### REVISED PROPOSED REGULATION OF THE

### STATE ENVIRONMENTAL COMMISSION

#### **LCB File No. R099-02**

September 17, 2002

EXPLANATION - Matter in italics is new; matter in brackets [omitted material] is material to be omitted.

AUTHORITY: §§1-63, NRS 445A.425 and 445A.520.

**Section 1.** Chapter 445A of NAC is hereby amended by adding thereto the provisions set forth as sections 2 and 3 of this regulation.

- Sec. 2. "E. Coli" means escherichia coli.
- Sec. 3. 1. The acute criteria of water quality with regard to the concentration of total ammonia are subject to the following:
- (a) The 1-hour average concentration of total ammonia, in milligrams of nitrogen per liter, for the protection of freshwater aquatic life is shown in Table 1.
- (b) For cold water fisheries, the concentration of total ammonia, in milligrams of nitrogen per liter, must not exceed the applicable acute criterion listed under "Cold Water Fisheries" set forth in Table 1, more than once every 3 years on average.
- (c) For warm water fisheries, the concentration of total ammonia, in milligrams of nitrogen per liter, must not exceed the applicable acute criterion listed under "Warm Water Fisheries" set forth in Table 1, more than once every 3 years on average.
- 2. The chronic criteria of water quality with regard to the concentration of total ammonia are subject to the following:

- (a) The 30-day average concentration of total ammonia, in milligrams of nitrogen per liter, for the protection of freshwater aquatic life is shown in Tables 2 and 3.
- (b) The concentration of total ammonia, in milligrams of nitrogen per liter, expressed as a 30-day average must not exceed the applicable chronic criterion listed in Tables 2 and 3 more than once every 3 years on average, and the highest 4-day average within the 30-day period must not exceed 2.5 times the applicable chronic criterion.
- (c) Table 3 must not be used unless the division receives acceptable documentation of the absence of freshwater fish in early life stages.

TABLE 1: ACUT	E WATER QUALITY CRITERIA FO FOR FRESHWATER AQUATIC L								
	(mg nitrogen/l)								
pН	Cold Water Fisheries <sup>1</sup>	Warm Water Fisheries							
6.5	32.6	48.8							
6.6	31.3	46.8							
6.7	29.8	44.6							
6.8	28.1	42.0							
6.9	26.2	39.1							
7.0	24.1	36.1							
7.1	22.0	32.8							
7.2	19.7	29.5							
7.3	17.5	26.2							
7.4	15.4	23.0							
7.5	13.3	19.9							
7.6	11.4	17.0							
7.7	9.65	14.4							
7.8	8.11	12.1							

TABLE 1: ACUT	E WATER QUALITY CRITERIA FO								
	FOR FRESHWATER AQUATIC LIFE  (mg nitrogen/l)								
pН	Cold Water Fisheries <sup>1</sup>	Warm Water Fisheries							
7.9	6.77	10.1							
8.0	5.62	8.40							
8.1	4.64	6.95							
8.2	3.83	5.72							
8.3	3.15	4.71							
8.4	2.59	3.88							
8.5	2.14	3.20							
8.6	1.77	2.65							
8.7	1.47	2.20							
8.8	1.23	1.84							
8.9	1.04	1.56							

<sup>&</sup>lt;sup>1</sup> The acute water quality criteria for total ammonia for cold water fisheries were calculated using the following equation, which may also be used to calculate unlisted values:

0.885

1.32

Acute water quality criteria for ammonia (cold water fisheries) =

$$\left[\frac{0.275}{1+10^{7.204-pH}}\right] + \left[\frac{39.0}{1+10^{pH-7.204}}\right]$$

9.0

Acute water quality criteria for ammonia (warm water fisheries) =

$$\left[\frac{0.411}{1+10^{7.204-pH}}\right] + \left[\frac{58.4}{1+10^{pH-7.204}}\right]$$

<sup>&</sup>lt;sup>2</sup> The acute water quality criteria for total ammonia for warm water fisheries were calculated using the following equation, which may also be used to calculate unlisted values:

TABLE 2: CHRONIC WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR

WATERS WHERE FRESHWATER FISH IN EARLY LIFE STAGES MAY BE PRESENT

(mg nitrogen/l)<sup>1</sup>

					Tempera	ture (°C)				
pН	0	14	16	18	20	22	24	26	28	30
6.5	<b>6.67</b>	6.67	6.06	5.33	4.68	4.12	3.62	3.18	2.80	2.46
6.6	6.57	6.57	5.97	5.25	4.61	4.05	3.56	3.13	2.75	2.42
<b>6. 7</b>	6.44	6.44	5.86	5.15	4.52	3.98	3.50	3.07	2.70	2.37
6.8	6.29	6.29	5.72	5.03	4.42	3.89	3.42	3.00	2.64	2.32
6.9	6.12	6.12	5.56	4.89	4.30	3.78	3.32	2.92	2.57	2.25
7.0	5.91	5.91	5.37	4.72	4.15	3.65	3.21	2.82	2.48	2.18
7.1	5.67	5.67	5.15	4.53	3.98	3.50	3.08	2.70	2.38	2.09
7.2	5.39	5.39	4.90	4.31	3.78	3.33	2.92	2.57	2.26	1.99
7.3	5.08	5.08	4.61	4.06	3.57	3.13	2.76	2.42	2.13	1.87
7.4	4.73	4.73	4.30	3.78	3.32	2.92	2.57	2.26	1.98	1.74
7.5	4.36	4.36	3.97	3.49	3.06	2.69	2.37	2.08	1.83	1.61
<b>7.6</b>	3.98	3.98	3.61	3.18	2.79	2.45	2.16	1.90	1.67	1.47
7.7	3.58	3.58	3.25	2.86	2.51	2.21	1.94	1.71	1.50	1.32
7.8	3.18	3.18	2.89	2.54	2.23	1.96	1.73	1.52	1.33	1.17
<b>7.9</b>	2.80	2.80	2.54	2.24	1.96	1.73	1.52	1.33	1.17	1.03
8.0	2.43	2.43	2.21	1.94	1.71	1.50	1.32	1.16	1.02	0.897
<i>8.1</i>	2.10	2.10	1.91	1.68	1.47	1.29	1.14	1.00	0.879	<b>0.773</b>
8.2	1.79	1.79	1.63	1.43	1.26	1.11	0.973	0.855	0.752	0.661
8.3	1.52	1.52	1.39	1.22	1.07	0.941	0.827	0.727	0.639	0.562
8.4	1.29	1.29	1.17	1.03	0.906	0.796	0.700	0.615	0.541	0.475
8.5	1.09	1.09	0.990	0.870	0.765	0.672	0.591	0.520	0.457	0.401
8.6	0.920	0.920	0.836	0.735	0.646	0.568	0.499	0.439	0.386	0.339
<b>8.</b> 7	0.778	0.778	0.707	0.622	0.547	0.480	0.422	0.371	0.326	0.287
8.8	0.661	0.661	0.601	0.528	0.464	0.408	0.359	0.315	0.277	0.244

TABLE 2: CHRONIC WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR WATERS WHERE FRESHWATER FISH IN EARLY LIFE STAGES MAY BE PRESENT (mg nitrogen/l)<sup>1</sup> *Temperature (°C)* **24** pH0 *14 18* **20** *22* **26 28** *30 16 0.513* 0.269 0.237 **8.9** 0.565 0.565 0.451 0.397 0.349 0.306 *0.208* 0.442 0.389 0.300 **0.264** 0.204 *0.179* 9.0 *0.486 0.486* 0.342 *0.232* 

Chronic water quality criteria for ammonia (fish in early life stages present) =

$$\left[\frac{0.0577}{1+10^{7.688-pH}} + \frac{2.487}{1+10^{pH-7.688}}\right] \times MIN\left[2.85, 1.45 \times 10^{0.028 \times (25-T)}\right]$$
 where:

*T*=°*C* 

x means multiplication

MIN means the lesser of the two values separated by the comma

	TABLE 3: CHRONIC WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR WATERS WHERE FRESHWATER FISH IN EARLY LIFE STAGES ARE ABSENT										
	(mg nitrogen/l) <sup>1</sup>										
	Temperature (°C)										
pН	<b>0-7</b>	8	9	10	11	12	13	14	15 <sup>2</sup>	16 <sup>2</sup>	
6.5	10.8	10.1	9.51	8.92	8.36	7.84	7.35	6.89	6.46	6.06	
6.6	10.7	9.99	9.37	8.79	8.24	7.72	7.24	6.79	6.36	5.97	
<b>6.</b> 7	10.5	9.81	9.20	8.62	8.08	7.58	7.11	6.66	6.25	5.86	
6.8	10.2	9.58	8.98	8.42	7.90	7.40	6.94	6.51	6.10	5.72	
6.9	9.93	9.31	8.73	8.19	7.68	7.20	6.75	6.33	5.93	5.56	
7.0	9.60	9.00	8.43	7.91	7.41	6.95	6.52	6.11	5.73	5.37	

<sup>&</sup>lt;sup>1</sup> The chronic water quality criteria for total ammonia for waters where freshwater fish in early life stages may be present were calculated using the following equation, which may also be used to calculate unlisted values:

TABLE 3: CHRONIC WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR

WATERS WHERE FRESHWATER FISH IN EARLY LIFE STAGES ARE ABSENT

(mg nitrogen/l)<sup>1</sup>

					Tempera	ture (°C)	<u> </u>			
pН	<b>0-7</b>	8	9	10	11	12	13	14	15 <sup>2</sup>	16 <sup>2</sup>
7.1	9.20	8.63	8.09	7.58	7.11	<b>6.67</b>	6.25	5.86	5.49	5.15
7.2	8.75	8.20	7.69	7.21	6.76	6.34	5.94	5.57	5.22	4.90
7.3	8.24	7.73	7.25	6.79	6.37	5.97	5.60	5.25	4.92	4.61
7.4	7.69	7.21	6.76	6.33	5.94	5.57	5.22	4.89	4.59	4.30
7.5	7.09	6.64	6.23	5.84	5.48	5.13	4.81	4.51	4.23	<i>3.97</i>
7.6	6.46	6.05	<b>5.67</b>	5.32	4.99	4.68	4.38	4.11	3.85	3.61
7.7	<i>5.81</i>	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47	3.25
7.8	<i>5.17</i>	4.84	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89
7.9	4.54	4.26	3.99	3.74	3.51	3.29	3.09	2.89	2.71	2.54
8.0	3.95	3.70	3.47	3.26	3.05	2.86	2.68	2.52	2.36	2.21
<i>8.1</i>	3.41	3.19	2.99	2.81	2.63	2.47	2.31	2.17	2.03	1.91
8.2	2.91	2.73	2.56	2.40	2.25	2.11	1.98	1.85	1.74	1.63
8.3	2.47	2.32	2.18	2.04	1.91	1.79	1.68	1.58	1.48	1.39
8.4	2.09	1.96	1.84	1.73	1.62	1.52	1.42	1.33	1.25	1.17
8.5	1.77	1.66	1.55	1.46	1.37	1.28	1.20	1.13	1.06	0.990
8.6	1.49	1.40	1.31	1.23	1.15	1.08	1.01	0.951	0.892	0.836
<b>8.</b> 7	1.26	1.18	1.11	1.04	0.976	0.915	0.858	0.805	0.754	0.707
8.8	<i>1.07</i>	1.01	0.944	0.885	0.829	0.778	0.729	0.684	0.641	0.601
8.9	0.917	0.860	0.806	0.756	0.709	0.664	0.623	0.584	0.548	0.513
9.0	0.790	0.740	0.694	0.651	0.610	0.572	0.536	0.503	0.471	0.442

<sup>&</sup>lt;sup>1</sup> The chronic water quality criteria for total ammonia for waters where freshwater fish in early life stages are absent were calculated using the following equation, which may also be used to calculate unlisted values:

Chronic water quality criteria for ammonia (fish in early life stages absent) =

$$\left[\frac{0.0577}{\left(1+10^{7.688-pH}\right)}+\frac{2.487}{\left(1+10^{pH-7.688}\right)}\right]x\,1.45\,x\left[10^{0.028\,x\left(25-MAX\,\left(T,7\right)\right)}\right]$$
 where:

*T*=°*C* 

x means multiplication

MAX means the greater of the two values separated by the comma

<sup>2</sup> At 15°C and above, the criteria for waters where freshwater fish in early life stages are absent is the same as the criteria for waters where freshwater fish in early life stages may be present.

### **NOTES FOR TABLES 1, 2 AND 3:**

- pH and temperature are field measurements that must be taken at the same time and location as the water sample destined for the laboratory analysis of ammonia.
- If the field-measured pH or the temperature values, or both, fall between the tabular values set forth in this section, the field-measured values or temperature values, as appropriate, must be rounded according to standard rounding procedures to the nearest tabular value to determine the applicable ammonia standard, or the equations provided in this section may be used to calculate unlisted values.
  - **Sec. 4.** NAC 445A.070 is hereby amended to read as follows:
- 445A.070 As used in NAC 445A.070 to 445A.348, inclusive, *and sections 2 and 3 of this regulation*, unless the context otherwise requires, the words and terms defined in NAC 445A.071 to 445A.116, inclusive, *and section 2 of this regulation* have the meanings ascribed to them in those sections.
  - **Sec. 5.** NAC 445A.119 is hereby amended to read as follows:
- 445A.119 The water quality criteria for designated beneficial uses for the various waters of the state are in the following table. The criteria are water quality characteristics based upon

available scientific and technical information and are to be used as guidelines in establishing water quality standards.

