CR-09	Carson River	Mexican Ditch Gage to New Empire	рН
NV08-CR-10	Carson River	New Empire to Dayton Bridge	Chlorides
			рН
			Turbidity
NV08-CR-11	Carson River	Dayton Bridge to Weeks	Chlorides
		3 5	Fecal coliform
			рН
			Turbidity
NV08-CR-12	Carson River	Weeks to Lahontan Dam	Chlorides
			Total dissolved solids
NILIOO NID OI	W . W 11 D'	A . G 1	Turbidity
NV09-WR-01	West Walker River	At Stateline	Total suspended solids
NV09-WR-02	Topaz Lake	Topaz Lake (Nevada portion)	Total nitrogen
			Total suspended solids
			Turbidity
NV09-WR-03	West Walker River	Stateline to Wellington	Chlorides
		-	Total dissolved solids
			Total nitrogen
			Total
			phosphorus
NV09-WR-04	West Walker River	Wellington to Confluence with East Walker River	Chlorides
			Total phosphorus
NV09-WR-05	Sweetwater Creek	Stateline to Confluence with Eas	Total nitrates

		Walker River	
NV09-WR-06	East Walker River	At Stateline	Total nitrogen
NV09-WR-08		East Walker River from Bridge B-1475 to the confluence with the W. Walker	Sulfate
NV13-CL-07	Virgin River	Stateline to Mesquite	Total nitrogen

## Enclosure 2; Responsiveness Summary EPA Decision Concerning Nevada's 2002 CWA Section 303(d) List

#### Introduction

EPA partially approved and partially disapproved Nevada's Section 303(d) list on November 20, 2002. EPA published a public notice of availability of its listing decision in the Federal Register on December 12, 2002 (67 FR 239 p. 76404). EPA invited public comment on its decisions to disapprove Nevada's decisions not to list certain waters and pollutants and identify these waters and pollutants for inclusion on Nevada's list. EPA did not invite comment on its decisions to approve the State's decision to list waters and pollutants identified in the State listing submittal. On December 10, 2002, EPA sent notices of availability to several dozen individuals and organizations listed on a TMDL program mail distribution list provided by the State. EPA also posted the notice of availability and decision documents on its Region 9 web site. Decision documents were also available upon request to staff at Region 9.

EPA received comments from 3 parties in response to the public notice. This responsiveness summary contains summaries of comments received and EPA's responses to these comments. Written comments were received from the following parties:

- City of Las Vegas, Clark County Water Reclamation District, and City of Henderson
- Great Basin Mine Watch
- Nevada Division of Environmental Protection

In response to comments received, EPA is not including on the final Nevada 2002 Section 303(d) list Lake Mead/Las Vegas Bay for chlorophyll because the data relied upon to support the initial listing decision were collected in a single year that experienced unusual water quality conditions. EPA has concluded that these data are not sufficiently representative of receiving water conditions to support a determination that the lake is impaired. The final list being transmitted to Nevada contains each of the other waters and pollutants identified for listing by EPA on November 20, 2002.

### **Comments and Responses**

1. Two Colorado River segments should not be listed for pH. There is no "Designated Use Exceedence" in these segments. Instead, EPA should not act on Nevada's Section 303(d) list until it has approved the new pH criteria (which are being met in these segments).

<u>Response:</u> As discussed in EPA's November 20, 2002 listing decision, States are required to apply the water quality standards that are currently in effect in order to identify waters that must be included on the Section 303(d) list. The pH standards applied by EPA are currently applicable and are required to be applied in the 2002 listing

process. The new pH standards referred to by the commenter have not been submitted to EPA for approval and have not yet been approved by EPA; therefore, they are not yet applicable for listing waters under CWA Section 303(d) (see, 40 CFR 131.21). EPA fully supports reevaluation of waters listed for if the revised pH standards are submitted and approved, and understands that it may be appropriate to remove them from the Section 303(d) list at that time. For this reason, EPA set a low priority ranking for the waters added to the list for pH. The next list is due April 1, 2004, and the list revisions at that time will likely include this change to pH listings.

EPA fully supports reevaluation of waters listed for pH following submittal and approval of the revised pH standards, and understands that it would be appropriate to remove them from the Section 303(d) list at that time. For this reason, EPA set a low priority ranking for the waters added to the list for pH. The next list is due April 1, 2004, and the list revisions at that time will likely include this change to pH listings.

EPA was required to act upon Nevada's Section 303(d) listing submission within 30 days of submission (40 CFR 130.7). Because the new pH standards had not been submitted for EPA action and had not been approved by EPA, we determined that we should proceed with our decision concerning Nevada's submittal, consistent with the regulatory requirement.

The reference in EPA's listing decision to "Designated Use Exceedences" refers to the title used in the section of Nevada's water quality standards that includes pH standards, and was used in Table 1 to distinguish this group of waters added to the list from the other group of waters added due to exceedences of Nevada's "Requirements to Maintain Higher Quality" (RMHQ) standards.

#### 2. Las Vegas Bay should not be listed for chlorophyll because:

- the data relied upon were collected in a single aberrant year that is not representative,
- the bay now complies with all standards,
- Nevada water quality standards provide that standards do not apply to extreme natural conditions, and
- Requirements to Maintain Higher Quality (RMHQ) criteria were not meant to be applied strictly.