# WATER QUALITY CRITERIA FOR

# DESIGNATED BENEFICIAL [USES<sup>2</sup>] USES<sup>4</sup>

Beneficial Uses					Aqua	tic Life						
		Agricultura	1	Cold		Warm						
		Use		Water	r	Water						
Parameter		Irrigation	Watering of Livestock	Propa- gation	Put & Take	Propa- gation	Put & Take	[Water Contact Recreation] Recreation involving contact with the water	[Non-Contact Recreation] Recreation not involving contact with the	Municipal or Domestic Supply	Industrial Supply <del>[Supply]</del>	Propagation of Wildlife
Temperature °C		x	x	< Site	Specific D	Determinatio	on <sup>a,b</sup> >	[15 34 *] 10-35 a	water x	x	x	x
					Π		T	10-33				
pH Units												
Single Value		4.5-9.0 <sup>a</sup>	5.0-9.0 b	6.5-9.0	6.5-9.0 [ <sup>b</sup> ] <sup>a</sup>	6.5-9.0 [b] a	6.5-9.0	6.5- [8.3 *] 9.0 *	х	5.0-9.0 <sup>a</sup>	3.0-11.7 <b>F</b>	[7.0 9.2 *] 6.5-9.0 a
Dissolved Oxygen Single Value-mg/l	>	x	Aerobic <sup>b</sup>	5.0 [b] "	5.0 [ <sup>b</sup> ] <sup>a</sup>	5.0 [ <sup>b</sup> ] "	5.0 [ <sup>b</sup> ] "	Aerobic <sup>b</sup>	Aerobic <sup>b</sup>	Aerobic <sup>b</sup>		Aerobic <sup>b</sup>
Chlorides Single Value-mg/l	<	y <sup>a</sup>	1500 <sup>f</sup>	[x] 230°	[x] 230°	[x] 230°	[x] 230°	х	х	[250/400°] 250 d/400°		1500 <sup>f</sup>
Total Phosphates as P Single Value-mg/l		х	х	<		Site S	Specific Det	ermination [ <sup>b,e</sup>	· · · · · · · · · · · · · · · · · · ·	·>	х	х
Nitrates as N Single Value-mg/l	<	x	100 <del>[*]</del> *	y [ <sup>b</sup> ] <sup>a</sup>	х	90 <b>[<sup>b</sup>] </b> <sup>a</sup>	90 <b>[</b> <sup>b</sup> <b>]</b> "	x	x	10 [ <sup>b,e</sup> ] <sup>a</sup>	x	100 [*] b
Nitrites as N Single Value-mg/l	<	х	10 [*] b	<del>[0.06<sup>b</sup>]</del>	<del>[x]</del>	[x] 5 a	[x] 5 a	х	х	1.0 ° [ <sup>-b</sup> ]	х	10 [a] b

Beneficial Uses					Aqua	tic Life						
		Agricultura	1	Cold		Warm						
		Use		Water	r	Water						
Parameter		Irrigation	Watering of Livestock	Propa- gation	Put & Take	Propagation	Put & Take	[Water Contact Recreation] Recreation involving contact with the water	[Non-Contact Recreation] Recreation not involving contact with the water	Municipal or Domestic Supply	Industrial Supply <del>[Supply]</del>	Propagation of Wildlife
		_		0.06ª	0.06a							
Total Nitrogen as N Single Value-mg/l		х	х	<	·	Site S	pecific Det	ermination [	] <sup>a</sup>	> I	х	х
EUn ionized Ammonia — as NH 3 Single Value mg/l	4	*	*	0.02 he	<site spe<="" td=""><td>reific Deterr</td><td>nination&gt;</td><td>*</td><td>*</td><td><del>0.5</del> (<del>Total NH <sub>3</sub> N)</del></td><td>*</td><td><del>x]</del></td></site>	reific Deterr	nination>	*	*	<del>0.5</del> ( <del>Total NH <sub>3</sub> N)</del>	*	<del>x]</del>
Total Ammonia as N Single Value-mg/l	<	x	x	(S Freshwate	See Footno	Determinatonte 1)are pH and ent	>	x	x	0.5 <sup>b</sup>	x	x
Total Dissolved Solids Single Value-mg/l	<	[x] 500- 1000 a	3000 [ <sup>a</sup> ] <sup>b</sup>	x	x	x	x	х	x	[500/1000°] 500°/1000°	x	x
Color (PT-CO), Single Value	<	x	x	x	x	x	x	x	x	75 <sup>b</sup>	x	x
Turbidity, Single Value-NTU	<	x	x	10 [ <sup>d</sup> ] <sup>e</sup>	10 [ <sup>4</sup> ] <sup>e</sup>	50 [ <sup>d</sup> ] <sup>e</sup>	50 [ <sup>d</sup> ] <sup>e</sup>	x [200/400-b] See	x <del>[1000/2000</del>	y <b>[</b> <sup>b</sup> ] "	x	x
Fecal Coliform (MF/100ml) Geometric Mean Single Value	< <	x 1000 [*] <sup>b</sup>	x 1000 <del>[*]</del> <sup>b</sup>	<b>x</b> x	<b>x</b> x	<b>x</b> x	<b>x</b> x	Footnote [1] 2 200 b 400 b	<del>d]</del> 1000 ° 2000 °	x 2000 [*] b	<b>x</b> x	x 1000 [*] b

Beneficial Uses					Aqua	tic Life						
		Agricultura	1	Cold		Warm						
		Use		Water		Water						
Parameter		Irrigation	Watering of Livestock	Propagation	Put & Take	Propagation	Put & Take	[Water Contact Recreation] Recreation involving contact with the water	[Non-Contact Recreation] Recreation not involving contact with the water	Municipal or Domestic Supply	Industrial Supply [Supply]	Propa- gation of Wildlife
E. Coli (No./100ml)								See	Footnote 3			
Geometric Mean	<	x	x	x	x	x	x	126 a	630 a	x	x	x
Single Value	٧	x	x	x	x	x	x	235-576 a	x	x	x	x
Alkalinity as CaCO <sub>3</sub> Single Value-mg/l		x	x	Less than natural con	-			x	x	х	x	30-130 [a]
Suspended Solids Single Value-mg/l	<	х	х	25-80 [*]	25-80 [*]	25-80 [*]	25-80 [*]	x	х	x	x	х
Sulfate Single Value-mg/l	<	x	x	x	х	x	x	x	x	[250 be/500 e] 250 a/500 d	x	x

### FOOTNOTES AND REFERENCES

- < means less than
- > means greater than
- x means a specific recommendation has not been developed.
- y means the cited reference recommended no value be established.
- (1) U.S. Environmental Protection Agency, Pub. No. EPA 822-R-99-014, 1999 Update of

  Ambient Water Quality Criteria for Ammonia (December 1999). Office of Water, Washington,

  D.C. The water quality criteria for ammonia relating to aquatic life are specified in section 3

  of this regulation.
- (2) Based on a minimum of five samples taken over a 30-day period, the fecal coliform bacterial level must not exceed a log mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- [(2)] (3) The recommended water quality criteria for E. Coli requires that the geometric mean calculated over an annual basis not exceed the criteria and that the single sample maximum be met for a water body to be fully supportive of its intended use. The single sample maximum value for E. Coli for recreation involving contact with the water varies depending on the degree of use. For recreation not involving contact with the water, the levels for E. Coli should not exceed 5 times the Environmental Protection Agency's recommended geometric mean water quality criteria for bacteria.

- (4) The table is not all-inclusive. As the need arises and data becomes available, appropriate revisions and additions will be made.
- a. U.S. Environmental Protection Agency, Pub. No. EPA 440/5-86-001, <u>Quality Criteria for Water 1986 (The Gold Book)</u>. Office of Water, Washington, D.C.
- **b.** National Academy of Sciences, Water Quality Criteria (Blue Book) (1972).
- [b.] c. U.S. Environmental Protection Agency, [Pub. No. EPA 440/9-76-023, Quality Criteria for Water (1976). Office of Water and Hazardous Materials, Washington, D.C.
- e.] "National Recommended Water Quality Criteria," set forth in volume 63 of the Federal Register at pages 68353 et seq., December 10, 1998.
- d. Nevada Division of Health, <del>[Water Supply Regulation, Part I, Water Quality Standards, Monitoring, Record Keeping and Reporting (1977). State Board of Health, Carson City, Nevada.</del>
- d.] Bureau of Health Protection Services, NAC 445A.455, "Secondary standards: General requirements; public notice."
- e. Report of the Commission on Water Quality Criteria (FWPCA) (Green Book) (1968).

- e. American Fisheries Society, Water Quality Section, A Review of the EPA Red Book; Quality Criteria for Water (1979).
- f. McKee and Wolf, California State Water Resources Control Board, Water Quality Criteria (1963).
  - **Sec. 6.** NAC 445A.147 is hereby amended to read as follows:

# STANDARDS OF WATER QUALITY

## Carson River

Control Point at the West Fork at the state line. The limits of this table apply only to the West Fork at the state line.

	REQUIREMENTS TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMay: ≤13°C	Aquatic life <sup>b</sup> and [water contact recreation.]
Maximum		June: ≤17°C	recreation involving contact with the water.
		July: ≤21°C	
		AugOct.: ≤22°C	
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	

pH Units	7.4 - 8.4		[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]
		S.V.: 6.5 - 9.0	Recreation involving contact with the water <sup>b</sup> ,
		ΔpH: ±0.5 Max.	propagation of wildlife <sup>b</sup> , aquatic life, irrigation,
			[stock watering,] watering of livestock, municipal
			or domestic supply and industrial supply.
Total Phosphates	A-Avg.: ≤.016	A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(as P) - mg/l	S.V.: ≤.033		recreation involving contact with the water <sup>b</sup> ,
	2		municipal or domestic supply and <del>[noncontact</del>
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species	A-Avg.: ≤0.4	Nitrate S.V.: ≤10	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,
(N) - mg/l	S.V.: ≤0.5	Nitrite S.V.: ≤.06	[water contact recreation, stock watering, wildlife
	5. v <u>2</u> 0.3	Ammonia S.V.: ≤.02	propagation and noncontact recreation.]
			recreation involving contact with the water,
		<del>(un-ionized)</del>	watering of livestock, propagation of wildlife
			and recreation not involving contact with the
			water.
Total Ammonia	-	e	Aquatic life <sup>b</sup> .
(as N) - mg/l			
		S.V.:	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Dissolved		NovMay: ≥6.0	propagation, stock watering,] recreation
Oxygen – mg/l		JunOct.: ≥5.0	involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
<u> </u>			

Suspended	A-Avg.: ≤15		
Solids - mg/l		S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU	A-Avg.: ≤3 S.V.: ≤5	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color – PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤70 S.V.: ≤95	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤3 S.V.: ≤5	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l	 S.V.: ≤4	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤1	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤105 	≤200/400°	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.

E. Coli			Recreation involving contact with the water <sup>b</sup> and
(No./100 ml)			recreation not involving contact with the water.
Annual Geometric			
Mean	_	≤126	
Single Value	_	≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 7.** NAC 445A.148 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

### Carson River

Control Point at Bryant Creek near the state line. The limits of this table apply only to Bryant Creek near the state line.

REQUIREMENTS	
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TO MAINTAIN	WATER QUALITY	
EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
QUALITY	BENEFICIAL USES	USES
$\Delta T = 0$ °C	NovMay: ≤13°C  June: ≤17°C  July: ≤21°C  AugOct.: ≤22°C  ΔT ≤2°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
A-Avg.: ≤.036 S.V.: ≤.05	A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact  recreation.] recreation not involving contact with  the water.
A-Avg.: ≤0.6 S.V.: ≤1.0	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un-ionized)]	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,  [water contact recreation, stock watering, wildlife propagation and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
	EXISTING HIGHER QUALITY   AT = 0°C  A-Avg.: ≤.036 S.V.: ≤.05	EXISTING HIGHER QUALITY  STANDARDS FOR BENEFICIAL USES  NovMay: ≤13°C June: ≤17°C July: ≤21°C AugOct.: ≤22°C ΔT ≤2°C  S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.  A-Avg.: ≤0.36 S.V.: ≤.05  Nitrate S.V.: ≤10 Nitrite S.V.: ≤.06 [Ammonia S.V.: ≤.02

Total Ammonia	-	e	Aquatic life <sup>b</sup> .
(as N) mg/l			
Dissolved		S.V.: NovMay: ≥6.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife  propagation, stock watering,] recreation
Oxygen - mg/l		JunOct.: ≥5.0	involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Suspended Solids - mg/l		S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤375 S.V.: ≤420	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤6 S.V.: ≤7	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤1	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤50 S.V.: ≤90	≤200/400°	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean Single Value	 	≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 8.** NAC 445A.149 is hereby amended to read as follows: 445A.149

## STANDARDS OF WATER QUALITY

# Carson River

Control Point at the East Fork at the state line. The limits of this table apply only to the East Fork at the state line.