Response: EPA is not including Las Vegas Bay on the final 2002 Section 303(d) list for chlorophyll because EPA agrees that the data considered by the State and relied upon by EPA in its listing decision may not be representative of receiving water conditions. The commenter cites a number of factors supporting the conclusion that 2001 was a very unusual year in terms of algae growth. Given the limited data available, EPA has concluded that it would be inappropriate to list the water given the evidence that the available data from 2001 are unrepresentative and that the most recent data indicates chlorophyll standards are being met.

Insufficient evidence is available in the record to determine whether the algae growth in Las Vegas Bay in 2001 which caused the high chlorophyll levels was naturally occurring. Therefore, it is not clear that the exceptions provided in Nevada water quality standards accounting for extreme natural conditions would actually apply in this situation.

EPA disagrees that the "Requirements to maintain existing higher quality" (RMHQs) in N.A.C., Chap. 445A, Standards for Water Quality, should not be applied in the listing process (see November 20, 2002 listing decision for further discussion of EPA's rationale). The Nevada water quality standards and implementation procedures provide no clear evidence that the State did not intend to apply RMHQ's directly. To the contrary, Nevada's water quality standards regulations indicate that, once RMHQs become effective, "the requirements are applicable thereafter" and "must not be exceeded". See, e.g., N.A.C. 445A.194 et seq. It may be appropriate for Nevada modify its water quality standards or implementation procedures to clarify how it intends to apply RMHQs. If the RMHQ implementation provisions are clarified, it may be appropriate, in future 303(d) listing actions, for the State to make different listing decisions concerning waters that exceed RMHQs.

3. Commenter supports EPA's addition of several streams and pollutants to the list.

Response: We appreciate the comment.

4. Lack of data should not be an excuse for failing to meet water quality standards or meeting Clean Water Act goals. EPA should develop a method for requiring more data collection.

Response: EPA's regulations require States to develop 303(d) lists based on consideration of all existing and readily available data and information, but do not require States to conduct monitoring to create more data than is currently available. We agree that improvements in monitoring are needed to assist in better characterizing and restoring the quality of the Nation's waters. We are working now with the State of Nevada to improve monitoring efforts.

5. Nevada's methodology for excluding data during high or low flows is inconsistent and not well justified.

<u>Response</u>: EPA will forward this comment to Nevada for consideration in the next listing cycle. Because the comment does not directly address any of the additional listings identified by EPA in its November 20, 2002 decision, no further response is necessary.

6. Because cyanide is not found naturally, its presence indicates a problem in a watershed. Any observation of cyanide in water indicates degradation.

<u>Response:</u> EPA does not agree that any observation of cyanide in water necessarily means State water quality standards are exceeded. State water quality standards specify the amounts of cyanide that can be present in the water and still protect designated

beneficial uses. EPA expects the State to evaluate available data and information as part of the listing process to determine whether these standards are exceeded.

7. A minimum sample size of 10 data points is not reasonable. One grab sample that shows a substantial exceedance should be cause for inclusion on the list while one grab sample that shows no exceedances does not justify a conclusion that the stream is not impaired.

<u>Response:</u> EPA will forward this comment to Nevada for consideration in the next listing cycle. Because the comment does not directly address any of the additional listings identified by EPA in its November 20, 2002 decision, no further response is necessary.

8. Nevada Division of Environmental Protection (NDEP) understands EPA's position that listing decisions should be based on current state water quality standards. It is challenging to ensure that the general public realizes the deficiencies this creates with the list. Although the waters identified by EPA for inclusion on the list exceed numeric water quality standards for pH, there is no evidence that narrative standards were exceeded or that beneficial uses are being impacted. Any reference to Nevada's 303(d) list as a list of "impaired" waters is inappropriate.

Response: We appreciate NDEP's efforts to work with EPA in this listing cycle. EPA understands that the pH standards violations that led to the inclusion of additional waters on the list may not be causing beneficial use impairments. EPA set a low priority for these waters, in part for this reason. Federal listing requirements provide that States must identify waters on the Section 303(d) list if any aspect of State water quality standards are not being implemented due to the presence of pollutants (except in those situations where other required controls will bring about timely attainment of those standards). It would be inconsistent with the federal listing requirements to decline to list a water that meets the criteria for listing due to numeric water quality standard exceedences simply because there is no evidence that the narrative standards and/or beneficial use designations are not impaired.

9. NDEP never argued that chronic standards for toxic pollutants should not be applied in the listing analysis. The issue is how to use available sample data in comparison with 96-hour numeric criteria. NDEP concurs with the listing of Sammy Creek for selenium given the frequency and magnitude of exceedences. NDEP does not believe the existing data support listing for Willow Creek for cyanide.

<u>Response</u>: We agree that it is difficult to interpret chronic criteria for toxic pollutants based on limited grab sample data. As discussed in the listing decision, EPA determined that the available data and information concerning Willow Creek for cyanide was sufficient to support a determination that the chronic water quality standard for cyanide was exceeded. The State's comments provide no additional information or data to support a different analysis of Willow Creek.

10. NDEP questions the technical validity of some RMHQ values and does not believe it is appropriate to list waters based on exceedances of potentially erroneous RMHQs.

<u>Response</u>: See response to comment 2. EPA understands NDEP's concerns about the specific RMHQ values and the general application of RMHQs for water quality assessments. EPA would be willing to work with NDEP to identify mechanisms through which the State can efficiently clarify how it intends to apply RMHQs in the future.