REQUIREMENTS		
TO MAINTAIN	WATER QUALITY	
EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
QUALITY	BENEFICIAL USES	USES
	NovMay: ≤13°C	Aquatic life <sup>b</sup> and [water contact recreation.]
	June: ≤17°C	recreation involving contact with the water.
	July: ≤21°C	
	AugOct.: ≤22°C	
$\Delta T = 0$ °C	ΔT ≤2°C	
		[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]
	S.V.: 6.5 - 9.0	Recreation involving contact with the water <sup>b</sup> ,
	ΔpH: ±0.5 Max.	propagation of wildlife <sup>b</sup> , aquatic life, irrigation,
		[stock watering,] watering of livestock, municipal
		or domestic supply and industrial supply.
A-Avg.: ≤.03	A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , <del>[water contact recreation b],</del>
S.V.: ≤.065		recreation involving contact with the water <sup>b</sup> ,
		municipal or domestic supply and [noncontact
		recreation.] recreation not involving contact with
		the water.
	TO MAINTAIN EXISTING HIGHER QUALITY   ΔT = 0°C  A-Avg.: ≤.03	TO MAINTAIN  EXISTING HIGHER QUALITY  STANDARDS FOR BENEFICIAL USES  NovMay: $\leq 13^{\circ}$ C  June: $\leq 17^{\circ}$ C  July: $\leq 21^{\circ}$ C  AugOct.: $\leq 22^{\circ}$ C $\Delta T \leq 2^{\circ}$ C    S.V.: $6.5 - 9.0$ $\Delta pH$ : $\pm 0.5$ Max.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤0.5  S.V.: ≤1.1	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un_ionized)]	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,  [water contact recreation, stock watering, wildlife propagation and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	e	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l	 	S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Suspended Solids - mg/l		S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU	A-Avg.: ≤5 S.V.: ≤8	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.

	1	
REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
A-Avg.: ≤145 S.V.: ≤185	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
A-Avg.: ≤3 S.V.: ≤5	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
 S.V.: ≤3	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
A.G.M.: ≤40 S.V.: ≤60	≤200/400°	[Water contact recreation b, noncontact recreation,] Recreation involving contact with the water, recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
	TO MAINTAIN  EXISTING HIGHER  QUALITY  d  A-Avg.: ≤145  S.V.: ≤185  A-Avg.: ≤3  S.V.: ≤5   S.V.: ≤3  A-Avg.: ≤2      A.G.M.: ≤40	TO MAINTAIN       WATER QUALITY         EXISTING HIGHER       STANDARDS FOR         BENEFICIAL USES       BENEFICIAL USES         A-Avg.: ≤145       A-Avg.: ≤500         S.V.: ≤185       S.V.: ≤250          S.V.: ≤250         A-Avg.: ≤3       S.V.: ≤250         A-Avg.: ≤3       S.V.: ≤250         A-Avg.: ≤3       S.V.: ≤250         A-Avg.: ≤2       A-Avg.: ≤8          less than 25% change from natural conditions         A.G.M.: ≤40       A.G.M.: ≤40

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
E. Coli			
(No./100 ml)			Recreation involving contact with the water <sup>b</sup> and
Annual Geometric			recreation not involving contact with the water.
Mean		≤126	
Single Value	_	≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 9.** NAC 445A.150 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

### Carson River

Control Point for East Fork at Highway 395, South of Gardnerville (Riverview). The limits of this table apply from Riverview Mobile Home Park to the state line.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER	WATER QUALITY STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMay: ≤13°C June: ≤17°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
		July: ≤21°C AugOct.: ≤22°C	
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.5 - 8.6	S.V.: 6.5 - 9.0	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,
		ΔpH: ±0.5 Max.	<pre>propagation of wildlife<sup>b</sup>, aquatic life, irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.</pre>
Total Phosphates  (as P) - mg/l		A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤0.4  S.V.: ≤0.5	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un_ionized)]	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,  [water contact recreation, stock watering, wildlife propagation and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife

			and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l		е	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Suspended Solids - mg/l		S.V.: ≤80	Aquatic life <sup>b</sup> .
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤120 S.V.: ≤175	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤6 S.V.: ≤10	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .

Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤20 S.V.: ≤85	≤200/400°	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E.Coli (No./100 ml) Annual Geometric Mean Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 10.** NAC 445A.151 is hereby amended to read as follows: 445A.151

# STANDARDS OF WATER QUALITY

## Carson River

Control Point at the East Fork at Muller Lane. The limits of this table apply only from East Fork at Muller Lane to Highway 395, South of Gardnerville (Riverview Mobile Home Park).

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  ΔT <sup>a</sup>	$\Delta T = 0$ °C	NovMay: ≤13°C  June: ≤17°C  July: ≤21°C  AugOct.: ≤22°C  ΔT ≤2°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
pH Units	7.4 - 8.7	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
Total Phosphates		A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , <del>[water contact recreation<sup>b</sup>,]</del>

(as P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species	Total Nitrogen	Nitrate S.V.: ≤10	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,
(N) - mg/l	A-Avg.: ≤0.5	Nitrite S.V.: ≤.06	[water contact recreation, stock watering, wildlife
	S.V.: ≤0.8	<del>[Ammonia S.V.: ≤.02</del>	propagation and noncontact recreation.]
		(un-ionized)]	recreation involving contact with the water,
		(an iomzea)	watering of livestock, propagation of wildlife
			and recreation not involving contact with the
			water.
Total Ammonia	_	e	Aquatic life <sup>b</sup> .
(as N) - mg/l			
		S.V.:	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Dissolved		NovMay: ≥6.0	propagation, stock watering,] recreation
Oxygen - mg/l		JunOct.: ≥5.0	involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Suspended			Aquatic life <sup>b</sup> .
Solids - mg/l		S.V.: ≤80	
Turbidity - NTU			Aquatic life <sup>b</sup> and municipal or domestic supply.
		S.V.: ≤10	
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .

Total Dissolved Solids - mg/l	A-Avg.: ≤180 S.V.: ≤205	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤8 S.V.: ≤10	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤50 	≤200/400°	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml)  Annual Geometric  Mean  Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 11.** NAC 445A.152 is hereby amended to read as follows: 445A.152

## STANDARDS OF WATER QUALITY

### Carson River

Control Point at Genoa Lane. The limits of this table apply from Genoa Lane to the East Fork at Muller Lane and to the West Fork at the state line.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovApr: ≤13°C	Aquatic life <sup>b</sup> and [water contact recreation.]
Maximum		May-June: ≤17°C	recreation involving contact with the water.
		JulOct.: ≤23°C	

$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.4 - 8.5	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l		A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact  recreation.] recreation not involving contact with  the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤0.8  S.V.: ≤1.3	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un-ionized)]	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,  [water contact recreation, stock watering, wildlife propagation and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	_	e	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: NovApr.: ≥6.0 May-Oct.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.]

			recreation not involving contact with the water.
Suspended Solids - mg/l		S.V.: ≤80	Aquatic life <sup>b</sup> .
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤165 S.V.: ≤220	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤8 S.V.: ≤12	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤180 	≤200/400°	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock

			watering.] propagation of wildlife and watering
			of livestock.
E. Coli			
(No./100 ml)			Recreation involving contact with the water <sup>b</sup> and
Annual Geometric			recreation not involving contact with the water.
Mean	_	≤126	
Single Value	-	≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 12.** NAC 445A.153 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

## Carson River

Control Point at Cradlebaugh Bridge. The limits of this table apply from Cradlebaugh Bridge to Genoa Lane.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum $\Delta T^a$	$\Delta T = 0$ °C	NovApr: ≤13°C May-June: ≤17°C JulOct.: ≤23°C ΔT ≤2°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
pH Units	7.5 - 8.4	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l		A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact  recreation.] recreation not involving contact with  the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤.85  S.V.: ≤1.2	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un_ionized)]	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,  [water contact recreation, stock watering, wildlife  propagation and noncontact recreation.]  recreation involving contact with the water,  watering of livestock, propagation of wildlife  and recreation not involving contact with the  water.

Total Ammonia (as N) - mg/l		e	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: NovApr.: ≥6.0 May-Oct.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Suspended Solids - mg/l		S.V.: ≤80	Aquatic life <sup>b</sup> .
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤180 S.V.: ≤230	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤8 S.V.: ≤15	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

Alkalinity (as CaCO <sub>3</sub> ) - mg/l	 less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	  ≤200/400°	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean Single Value	 ≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 13.** NAC 445A.154 is hereby amended to read as follows: 445A.154

# STANDARDS OF WATER QUALITY

## Carson River

Control Point at Mexican Ditch Gage. The limits of this table apply from Mexican Ditch Gage to Highway 395, at Cradlebaugh Bridge.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum ΔT <sup>a</sup>	$\Delta T = 0$ °C	NovApr.: ≤13°C  May-June: ≤17°C  JulOct.: ≤23°C  ΔT ≤2°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
pH Units	7.4 - 8.5	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l		A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact  recreation.] recreation not involving contact with  the water.

Nitrogen Species	Total Nitrogen	Nitrate S.V.: ≤10	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,
(N) - mg/l	A-Avg.: ≤0.8	Nitrite S.V.: ≤.06	[water contact recreation, stock watering, wildlife
	S.V.: ≤1.3	[Ammonia S.V.: ≤.02	propagation and noncontact recreation.]
		(un-ionized)]	recreation involving contact with the water,
			watering of livestock, propagation of wildlife
			and recreation not involving contact with the
			water.
Total Ammonia	_	e	Aquatic life <sup>b</sup> .
(as N) - mg/l			
		S.V.:	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Dissolved		NovApr.: ≥6.0	propagation, stock watering.] recreation
Oxygen - mg/l		May-Oct.: ≥5.0	involving contact with the water, propagation of
, ,		May Oct.: 23.0	wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Suspended			Aquatic life <sup>b</sup> .
Solids - mg/l		S.V.: ≤80	
Turbidity - NTU		G.V. 40	Aquatic life <sup>b</sup> and municipal or domestic supply.
		S.V.: ≤10	
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved	A-Avg.: ≤285	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l	S.V.: ≤360		[stock watering.] watering of livestock.

Chlorides - mg/l	A-Avg.: ≤17		Municipal or domestic supply <sup>b</sup> , [wildlife
	S.V.: ≤23	S.V.: ≤250	propagation,] propagation of wildlife, irrigation
			and [stock watering.] watering of livestock.
Sulfate - mg/l	A-Avg.: ≤24 S.V.: ≤100	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤110 S.V.: ≤295	≤200/400°	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml)  Annual Geometric  Mean  Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.

- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 14.** NAC 445A.155 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

### Carson River

Control Point near New Empire. The limits of this table apply from New Empire to the Mexican Ditch Gage.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C-		NovMay: ≤18°C Jun.Oct.: ≤23°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
$\Delta T^{a}$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.4 - 8.4	S.V.: 6.5 - 9.0	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,

		ΔpH: ±0.5 Max.	propagation of wildlife <sup>b</sup> , aquatic life, irrigation,
			[stock watering,] watering of livestock, municipal
			or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l		A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤1.3  S.V.: ≤1.7	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un_ionized)]	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,  [water contact recreation, stock watering, wildlife propagation and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	_	e	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Suspended Solids - mg/l		S.V.: ≤80	Aquatic life <sup>b</sup> .

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Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤260 S.V.: ≤375	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤13 S.V.: ≤24	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml		≤200/400°	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli			

(No./100 ml)			Recreation involving contact with the water <sup>b</sup> and
Annual Geometric			recreation not involving contact with the water.
Mean		≤126	
Single Value	-	≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 15.** NAC 445A.156 is hereby amended to read as follows:

445A.156

### STANDARDS OF WATER QUALITY

#### Carson River

Control Point at Dayton Bridge. The limits of this table apply from Dayton Bridge to New Empire.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL

	QUALITY	BENEFICIAL USES	USES
Temperature °C- Maximum  ΔT <sup>a</sup>	$\Delta T = 0$ °C	NovMar: ≤11°C  AprJun.: ≤24°C  JulOct.: ≤28°C  ΔT ≤2°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
[PH] pH Units	7.5 - 8.6	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l		A-Avg.: ≤0.1	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact  recreation.] recreation not involving contact with  the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤1.2  S.V.: ≤1.6	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.1.0  [Ammonia S.V.: ≤.02  (un ionized)]	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,  [water contact recreation, stock watering, wildlife propagation and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	e	Aquatic life <sup>b</sup> .

Dissolved			Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Oxygen - mg/l		S.V.: ≥5.0	propagation, stock watering,] recreation
			involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Suspended			Aquatic life <sup>b</sup> .
Solids - mg/l		S.V.: ≤80	
Turbidity - NTU	A-Avg.: ≤12		Aquatic life <sup>b</sup> and municipal or domestic supply.
	S.V.: ≤25	S.V.: ≤50	
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved	A-Avg.: ≤250	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l	S.V.: ≤400	, <u>0</u> , , , , , , , , , , , , , , , , , , ,	[stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤10		Municipal or domestic supply <sup>b</sup> , <del>[wildlife</del>
	S.V.: ≤18	S.V.: ≤250	propagation,] propagation of wildlife, irrigation
	5. 7 210		and [stock watering.] watering of livestock.
Sulfate - mg/l			Municipal or domestic supply <sup>b</sup> .
		S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and <del>[wildlife propagation.]</del>
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
5)			

Fecal Coliform-	A.G.M.: ≤50		[Water contact recreation <sup>b</sup> , noncontact
No./100 ml	S.V.: ≤280	≤200/400°	recreation,] Recreation involving contact with
			the water <sup>b</sup> , recreation not involving contact with
			the water, municipal or domestic supply,
			irrigation, <del>[wildlife propagation and stock</del>
			watering.] propagation of wildlife and watering
			of livestock.
E. Coli			
(No./100 ml)			Recreation involving contact with the water <sup>b</sup> and
Annual Geometric			recreation not involving contact with the water.
Mean		≤126	
Single Value	_	≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 16.** NAC 445A.157 is hereby amended to read as follows: 445A 157

## STANDARDS OF WATER QUALITY

Carson River

Control Point at Weeks (Ft. Churchill). The limits of this table apply from the U.S. Highway 95 Bridge at Weeks to the Dayton Bridge.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature $^{\circ}$ C-Maximum $\Delta T^a$	$\Delta T = 0$ °C	NovMar.: ≤11°C  AprJun.: ≤24°C  JulOct.: ≤28°C  ΔT ≤2°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
pH Units	7.5 - 8.5	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l		A-Avg.: ≤0.1	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤0.6  S.V.: ≤1.1	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.1.0  [Ammonia S.V.: ≤.02	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,  [water contact recreation, stock watering, wildlife  propagation and noncontact recreation.]

		(un-ionized)]	recreation involving contact with the water,
		,	watering of livestock, propagation of wildlife
			and recreation not involving contact with the
			water.
T . 1.4			
Total Ammonia	_	e	Aquatic life <sup>b</sup> .
(as N) - mg/l			
D: 1 1			a control of the cont
Dissolved			Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Oxygen - mg/l		S.V.: ≥5.0	propagation, stock watering,] recreation
			involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Suspended			Aquatic life <sup>b</sup> .
Solids - mg/l		S.V.: ≤80	
Turbidity - NTU	A-Avg.: ≤25		Aquatic life <sup>b</sup> and municipal or domestic supply.
		S.V.: ≤50	
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolated	A Ava : <250	A Av <500	Municipal or domestic supply <sup>b</sup> , irrigation and
Total Dissolved	A-Avg.: ≤250	A-Avg.: ≤500	
Solids - mg/l	S.V.: ≤380		[stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤10		Municipal or domestic supply <sup>b</sup> , [wildlife
	S.V.: ≤18	S.V.: ≤250	propagation,] propagation of wildlife, irrigation
			and [stock watering.] watering of livestock.
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Sulfate - mg/l	A-Avg.: ≤100		Municipal or domestic supply <sup>b</sup> .
	S.V.: ≤140	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤90 S.V.: ≤240	≤200/400°	[Water contact recreation b, noncontact recreation,] Recreation involving contact with the water b, recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.

- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 17.** NAC 445A.158 is hereby amended to read as follows:

445A.158

# STANDARDS OF WATER QUALITY

### Carson River

Control Point at Lahontan Dam. The limits of this table apply from Lahontan Dam to the U.S. Highway 95 bridge at Weeks (Ft. Churchill).

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  ΔT <sup>a</sup>	$\Delta T = 0$ °C	NovMar.: ≤11°C  AprJun.: ≤24°C  JulOct.: ≤28°C  ΔT ≤2°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
[PH] pH Units		S.V.: [7.0 – 8.3] 6.5-9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.

Total Phosphates		S.V.: ≤0.06	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(as P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species	Total Nitrogen	Nitrate S.V.: ≤10	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,
(N) - mg/l	A-Avg.: ≤1.3	Nitrite S.V.: $\leq 1.0$	[water contact recreation, stock watering, wildlife
	S.V.: ≤1.7	<del>[Ammonia S.V.: ≤.02</del>	propagation and noncontact recreation.]
		(un-ionized)	recreation involving contact with the water,
		(an ionized)]	watering of livestock, propagation of wildlife
			and recreation not involving contact with the
			water.
Total Ammonia (as N) - mg/l	_	e	Aquatic life <sup>b</sup> .
(100 - 1) - 11 - 10			
Dissolved			Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Oxygen - mg/l		S.V.: ≥5.0	propagation, stock watering.] recreation
			involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Suspended			Aquatic life <sup>b</sup> .
Solids - mg/l		S.V.: ≤25	
Turbidity - NTU	A-Avg.: ≤15		Aquatic life <sup>b</sup> and municipal or domestic supply.
	S.V.: ≤27	S.V.: ≤50	
-	+		•

Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤175 S.V.: ≤225	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤9 S.V.: ≤15	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l	A-Avg.: ≤35 S.V.: ≤50	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤25 S.V.: ≤75	≤200/400°	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean	_	≤126	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.
Single Value	_	≤235	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 18.** NAC 445A.160 is hereby amended to read as follows:

### STANDARDS OF WATER QUALITY

### West Walker River

Control Point at the West Walker River at the state line. The limits of this table apply only to the West Walker River at the state line.

	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING HIGHER	STANDARDS FOR	As designated in NAC 445A.159
	QUALITY	BENEFICIAL USES	(Most stringent use listed first)
Temperature	July-Oct.: ≤22°C	NovApr.: ≤13°C	Propagation of aquatic life and recreation
Single Value	$\Delta T = 0^{\circ}C^{a}$	May-Jun.: ≤17°C	involving contact with the water.

		JulOct.: ≤23°C	
		$\Delta T \leq 2^{\circ}C^{a}$	
pН		Within range	Propagation of aquatic life, recreation involving
Single Value		6.5-9.0 SU	contact with the water, propagation of wildlife,
		ΔpH: ±0.5 SU Max.	irrigation, watering of livestock, municipal or
		•	domestic supply, or both, and industrial supply.
			1137
Total Phosphates			Propagation of aquatic life, recreation involving
(as P)			contact with the water, municipal or domestic
Annual Average		≤0.1 mg/l	supply, or both, and recreation not involving
			contact with the water.
Nitrogen Species	Total Nitrogen		Municipal or domestic supply, or both,
(as N)			propagation of aquatic life, recreation involving
			contact with the water, watering of livestock,
Annual Average	≤0.6 mg/l		propagation of wildlife and recreation not
Single Value	≤0.9 mg/l	Nitrate: ≤10 mg/l	involving contact with the water.
Single Value		Nitrite: ≤.06 mg/l	
[Single Value]		[Ammonia: ≤.02 mg/l	
		(un-ionized)]	
		7-	
Total Ammonia	_	c	Propagation of aquatic life.
(as N) - mg/l			
Dissolved		NovMay: ≥6.0 mg/l	Propagation of aquatic life, recreation involving
Oxygen		JunOct.: ≥5.0 mg/l	contact with the water, propagation of wildlife,
Single Value			watering of livestock, municipal or domestic
			supply, or both, and recreation not involving
			contact with the water.

Suspended			Propagation of aquatic life.
Solids			
Annual Average	≤60 mg/l		
Single Value		≤80 mg/l	
Turbidity			Propagation of aquatic life and municipal or
Single Value		b	domestic supply, or both.
Calar			Maisiral and associate and a solution of
Color	OC DOW	ege pour	Municipal or domestic supply, or both, and
Single Value	≤26 PCU	≤75 PCU	propagation of aquatic life.
Total Dissolved			Municipal or domestic supply, or both, irrigation
Solids			and watering of livestock.
Annual Average	≤165 mg/l	≤500 mg/l	
Single Value	≤220 mg/l		
	======================================		
Chloride			Municipal or domestic supply, or both,
Annual Average	≤15 mg/l		propagation of wildlife, irrigation and watering of
Single Value	≤20 mg/l	≤250 mg/l	livestock.
Sulfate			Municipal or domestic supply, or both.
Single Value	≤25 mg/l	≤250 mg/l	
Sodium			Irrigation and municipal or domestic supply, or
Adsorption Ratio			both.
Annual Average		≤8	
A Urolinite		loss than 250/ stress	Dropogation of agreetic life and a ground in a C
Alkalinity		less than 25% change from natural conditions	Propagation of aquatic life and propagation of
(as CaCO <sub>3</sub> )		nom natural conditions	wildlife.

[Escherichia coli]		
E. Coli		Recreation involving contact with the water [,]
(No./100 ml)		and recreation not involving contact with the
Annual Geometric	[126 MF/100 ml	water. [, municipal or domestic supply, or both,
Mean	 235 MF/100 ml] ≤126	irrigation and watering of livestock.]
Single Value	 <i>≤410</i>	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. Increase in turbidity must not be more than 10 NTU above natural conditions.
- c. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 19.** NAC 445A.161 is hereby amended to read as follows:

# STANDARDS OF WATER QUALITY

## Topaz Lake

Control Point at Topaz Lake. The limits of this table apply at various points in Topaz Lake.

	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING HIGHER	STANDARDS FOR	As designated in NAC 445A.159
	QUALITY	BENEFICIAL USES	(Most stringent use listed first)
Temperature		NovApr.: ≤13°C	Propagation of aquatic life and recreation

	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING HIGHER	STANDARDS FOR	As designated in NAC 445A.159
	QUALITY	BENEFICIAL USES	(Most stringent use listed first)
Single Value	$\Delta T = 0$ °C <sup>a</sup>	May-Jun.: ≤17°C	involving contact with the water.
		JulOct.: ≤23°C	
		ΔT ≤2°C <sup>a</sup>	
рН		Within range	Propagation of aquatic life, recreation involving
Single Value		6.5-9.0 SU	contact with the water, propagation of wildlife,
· ·		ΔpH: ±0.5 SU Max.	irrigation, watering of livestock, municipal or
			domestic supply, or both, and industrial supply.
Total Phosphates			Propagation of aquatic life, recreation involving
(as P)			contact with the water, municipal or domestic
Annual Average		≤0.05 mg/l	supply, or both, and recreation not involving
Single Value		≤0.10 mg/l	contact with the water.
Nitrogen Species	Total Nitrogen		Municipal or domestic supply, or both,
(as N)			propagation of aquatic life, recreation involving
Annual Average	≤0.6 mg/l		contact with the water, watering of livestock,
Single Value	≤1.0 mg/l	Nitrate: ≤10 mg/l	propagation of wildlife and recreation not
Single Value		Nitrite: ≤.06 mg/l	involving contact with the water.
[Single Value]		[Ammonia: ≤.02 mg/l	
		(un-ionized)]	
Total Ammonia		d	Propagation of aquatic life.
(as N) - mg/l			2. opugunon oj uquunc nje.
(as 11) - mg/l			

	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING HIGHER	STANDARDS FOR	As designated in NAC 445A.159
	QUALITY	BENEFICIAL USES	(Most stringent use listed first)
Dissolved		NovMay: ≥6.0 mg/l	Propagation of aquatic life, recreation involving
Oxygen		June-Oct. <sup>b</sup> : ≥5.0 mg/l	contact with the water, propagation of wildlife,
Single Value			watering of livestock, municipal or domestic
			supply, or both, and recreation not involving
			contact with the water.
Suspended Solids			Propagation of aquatic life.
Annual Average	≤0.6 mg/l		
Single Value	≤9.0 mg/l	≤25 mg/l	
Turbidity			Propagation of aquatic life and municipal or
Annual Average	≤3.0 NTU	С	domestic supply, or both.
Single Value	≤5.0 NTU		
			Water to the state of
Color			Municipal or domestic supply, or both, and
Single Value	≤21 PCU	≤75 PCU	propagation of aquatic life.
Total Dissolved			Municipal or domestic supply, or both, irrigation
Solids			and watering of livestock.
Annual Average	≤105 mg/l	≤500 mg/l	
Single Value	-		
	≤120 mg/l		
Chloride			Municipal or domestic supply, or both,
Annual Average	≤7 mg/l		propagation of wildlife, irrigation and watering of
Single Value	≤10 mg/l	≤250 mg/l	livestock.
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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Sulfate Single Value	≤25 mg/l	≤250 mg/l	Municipal or domestic supply, or both.
Sodium  Adsorption Ratio  Annual Average		≤8	Irrigation, and municipal or domestic supply, or both.
Alkalinity (as CaCO <sub>3</sub> )		less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
[Escherichia coli]  E. Coli (No./100 ml)  Annual Geometric  Mean  Single Value	 	[126 MF/100 ml] 235 MF/100 ml] ≤126 ≤235	Recreation involving contact with the water [,]  and recreation not involving contact with the  water. [, municipal or domestic supply, or both,  irrigation and watering of livestock.]

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The dissolved oxygen standard from June to October applies only to the epilimnion.
- c. Increase in turbidity must not be more than 10 NTU above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 20.** NAC 445A.162 is hereby amended to read as follows:

# STANDARDS OF WATER QUALITY

# West Walker River

Control Point at the West Walker River near Wellington. The limits of this table apply from the West Walker River near Wellington to the West Walker River at the state line.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0$ °C <sup>a</sup>	NovApr.: ≤13°C  May-Jun.: ≤17°C  JulOct.: ≤23°C  ΔT ≤2°C <sup>a</sup>	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value		Within range 6.5 - 9.0 SU ΔpH: ±0.5 SU Max.	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.
Total Phosphates (as P) Annual Average Single Value	≤0.07 mg/l ≤0.10 mg/l	≤0.1 mg/l	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with the water.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Nitrogen Species (as N) Annual Average Single Value Single Value [Single Value]	Total Nitrogen  ≤0.6 mg/l ≤1.0 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤.06 mg/l  [Ammonia: ≤.02 mg/l (un-ionized)]	Municipal or domestic supply, or both, propagation of aquatic life, recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l		с	Propagation of aquatic life.
Dissolved Oxygen Single Value		NovMay: ≥6.0 mg/l JunOct.: ≥5.0 mg/l	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and recreation not involving contact with the water.
Suspended Solids Single Value		≤80 mg/l	Propagation of aquatic life.
Turbidity Single Value		b	Propagation of aquatic life and municipal or domestic supply, or both.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL  USES  As designated in NAC 445A.159  (Most stringent use listed first)
Color Single Value		≤75 PCU	Municipal or domestic supply, or both, and propagation of aquatic life.
Total Dissolved Solids Annual Average Single Value	≤175 mg/l ≤260 mg/l	≤500 mg/l	Municipal or domestic supply, or both, irrigation and watering of livestock.
Chloride Annual Average Single Value	≤16 mg/l ≤30 mg/l	 ≤250 mg/l	Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.
Sulfate Single Value		≤250 mg/l	Municipal or domestic supply, or both.
Sodium Adsorption Ratio Annual Average		≤8	Irrigation, and municipal or domestic supply, or both.
Alkalinity (as CaCO <sub>3</sub> )		less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
[Escherichia coli]			Recreation involving contact with the water [,]

	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING	STANDARDS FOR	As designated in NAC 445A.159
	HIGHER	BENEFICIAL USES	(Most stringent use listed first)
	QUALITY		
E. Coli			and recreation not involving contact with the
(No./100 ml)			water. [, municipal or domestic supply, or both,
Annual Geometric		<del>[126 MF/100 ml</del>	irrigation and watering of livestock.]
Mean		235 MF/100 ml] ≤126	
Single Value		≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. Increase in turbidity must not be more than 10 NTU above natural conditions.
- c. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 21.** NAC 445A.163 is hereby amended to read as follows:

### STANDARDS OF WATER QUALITY

#### West Walker River

Control Point at the West Walker River above the confluence with the East Walker River at Nordyke Road. The limits of this table apply to the West Walker River above its confluence with the East Walker River to the control point mentioned in NAC 445A.162 (near Wellington).

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0$ °C <sup>a</sup>	NovApr.: $\leq 13^{\circ}$ C  May-Jun.: $\leq 17^{\circ}$ C  JulOct.: $\leq 23^{\circ}$ C $\Delta T \leq 2^{\circ}$ C	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value		Within range 6.5 - 9.0 SU ΔpH: ±0.5 SU Max.	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.
Total Phosphates (as P) Annual Average Single Value	≤0.15 mg/l	≤0.10 mg/l	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with the water.
Nitrogen Species (as N) Annual Average Single Value Single Value [Single Value]	Total Nitrogen  ≤1.0 mg/l  ≤1.2 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤.06 mg/l  [Ammonia: ≤.02 mg/l (un-ionized)]	Municipal or domestic supply, or both, propagation of aquatic life, recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Total Ammonia (as N) - mg/l		С	Propagation of aquatic life.
Dissolved Oxygen Single Value		NovMay: ≥6.0 mg/l  JunOct.: ≥5.0 mg/l	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and recreation not involving contact with the water.
Suspended Solids Single Value		≤80 mg/l	Propagation of aquatic life.
Turbidity Single Value		b	Propagation of aquatic life and municipal or domestic supply, or both.
Color Single Value	≤46 PCU	≤75 PCU	Municipal or domestic supply, or both, and propagation of aquatic life.
Total Dissolved Solids Annual Average Single Value	≤330 mg/l ≤425 mg/l	≤500 mg/l	Municipal or domestic supply, or both, irrigation and watering of livestock.

	T	T	
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL  USES  As designated in NAC 445A.159  (Most stringent use listed first)
Chloride Annual Average Single Value	≤22 mg/l ≤28 mg/l	 ≤250 mg/l	Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.
Sulfate Single Value	≤74 mg/l	≤250 mg/l	Municipal or domestic supply, or both.
Sodium Adsorption Ratio Annual Average		≤8	Irrigation and municipal or domestic supply, or both.
Alkalinity (as CaCO <sub>3</sub> )		less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
[Escherichia coli]  E. Coli  (No./100 ml)  Annual Geometric  Mean		[126 MF/100 ml] 235 MF/100 ml] ≤126	Recreation involving contact with the water [,]  and recreation not involving contact with the  water. [, municipal or domestic supply, or both,  irrigation and watering of livestock.]
Single Value		≤410	

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

- b. Increase in turbidity must not be more than 10 NTU above natural conditions.
- c. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 22.** NAC 445A.164 is hereby amended to read as follows:

445A.164

# STANDARDS OF WATER QUALITY

### Sweetwater Creek

Control Point at Sweetwater Creek. The limits of this table apply to Sweetwater Creek from its confluence with the East Walker River to the state line.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0^{\circ} C^{a}$	NovApr.: ≤13°C May-Jun.: ≤17°C JulOct.: ≤23°C ΔT ≤2°C <sup>a</sup>	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value		Within range 6.5 - 9.0 SU ΔpH: ±0.5 SU Max.	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.

	<u> </u>	T	T
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL  USES  As designated in NAC 445A.159  (Most stringent use listed first)
Total Phosphates  (as P)  Annual Average		≤0.1 mg/l	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with the water.
Nitrogen Species (as N) Annual Average Single Value Single Value [Single Value]	Total Nitrate  ≤0.25 mg/l  ≤0.45 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤.06 mg/l  [Ammonia: ≤.02 mg/l (un_ionized)]	Municipal or domestic supply, or both, propagation of aquatic life, recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	С	Propagation of aquatic life.
Dissolved Oxygen Single Value		NovMay: ≥6.0 mg/l JunOct.: ≥5.0 mg/l	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and recreation not involving contact with the water.
Suspended Solids			Propagation of aquatic life.

REQUIREMENTS TO MAINTAIN WATER QUALITY USES As designated in NAC 445A.159 (Most stringent use listed first)  Single Value  Single Value  445 mg/l  Fropagation of aquatic life and municipal or domestic supply, or both, and propagation of aquatic life.  Municipal or domestic supply, or both, irrigation and watering of livestock.  Municipal or domestic supply, or both, irrigation and watering of Single Value  Single Value  Single Value  Single Value  Single Value  Municipal or domestic supply, or both, irrigation and watering of livestock.  Municipal or domestic supply, or both, irrigation and watering of livestock.  Municipal or domestic supply, or both, irrigation and watering of livestock.  Municipal or domestic supply, or both, irrigation and watering of livestock.  Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.				<u>,                                      </u>
PARAMETER EXISTING STANDARDS FOR As designated in NAC 445A.159 HIGHER QUALITY  Single Value ≤45 mg/l ≤80 mg/l  Turbidity - b Propagation of aquatic life and municipal or domestic supply, or both, and propagation of aquatic life.  Color - Municipal or domestic supply, or both, irrigation and watering of livestock.  Annual Average ≤220 mg/l  Chloride Annual Average ≤5 mg/l  TO MAINTAIN EXISTING STANDARDS FOR As designated in NAC 445A.159 (Most stringent use listed first)  Propagation of aquatic life and municipal or domestic supply, or both.  Municipal or domestic supply, or both, irrigation and watering of livestock.  Municipal or domestic supply, or both, irrigation and watering of livestock.  Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of		DEOLUDEMENTS		DENIEEICIAI
PARAMETER EXISTING HIGHER QUALITY  Single Value ≤45 mg/l ≤80 mg/l  Turbidity Single Value b Propagation of aquatic life and municipal or domestic supply, or both.  Color Municipal or domestic supply, or both, and propagation of aquatic life.  Total Dissolved Solids Annual Average ≤220 mg/l ≤300 mg/l  Chloride Annual Average ≤5 mg/l Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.		-	WATER OHALITY	
HIGHER QUALITY  Single Value  ≤45 mg/l  Single Value  b  Propagation of aquatic life and municipal or domestic supply, or both.  Color  Municipal or domestic supply, or both, and propagation of aquatic life.  Total Dissolved Solids Annual Average Single Value  Single Value  ≤500 mg/l  Chloride Annual Average  ≤5 mg/l  Annual Average  ≤5 mg/l  Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of	DADAMETER			
Single Value       ≤45 mg/l       ≤80 mg/l         Turbidity        b       Propagation of aquatic life and municipal or domestic supply, or both.         Color        Municipal or domestic supply, or both, and propagation of aquatic life.         Total Dissolved Solids       Municipal or domestic supply, or both, irrigation and watering of livestock.         Annual Average       ≤220 mg/l       ≤500 mg/l         Chloride Annual Average       ≤5 mg/l        Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.	PARAMETER			
Single Value       ≤45 mg/l       ≤80 mg/l         Turbidity        b       Propagation of aquatic life and municipal or domestic supply, or both.         Color        Municipal or domestic supply, or both, and propagation of aquatic life.         Total Dissolved       Municipal or domestic supply, or both, irrigation and watering of livestock.         Annual Average       ≤220 mg/l       ≤500 mg/l         Chloride       Municipal or domestic supply, or both, and propagation of wildlife, irrigation and watering of livestock.			BENEFICIAL USES	(Most stringent use listed first)
Turbidity Single Value b domestic supply, or both.  Color		QUALITY		
Single Value b domestic supply, or both.  Color	Single Value	≤45 mg/l	≤80 mg/l	
Single Value b domestic supply, or both.  Color				
Color	Turbidity			Propagation of aquatic life and municipal or
Single Value ≤75 PCU propagation of aquatic life.  Total Dissolved Municipal or domestic supply, or both, irrigation and watering of livestock.  Annual Average ≤220 mg/l ≤500 mg/l  Single Value ≤300 mg/l  Chloride Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of	Single Value		b	domestic supply, or both.
Single Value ≤75 PCU propagation of aquatic life.  Total Dissolved Municipal or domestic supply, or both, irrigation and watering of livestock.  Annual Average ≤220 mg/l ≤500 mg/l  Single Value ≤300 mg/l  Chloride Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of				
Total Dissolved  Solids  Annual Average  Single Value  Chloride  Annual Average  ≤5 mg/l  Municipal or domestic supply, or both, irrigation and watering of livestock.  Municipal or domestic supply, or both,  propagation of wildlife, irrigation and watering of	Color			Municipal or domestic supply, or both, and
Solids Annual Average ≤220 mg/l ≤500 mg/l  Single Value ≤300 mg/l  Chloride Annual Average ≤5 mg/l propagation of wildlife, irrigation and watering of	Single Value		≤75 PCU	propagation of aquatic life.
Solids Annual Average ≤220 mg/l ≤500 mg/l  Single Value ≤300 mg/l  Chloride Annual Average ≤5 mg/l propagation of wildlife, irrigation and watering of				
Annual Average ≤220 mg/l ≤500 mg/l  Single Value ≤300 mg/l  Chloride Municipal or domestic supply, or both,  Annual Average ≤5 mg/l propagation of wildlife, irrigation and watering of	Total Dissolved			Municipal or domestic supply, or both, irrigation
Single Value ≤300 mg/l  Chloride Municipal or domestic supply, or both,  Annual Average ≤5 mg/l propagation of wildlife, irrigation and watering of	Solids			and watering of livestock.
Chloride  Annual Average ≤5 mg/l  Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of	Annual Average	≤220 mg/l	≤500 mg/l	
Annual Average ≤5 mg/l propagation of wildlife, irrigation and watering of	Single Value	≤300 mg/l		
Annual Average ≤5 mg/l propagation of wildlife, irrigation and watering of				
Annual Average ≤5 mg/l propagation of wildlife, irrigation and watering of	Chloride			Municipal or domestic supply, or both,
	Annual Average	≤5 mg/l		propagation of wildlife, irrigation and watering of
		-	≤250 mg/l	
	_			
Sulfate Municipal or domestic supply, or both.	Sulfate			Municipal or domestic supply or both
Single Value ≤250 mg/l			<250 mg/l	Withhelpar of domestic supply, of both.
5230 mg/1	Single value		2200 mg/1	
Codium	Sodium			Imigation and magnicinal and acception and
Sodium Irrigation and municipal or domestic supply, or				
Adsorption Ratio both.			10	DOIN.
Annual Average ≤8	Annual Average		≤8	

	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING	STANDARDS FOR	As designated in NAC 445A.159
	HIGHER	BENEFICIAL USES	(Most stringent use listed first)
	QUALITY		
Alkalinity		less than 25% change	Propagation of aquatic life and propagation of
(as CaCO <sub>3</sub> )		from natural conditions	wildlife.
[Escherichia coli]			Recreation involving contact with the water [,]
E. Coli			and recreation not involving contact with the
(No./100 ml)			water [, municipal or domestic supply, or both,
Annual Geometric		[126 MF /100 ml	irrigation watering of livestock.]
Mean		235 MF/100 ml] ≤126	
Single Value		<i>≤410</i>	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. Increase in turbidity must not be more than 10 NTU above natural conditions.
- c. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 23.** NAC 445A.165 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

### East Walker River

Control Point at the East Walker River at the state line. The limits of this table apply only to the East Walker River at the state line.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0^{\circ}C^{a}$	NovApr.: ≤13°C  May-Jun.: ≤17°C  JulOct.: ≤23°C  ΔT ≤2°C <sup>a</sup>	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value		Within range 6.5 - 9.0 SU ΔpH: ±0.5 SU Max.	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.
Total Phosphates  (as P)  Annual Average		≤0.1 mg/l	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with water.
Nitrogen Species (as N) Annual Average Single Value Single Value	Total Nitrogen  ≤0.8 mg/l ≤1.4 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤.06 mg/l	Municipal or domestic supply, or both, propagation of aquatic life, recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
[Single Value]		[Ammonia: ≤.02 mg/l (un-ionized)]	

Total Ammonia (as N) - mg/l		с	Propagation of aquatic life.
Dissolved Oxygen Single Value		NovMay: ≥6.0 mg/l  JunOct.: ≥5.0 mg/l	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and recreation not involving contact with the water.
Suspended Solids Single Value	≤30 mg/l	≤80 mg/l	Propagation of aquatic life.
Turbidity Single Value		b	Propagation of aquatic life and municipal or domestic supply, or both.
Color Single Value		≤75 PCU	Municipal or domestic supply, or both, and propagation of aquatic life.
Total Dissolved Solids Annual Average Single Value	≤175 mg/l ≤210 mg/l	≤500 mg/l	Municipal or domestic supply, or both, irrigation and watering of livestock.
Chloride Annual Average Single Value	≤5 mg/l ≤7 mg/l	 ≤250 mg/l	Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.
Sulfate			Municipal or domestic supply, or both.

Single Value	≤26 mg/l	≤250 mg/l	
Sodium			Irrigation and municipal or domestic supply, or
Adsorption Ratio			both.
Annual Average	≤2	≤8	
Alkalinity		less than 25% change	Propagation of aquatic life and propagation of
(as CaCO <sub>3</sub> )		from natural conditions	wildlife.
[Escherichia coli]			Recreation involving contact with the water [.]
E. Coli			and recreation not involving contact with the
(No./100 ml)			water. [, municipal or domestic supply, or both,
Annual Geometric		[126 MF /100 ml	irrigation and watering of livestock.]
Mean		235 MF/100 ml] ≤126	
Single Value		≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. Increase in turbidity must not be more than 10 NTU above natural conditions.
- c. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 24.** NAC 445A.1655 is hereby amended to read as follows:

445A.1655

### STANDARDS OF WATER QUALITY

East Walker River at Bridge B-1475

Control Point at the East Walker River at Bridge B-1475. The limits of this table apply only from the East Walker River at Bridge B-1475 to the East Walker River at the state line.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0$ °C <sup>a</sup>	NovApr.: ≤13°C  May-Jun.: ≤17°C  JulOct.: ≤23°C  ΔT ≤2°C <sup>a</sup>	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value		Within range 6.5 - 9.0 SU ΔpH: ± 0.5 SU Max.	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.
Total Phosphates  (as P)  Annual Average		≤0.10 mg/l	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with the water.
Nitrogen Species (as N) Annual Average Single Value Single Value [Single Value]	Total Nitrogen  ≤0.9 mg/l ≤1.7mg/l	Nitrate: ≤10 mg/l Nitrite: ≤ .06 mg/l [Ammonia: ≤ .02 mg/l (un_ionized)]	Municipal or domestic supply, or both, propagation of aquatic life, recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.

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	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING HIGHER	STANDARDS FOR	As designated in NAC 445A.159
	QUALITY	BENEFICIAL USES	(Most stringent use listed first)
Total Ammonia		c	Propagation of aquatic life.
(as N) - mg/l			
Dissolved		NovMay: ≥6.0 mg/l	Propagation of aquatic life, recreation involving
Oxygen		June-Oct.: ≥5.0 mg/l	contact with the water, propagation of wildlife,
Single Value		June-Oct 23.0 mg/1	watering of livestock, municipal or domestic
56			supply, or both, and recreation not involving
			contact with the water.
Suspended			Propagation of aquatic life.
Solids			
Single Value		≤80 mg/l	
Turbidity			Propagation of aquatic life and municipal or
Single Value		b	domestic supply, or both.
Color			Municipal or domestic supply, or both, and
Single Value		≤75 PCU	propagation of aquatic life.
			Leaf-10mmer or milmore area
Total Dissolved			Municipal or domestic supply, or both, irrigation
Solids			and watering of livestock.
Annual Average	≤320 mg/l	≤500 mg/l	
Single Value	≤390 mg/l		
	-		
Chloride			Municipal or domestic supply, or both,
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PARAMETER  Annual Average	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY ≤13 mg/l	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL  USES  As designated in NAC 445A.159  (Most stringent use listed first)  propagation of wildlife, irrigation and watering of
Single Value	≤19 mg/l	≤250 mg/l	livestock.
Sulfate Single Value		≤250 mg/l	Municipal or domestic supply, or both.
Sodium  Adsorption Ratio  Annual Average		≤8	Irrigation and municipal or domestic supply, or both.
Alkalinity (as CaCO <sub>3</sub> )		less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
[Escherichia coli]  E. Coli  (No./100 ml)  Annual Geometric		<del>[126 MF /100 ml</del>	Recreation involving contact with the water [,]  and recreation not involving contact with the  water. [, municipal or domestic supply, or both,  irrigation and watering of livestock.]
Mean		235 MF/100 ml] ≤126	
Single Value		≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. Increase in turbidity must not be more than 10 NTU above natural conditions.
- c. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 25.** NAC 445A.166 is hereby amended to read as follows: 445A.166

# STANDARDS OF WATER QUALITY

### East Walker River

Control Point at the East Walker River south of Yerington above the confluence with the West Walker River (Nordyke Road). The limits of this table apply to the East Walker River south of Yerington above its confluence with the West Walker River to the East Walker River at Bridge B-1475.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0^{\circ}C^{a}$	NovApr.: ≤13°C  May-Jun.: ≤17°C  JulOct.: ≤23°C  ΔT ≤2°C <sup>a</sup>	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value		Within range 6.5 - 9.0 SU ΔpH: ±0.5 SU Max.	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL  USES  As designated in NAC 445A.159  (Most stringent use listed first)
Total Phosphates (as P) Annual Average Single Value		≤0.16 mg/l ≤0.39 mg/l	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with the water.
Nitrogen Species (as N) Annual Average Single Value Single Value [Single Value]	Total Nitrogen  ≤0.9 mg/l  ≤1.7 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤.06 mg/l [Ammonia: ≤.02 mg/l (un_ionized)]	Municipal or domestic supply, or both, propagation of aquatic life, recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	С	Propagation of aquatic life.
Dissolved Oxygen Single Value		NovMay: ≥6.0 mg/l JunOct.: ≥5.0 mg/l	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and recreation not involving contact with the water.
Suspended Solids			Propagation of aquatic life.

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	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING	STANDARDS FOR	As designated in NAC 445A.159
	HIGHER	BENEFICIAL USES	(Most stringent use listed first)
	QUALITY		
Single Value		≤80 mg/l	
m 1111			
Turbidity			Propagation of aquatic life and municipal or
Single Value		b	domestic supply, or both.
Color			Municipal or domestic supply, or both,
Single Value		≤75 PCU	propagation of aquatic life.
Single varie		273100	propagation of aquationic.
Total Dissolved			Municipal or domestic supply, or both, irrigation
Solids			and watering of livestock.
Annual Average	≤320 mg/l	≤500 mg/l	
Single Value	≤390 mg/l		
Chloride			Municipal or domestic supply, or both,
Annual Average	≤13 mg/l		propagation of wildlife, irrigation and watering of
Single Value	≤19 mg/l	≤250 mg/l	livestock.
2.12			
Sulfate			Municipal or domestic supply, or both.
Single Value	≤44 mg/l	≤250 mg/l	
Sodium			Irrigation and municipal or domestic supply, or
Adsorption Ratio			both.
Annual Average		≤8	· ·
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	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING	STANDARDS FOR	As designated in NAC 445A.159
	HIGHER	BENEFICIAL USES	(Most stringent use listed first)
	QUALITY		
Alkalinity		less than 25% change	Propagation of aquatic life and propagation of
(as CaCO <sub>3</sub> )		from natural conditions	wildlife.
Escherichia coli			Recreation involving contact with the water [.]
Annual Average]			and recreation not involving contact with the
E. Coli			water. <del>[, municipal or domestic supply, or both,</del>
(No./100 ml)			irrigation and watering of livestock.]
Annual Geometric		<del>[126 MF /100 m]</del>	
Mean		235 MF/100 ml] ≤ <b>126</b>	
Single Value		≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. Increase in turbidity must not be more than 10 NTU above natural conditions.
- c. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 26.** NAC 445A.167 is hereby amended to read as follows:

445A.167

# STANDARDS OF WATER QUALITY

Walker River

Control Point at the Walker River at the inlet to Weber Reservoir. The limits of this table apply to the Walker River from the inlet to Weber Reservoir to the confluence of the West Walker River and the East Walker River.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0^{\circ} C^{a}$	NovMar.: ≤13°C  AprJun.: ≤23°C <sup>b</sup> JulOct.: ≤28°C  ΔT ≤2°C	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value		Within range 6.5 - 9.0 SU ΔpH: ±0.5 SU Max.	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.
Total Phosphates (as P) Annual Average Single Value		≤0.26 mg/l ≤0.40 mg/l	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with the water.
Nitrogen Species (as N) Annual Average	Total Nitrogen ≤1.2 mg/l		Municipal or domestic supply, or both, propagation of aquatic life, recreation involving contact with the water, watering of livestock,

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	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING	STANDARDS FOR	As designated in NAC 445A.159
	HIGHER	BENEFICIAL USES	(Most stringent use listed first)
	QUALITY		
Single Value	≤1.5 mg/l	Nitrate: ≤10 mg/l	propagation of wildlife and recreation not
Single Value		Nitrite: ≤1° mg/l	involving contact with the water.
[Single Value]		[Ammonia: ≤.06 mg/l	
		(un-ionized)]	
		(un-tonizeu)]	
Total Ammonia		e	Propagation of aquatic life.
(as N) - mg/l			Tropagation of aquate tipe.
(us 1) mg/			
Dissolved		NovMay: ≥6.0 mg/l	Propagation of aquatic life, recreation involving
Oxygen		JunOct.: ≥5.0 mg/l	contact with the water, propagation of wildlife,
Single Value			watering of livestock, municipal or domestic
			supply, or both, and recreation not involving
			contact with the water.
Suspended			Propagation of aquatic life.
Solids			
Single Value		≤80 mg/l	
Turbidity			Propagation of aquatic life and municipal or
Single Value		d	domestic supply, or both.
Color			Municipal or domestic supply, or both, and
Single Value		≤75 PCU	propagation of aquatic life.

	T	T	<u> </u>
PARAMETER  Total Dissolved	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL  USES  As designated in NAC 445A.159  (Most stringent use listed first)  Municipal or domestic supply, or both, irrigation
Solids Annual Average Single Value	≤400 mg/l ≤450 mg/l	≤500 mg/l	and watering of livestock.
Chloride Annual Average Single Value	≤30 mg/l ≤35 mg/l	 ≤250 mg/l	Municipal or domestic supply, or both, propagation of wildlife irrigation and watering of livestock.
Sulfate Annual Average Single Value	≤95 mg/l ≤110 mg/l	≤250 mg/l	Municipal or domestic supply, or both.
Sodium Adsorption Ratio Annual Average	≤3	≤8	Irrigation and municipal or domestic supply, or both.
Alkalinity (as CaCO <sub>3</sub> )		less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
[Escherichia coli]  E. Coli  (No./100 ml)  Annual Geometric		<del>[126 MF /100 ml</del>	Recreation involving contact with the water [,]  and recreation not involving contact with the  water. [, municipal or domestic supply, or both,  irrigation and watering of livestock.]

	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING	STANDARDS FOR	As designated in NAC 445A.159
	HIGHER	BENEFICIAL USES	(Most stringent use listed first)
	QUALITY		
Mean		235 MF/100 ml] ≤126	
Single Value		≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The temperature beneficial use standard is ≤21°C from February through June when Lahontan cutthroat are present in the reach from Walker Lake to Weber Reservoir.
- c. The nitrite beneficial use standard is ≤0.06 mg/l from February through June when Lahontan cutthroat trout are present in the reach from Walker Lake to the Weber Reservoir.
- d. Increase in turbidity must not be more than 10 NTU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 27.** NAC 445A.169 is hereby amended to read as follows:

### STANDARDS OF WATER QUALITY

#### Desert Creek

Control Point at Desert Creek. The limits of this table apply to Desert Creek from its confluence with the West Walker River to the state line.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES Designated in NAC 445A.159 (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0$ °C <sup>a</sup>	NovApr.: ≤13°C  May-Jun.: ≤17°C  JulOct.: ≤23°C  ΔT ≤2°C <sup>a</sup>	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value		Within range 6.5 - 9.0 SU ΔpH: ±0.5 SU Max.	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.
Total Phosphates (as P) Annual Average Single Value	≤0.13 mg/l	≤0.1 mg/l	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with the water.
Nitrogen Species (as N) Annual Average Single Value Single Value [Single Value]	Total Nitrate  ≤0.20 mg/l  ≤0.27 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤.06 mg/l [Ammonia: ≤.02 mg/l (un_ionized)]	Municipal or domestic supply, or both, propagation of aquatic life, recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia	-	c	Propagation of aquatic life.

(as N) - mg/l			
Dissolved Oxygen Single Value	 	NovMay: ≥6.0 mg/l  JunOct.: ≥5.0 mg/l	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply, or both, and recreation not involving contact with the water.
Suspended Solids Single Value		≤80 mg/l	Propagation of aquatic life.
Turbidity Single Value		b	Propagation of aquatic life and municipal or domestic supply, or both.
Color Single Value		≤75 PCU	Municipal or domestic supply, or both, and propagation of aquatic life.
Total Dissolved Solids Annual Average Single Value	≤110 mg/l ≤130 mg/l	≤500 mg/l	Municipal or domestic supply, or both, irrigation and watering of livestock.
Chloride Annual Average Single Value	≤5 mg/l ≤7 mg/l	 ≤250 mg/l	Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.
Sulfate Single Value		≤250 mg/l	Municipal or domestic supply, or both.

Sodium		Irrigation and municipal or domestic supply, or
Adsorption Ratio		both.
Annual Average	≤8	
A11 -1114	land them 250/ all and	Description of a series life and a series of
Alkalinity	less than 25% change	Propagation of aquatic life and propagation of
(as CaCO <sub>3</sub> )	 from natural conditions	wildlife.
[Escherichia coli]		Recreation involving contact with the water 🚼
E. Coli		and recreation not involving contact with the
(No./100 ml)		water. [, municipal or domestic supply, or both,
Annual Geometric	<del>[126 MF /100 ml</del>	irrigation and watering of livestock.]
Mean	235 MF/100 ml] ≤126	
Single Value	≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. Increase in turbidity must not be more than 10 NTU above natural conditions.
- c. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 28.** NAC 445A.1696 is hereby amended to read as follows:

445A.1696

# STANDARDS OF WATER QUALITY

Walker Lake

Control Point at Walker Lake. The limits of this table apply to Walker Lake.

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	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING HIGHER	STANDARDS FOR	As designated in NAC 445A.1693
	QUALITY	BENEFICIAL USES	(Most stringent use listed first)
Temperature <sup>a</sup>			Propagation of aquatic life.
Single Value		ΔT ≤2°C	
pН			Propagation of aquatic life, recreation involving
Single Value		Within range	contact with the water and propagation of
		6.5 - 9.7 SU	wildlife.
Dissolved			Propagation of aquatic life, recreation involving
Oxygen <sup>b</sup>		≥5 mg/l	contact with the water, recreation not involving
Single Value			contact with the water and propagation of
			wildlife.
Suspended Solids			Propagation of aquatic life.
Single Value		≤25 mg/l	
Nitrogen Species			Propagation of aquatic life and propagation of
[as N] (as N)	Total Inorganic		wildlife.
Single Value	Nitrogen:	Nitrate ≤90 mg/l	
Single Value	≤0.3 mg/l	Nitrite ≤0.06 mg/l	
-			
Total Ammonia	_	c	Propagation of aquatic life.
(as N) - mg/l			
(45 11) IIIg/t			
Total Phosphorus			Propagation of aquatic life.
[as P] (as P)			T. Onno. or advance
[ ] ( )			

Single Value	 ≤0.82 mg/l	
[Escherichia] E. Coli (No./100 ml) Annual		Recreation involving contact with the water and recreation not involving contact with the water.
Geometric  Mean  Single Value	 ≤126 <del>[MF/100 ml]</del> ≤235 <del>[MF/100 ml]</del>	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.
- b. When lake is stratified, the dissolved oxygen applies only to the epilimnion.
- c. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 29.** NAC 445A.171 is hereby amended to read as follows:

# STANDARDS OF WATER QUALITY

#### Chiatovich Creek

Control Point above highway maintenance station. The limits of this table apply above the highway maintenance station.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- $Maximum$	$\Delta T = 0$ °C	NovApr.: ≤13°C  May-Jun.: ≤17°C  JulOct.: ≤23°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
pH Units		S.V.: [7.0 – 8.3] 6.5-9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l	A-Avg.: ≤.04 S.V.: ≤.06	A-Avg.: ≤0.1 	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤.6  S.V.: ≤.8	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un_ionized)]	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> ,  [water contact recreation, stock watering, wildlife  propagation and noncontact recreation.]  recreation involving contact with the water,  watering of livestock, propagation of wildlife  and recreation not involving contact with the

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
			water.
Total Ammonia (as N) - mg/l	-	e	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Suspended Solids - mg/l		S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU		c	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved Solids - mg/l	A-Avg.: ≤50 S.V.: ≤60	A-Avg.: ≤500 	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤2 S.V.: ≤3	 S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife  propagation, irrigation and stock watering.]  propagation of wildlife, irrigation and watering

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
			of livestock.
Sulfate - mg/l	A-Avg.: ≤4 S.V.: ≤5	 S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤1	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤100 S.V.: ≤200	≤200/400 <sup>d</sup>	[Water contact recreation b, noncontact recreation,] Recreation involving contact with the water b, recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Increase in color must not be more than 10 PCU above natural conditions.
- d. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 30.** NAC 445A.172 is hereby amended to read as follows: 445A.172

## STANDARDS OF WATER QUALITY

#### Indian Creek

Control Point near center of Section 9, T.2 S., R.34 E. The limits of this table apply above the center of Section 9, T.2 S., R 34 E.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum		NovApr.: ≤13°C May-Jun.: ≤17°C JulOct.: ≤23°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
$\Delta \mathrm{T}^{\mathrm{a}}$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units		S.V.: [7.0 – 8.3] 6.5-9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l	 S.V.: ≤0.13	A-Avg.: ≤0.1	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Nitrate S.V.: ≤0.45	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un_ionized)]	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> ,  [water contact recreation, stock watering, wildlife propagation and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water
Total Ammonia (as N) - mg/l	-	e	Aquatic life <sup>b</sup> .

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Suspended Solids - mg/l		S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU		c	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved Solids - mg/l	A-Avg.: ≤225 S.V.: ≤300	A-Avg.: ≤500 	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤6 S.V.: ≤10	 S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation, irrigation and stock watering.]  propagation of wildlife, irrigation and watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .

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PARAMETER  Sodium - SAR	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES  A-Avg.: ≤8	BENEFICIAL  USES  Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤100 S.V.: ≤200	≤200/400 <sup>d</sup>	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Increase in color must not be more than 10 PCU above natural conditions.

- d. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 31.** NAC 445A.173 is hereby amended to read as follows: 445A.173

# STANDARDS OF WATER QUALITY Leidy Creek

Control Point at hydroelectric plant. The limits of this table apply above the hydroelectric plant.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C-Maximum $\Delta T^a$	$\Delta T = 0$ °C	NovApr.: ≤13°C  May-Jun.: ≤17°C  JulOct.: ≤23°C  ΔT ≤2°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
pH Units		S.V.: [7.0 – 8.3] 6.5-9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL  USES  or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l	A-Avg.: ≤.013 S.V.: ≤.03	A-Avg.: ≤0.1 	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Nitrate A-Avg.: ≤0.18 S.V.: ≤0.22	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un_ionized)]	Municipal or domestic supply <sup>b</sup> , aquatic life,  [water contact recreation, stock watering, wildlife propagation <sup>b</sup> and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife <sup>b</sup> and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	e	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Suspended Solids - mg/l		S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU		<del>[C]</del> c	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved Solids - mg/l	A-Avg.: ≤135 S.V.: ≤150	A-Avg.: ≤500 	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤3 S.V.: ≤5	 S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation, irrigation and stock watering.]  propagation of wildlife, irrigation and watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR		A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤100 S.V.: ≤200	≤200/400 <sup>d</sup>	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
			the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Increase in color must not be more than 10 PCU above natural conditions.
- d. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 32.** NAC 445A.175 is hereby amended to read as follows:

# STANDARDS OF WATER QUALITY

# Virgin River

Control Point at Mesquite. The limits of this table apply from Mesquite to the Arizona state line (near Littlefield, Arizona).

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C-	$\Delta T = 0^{\circ} C$	NovJun.: ≤21°C JulOct.: ≤32°C	Aquatic life <sup>b</sup> .
$\Delta T^a$	Δ1 – 0 C	ΔT ≤2°C	
pH Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagation <sup>b</sup> ,] Propagation of wildlife <sup>b</sup> , aquatic life <sup>b</sup> , [noncontact recreation, irrigation, stock watering] recreation not involving contact with the water, irrigation, watering of livestock and industrial supply.
Total Phosphates (as P) - mg/l		A-Avg.: ≤0.1	Aquatic life <sup>b</sup> and [noncontact recreation.]  recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤0.9	Nitrate S.V.: ≤90 Nitrite S.V.: ≤5.0	Aquatic life <sup>b</sup> [stock watering, wildlife propagation and noncontact recreation.], watering of

PARAMETER	REQUIREMENTS  TO MAINTAIN  EXISTING HIGHER  QUALITY  S.V.: ≤1.6	WATER QUALITY STANDARDS FOR BENEFICIAL USES  [Ammonia S.V.: ≤.06 (un_ionized)]	BENEFICIAL  USES  livestock, propagation of wildlife and recreation  not involving contact with the water.
Total Ammonia (as N) - mg/l	_	f	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life <sup>b</sup> , [noncontact recreation, wildlife propagation and stock watering.] recreation not involving contact with the water, propagation of wildlife and watering of livestock.
Turbidity - NTU		e	Aquatic life <sup>b</sup> .
Color - PCU		d	Aquatic life <sup>b</sup> .
Total Dissolved Solids - mg/l		с	Irrigation <sup>b</sup> and [stock watering.] watering of livestock.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤300 S.V.: ≤550	A.G.M.: ≤1000 S.V.: ≤2000	[Noncontact recreation <sup>b</sup> , irrigation, wildlife  propagation and stock watering.] Recreation not  involving contact with the water <sup>b</sup> , irrigation,  propagation of wildlife and watering of

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER	WATER QUALITY STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES  livestock.
E. Coli (No./100 ml)			Recreation not involving contact with the water <sup>b</sup> .
Annual Geometric Mean	_	≤630	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. The salinity standard for the Colorado River System is specified in NAC 445A.143.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. Increase in turbidity must not be more than 10 NTU above natural conditions.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 33.** NAC 445A.176 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

## Virgin River

Control Point at the state line (near Littlefield, Arizona). The limits of this table apply at the Arizona-Nevada state line (near Littlefield, Arizona).

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature $^{\circ}$ C-  Maximum $\Delta T^{a}$	$\Delta T = 0$ °C	NovJun.: ≤21°C  JulOct.: ≤32°C  ΔT ≤2°C	Aquatic life <sup>b</sup> .
pH - Standard Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagation <sup>b</sup> ,] Propagation of wildlife <sup>b</sup> , aquatic life <sup>b</sup> , [noncontact recreation, irrigation, stock watering] recreation not involving contact with the water, irrigation, watering of livestock and industrial supply.
Total Phosphates  (as P) - mg/l	A-Avg.: ≤.06 S.V.: ≤0.1	A-Avg.: ≤0.1 	Aquatic life <sup>b</sup> and [noncontact recreation.]  recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤2.4  S.V.: ≤3.2	Nitrate S.V.: ≤90  Nitrite S.V.: ≤5.0  [Ammonia S.V.: ≤.06  (un_ionized)]	Aquatic life <sup>b</sup> [stock watering, wildlife propagation and noncontact recreation.], watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l		f	Aquatic life <sup>b</sup> .
Dissolved			Aquatic life <sup>b</sup> , <del>[noncontact recreation, wildlife</del>

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	REQUIREMENTS TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Oxygen - mg/l		S.V.: ≥5.0	propagation and stock watering.] recreation not
			involving contact with the water, propagation of
			wildlife and watering of livestock.
Turbidity - NTU		e	Aquatic life <sup>b</sup> .
Color - PCU		d	Aquatic life <sup>b</sup> .
Total Dissolved Solids - mg/l		С	Irrigation <sup>b</sup> and [stock watering.] watering of livestock.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤450 S.V.: ≤1800	A.G.M.: ≤1000 S.V.: ≤2000	[Noncontact recreation <sup>b</sup> , irrigation, wildlife  propagation and stock watering.] Recreation not  involving contact with the water <sup>b</sup> , irrigation,  propagation of wildlife and watering of  livestock.
E. Coli (No./100 ml) Annual Geometric Mean		≤630	Recreation not involving contact with the water <sup>b</sup> .

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. The salinity standard for the Colorado River System is specified in NAC 445A.143.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. Increase in turbidity must not be more than 10 NTU above natural conditions.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 34.** NAC 445A.177 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

## Virgin River

Control Point at Riverside. The limits of this table apply from the river mouth at Lake Mead to Mesquite.

PARAMETER EX	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C-  Maximum $\Delta T^a$ $\Delta T$	T = 0°C	NovJun.: ≤21°C JulOct.: ≤32°C ΔT ≤2°C	Aquatic life <sup>b</sup> .

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
pH Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagation <sup>b</sup> ,] Propagation of wildlife <sup>b</sup> , aquatic life <sup>b</sup> , [noncontact recreation, irrigation, stock watering] recreation not involving contact with the water, irrigation, watering of livestock and industrial supply.
Total Phosphates  (as P) - mg/l		A-Avg.: ≤0.1	Aquatic life <sup>b</sup> and [noncontact recreation.]  recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤2.9  S.V.: ≤6.1	Nitrate S.V.: ≤90  Nitrite S.V.: ≤5.0  [Ammonia S.V.: ≤.06  (un_ionized)]	Aquatic life <sup>b</sup> [stock watering, wildlife propagation and noncontact recreation.], watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	_	f	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life <sup>b</sup> , [noncontact recreation, wildlife propagation and stock watering.] recreation not involving contact with the water, propagation of wildlife and watering of livestock.
Turbidity - NTU		e	Aquatic life <sup>b</sup> .

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER	WATER QUALITY STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
a la pari			
Color - PCU		d	Aquatic life <sup>b</sup> .
Total Dissolved Solids - mg/l		С	Irrigation <sup>b</sup> and [stock watering.] watering of livestock.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤625 S.V.: ≤1250	A.G.M.: ≤1000 S.V.: ≤2000	[Noncontact recreation <sup>b</sup> , irrigation, wildlife propagation and stock watering.] Recreation not involving contact with the water <sup>b</sup> , irrigation, propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean		≤630	Recreation not involving contact with the water <sup>b</sup> .

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. The salinity standard for the Colorado River System is specified in NAC 445A.143.
- d. Increase in color must not be more than 10 PCU above natural conditions.

- e. Increase in turbidity must not be more than 10 NTU above natural conditions.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 35.** NAC 445A.178 is hereby amended to read as follows:

445A.178

# STANDARDS OF WATER QUALITY

# Beaver Dam Wash

Control Point above Schroeder Reservoir. The limits of this table apply above Schroeder Reservoir.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C-		NovApr.: ≤13°C May-Jun.: ≤17°C JulOct.: ≤23°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units		S.V.: [7.0—8.3] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
TARAWETER	QUALITY	BENEFICIAL USES	USES
	QUALITI	BENEFICIAL OSES	USLS
Total Phosphates	A-Avg.: ≤.01	A-Avg.: ≤0.05	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(as P) - mg/l	S.V.: ≤.013		recreation involving contact with the water <sup>b</sup> ,
(** - )	5. V 2.015		municipal or domestic supply and <del>[noncontact</del>
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species	Nitrate	Nitrate S.V.: ≤10	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> ,
(N) - mg/l	S.V.: ≤.22	Nitrite S.V.: ≤.06	[water contact recreation, stock watering, wildlife
		<del>[Ammonia S.V.: ≤.02</del>	propagation and noncontact recreation.]
		(un-ionized)]	recreation involving contact with the water,
		,-	watering of livestock, propagation of wildlife
			and recreation not involving contact with the
			water
Total Ammonia	-	f	Aquatic life <sup>b</sup> .
(as N) - mg/l			
		S.V.:	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Dissolved		NovMay: ≥6.0	propagation, stock watering,] recreation
Oxygen - mg/l		JunOct.: ≥5.0	involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
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	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Suspended		S.V.: ≤25	Aquatic life <sup>b</sup> .
Solids - mg/l			
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU		e	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved		c	Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l			[stock watering.] watering of livestock.
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Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform-			[Water contact recreation <sup>b</sup> , noncontact
No./100 ml		≤200/400 <sup>d</sup>	recreation,] Recreation involving contact with
No./100 IIII		\$200/400	
			the water <sup>b</sup> , recreation not involving contact with
			the water, municipal or domestic supply,
			irrigation, [wildlife propagation and stock
			watering.] propagation of wildlife and watering
			of livestock.
E. Coli			Recreation involving contact with the water <sup>b</sup> and
(No./100 ml)			recreation not involving contact with the water.
Annual Geometric			recreation not involving condict with the willer.
Mean		≤126	
Meun	_	2120	

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Single Value		≤410	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. The salinity standard for the Colorado River System is specified in NAC 445A.143.
- d. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- e. Increase in color must not be more than 10 PCU above natural conditions.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 36.** NAC 445A.179 is hereby amended to read as follows: 445A.179

## STANDARDS OF WATER QUALITY

## Snake Creek

Control Point above fish hatchery. The limits of this table apply above the fish hatchery.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C-Maximum $\Delta T^a$	$\Delta T = 0$ °C	NovApr.: ≤13°C  May-Jun.: ≤17°C  JulOct.: ≤23°C  ΔT ≤2°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.
pH Units		S.V.: [7.0—8.3] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	A-Avg.: ≤.05 S.V.: ≤.08	A-Avg.: ≤0.1	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact  recreation.] recreation not involving contact with  the water.
Nitrogen Species (N) - mg/l	Nitrate A-Avg.: ≤.22 S.V.: ≤.44	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un_ionized)]	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> ,  [water contact recreation, stock watering, wildlife  propagation and noncontact recreation.]  recreation involving contact with the water,  watering of livestock, propagation of wildlife  and recreation not involving contact with the

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES water.
Total Ammonia (as N) - mg/l	-	e	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Suspended Solids - mg/l		S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU		С	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved Solids - mg/l	A-Avg.: ≤100 S.V.: ≤125	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤10 S.V.: ≤20	 S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife  propagation, irrigation and stock watering.]  propagation of wildlife, irrigation and watering

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES  of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR		A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤100 S.V.: ≤200	≤200/400 <sup>d</sup>	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.

- b. The most restrictive beneficial use.
- c. Increase in color must not be more than 10 PCU above natural conditions.
- d. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 37.** NAC 445A.184 is hereby amended to read as follows:

# STANDARDS OF WATER QUALITY

## Truckee River

Control Point at the state line. The limits of this table apply only at the California-Nevada state line.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMar.: ≤7°C	Aquatic life <sup>b</sup> and [water contact recreation.]
Maximum		AprMay: ≤13°C	recreation involving contact with the water.
		June: ≤17°C	
		July: ≤21°C	
		Aug.: ≤22°C	
		SepOct.: ≤23°C	
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	

pH Units	7.0 - 8.3	S.V.: 6.5 - 9.0	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]
		ΔpH: ±0.5 Max.	Recreation involving contact with the water <sup>b</sup> ,
			propagation of wildlife <sup>b</sup> , aquatic life, irrigation,
			[stock watering,] watering of livestock, municipal
			or domestic supply and industrial supply.
Dissolved		S.V.:	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Oxygen - mg/l		NovMar.: ≥6.0	propagation, stock watering,] recreation
		AprOct.: ≥5.0	involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Chlorides - mg/l	A-Avg.: ≤7.0		Municipal or domestic supply <sup>b</sup> , <del>[wildlife</del>
	S.V.: ≤10.0	S.V.: ≤250	propagation, irrigation and stock watering.]
			propagation of wildlife, irrigation and watering
			of livestock.
Total Phosphates	A-Avg.: ≤0.03	A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(as P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Ortho Phosphate	S.V.: ≤0.01	S.V.: ≤0.05	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species	Total Nitrogen	Nitrate S.V.: ≤2.0	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(N) - mg/l	A-Avg.: ≤0.3	Nitrite S.V.: ≤.04	recreation involving contact with the water <sup>b</sup> ,
	S.V.: ≤0.43	[Ammonia S.V.: ≤.02	municipal or domestic supply and [noncontact
		(un-ionized)]	recreation.] recreation not involving contact with
			the water.
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	-	Aquatic life <sup>b</sup> .
A-Avg.: ≤70.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and
S.V.: ≤85.0		[stock watering.] watering of livestock.
A-Avg.: ≤5.0	S.V.: ≤10.00	Aquatic life <sup>b</sup> and municipal or domestic supply.
S.V.: ≤9.0		
d	S.V.: ≤75	Municipal or domestic supply.
	less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
	from natural conditions	propagation of wildlife.
A.G.M.: ≤30.0		[Water contact recreation <sup>b</sup> , noncontact
S.V.: ≤150.0	≤200/400°	recreation,] Recreation involving contact with
		the water <sup>b</sup> , recreation not involving contact with
		the water, municipal or domestic supply,
		irrigation, [wildlife propagation and stock
		watering.] propagation of wildlife and watering
		of livestock.
		Recreation involving contact with the water <sup>b</sup> and
		recreation not involving contact with the water.
	≤126	
-	≤410	
A-Avg.: ≤15.0	S.V.: ≤25	Aquatic life <sup>b</sup> .
A-Avg.: ≤7.0		Municipal or domestic supply <sup>b</sup> .
S.V.: ≤8.0	S.V.: ≤250	
A-Avg.: ≤0.5	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
S.V.: ≤0.6		
	A-Avg.: ≤2.5	Municipal or domestic supply.
	S.V.: ≤3.0	
	A-Avg.: ≤5.0 S.V.: ≤9.0 d   A.G.M.: ≤30.0  S.V.: ≤150.0  A-Avg.: ≤15.0  A-Avg.: ≤7.0  S.V.: ≤8.0  A-Avg.: ≤0.5  S.V.: ≤0.6	A-Avg.: ≤5.0  S.V.: ≤10.00  S.V.: ≤9.0  d  S.V.: ≤75  less than 25% change from natural conditions  A.G.M.: ≤30.0  S.V.: ≤150.0  ≤200/400°  ≤410  A-Avg.: ≤15.0  S.V.: ≤25  A-Avg.: ≤7.0  S.V.: ≤250  A-Avg.: ≤0.5  S.V.: ≤250  A-Avg.: ≤0.6   A-Avg.: ≤2.5

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 38.** NAC 445A.185 is hereby amended to read as follows: 445A.185

# STANDARDS OF WATER QUALITY

### Truckee River

Control Point at Idlewild. The limits of this table apply from the control point at Idlewild to the state line control point.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMar.: ≤7°C	Aquatic life <sup>b</sup> and [water contact recreation.]
Maximum		AprMay: ≤13°C	recreation involving contact with the water.
		June: ≤17°C	
		July: ≤21°C	
		Aug.: ≤22°C	

		SepOct.: ≤23°C	
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.2 - 8.3	S.V.: 6.5 - 9.0	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]
		ΔpH: ±0.5 Max.	Recreation involving contact with the water <sup>b</sup> ,
			propagation of wildlife <sup>b</sup> , aquatic life, irrigation,
			[stock watering,] watering of livestock, municipal
			or domestic supply and industrial supply.
Dissolved		S.V.:	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Oxygen - mg/l		NovMar.: ≥6.0	propagation, stock watering,] recreation
		AprOct.: ≥5.0	involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Chlorides - mg/l	A-Avg.: ≤7.0		Municipal or domestic supply <sup>b</sup> , [wildlife
	S.V.: ≤10.0	S.V.: ≤250	propagation, irrigation and stock watering.]
			propagation of wildlife, irrigation and watering
			of livestock.
Total Phosphates	A-Avg.: ≤0.05	A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , <del>[water contact recreation<sup>b</sup>,]</del>
(as P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Ortho Phosphate	S.V.: ≤0.02	S.V.: ≤0.05	Aquatic life <sup>b</sup> , <del>[water contact recreation<sup>b</sup>,]</del>
(P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species	Total Nitrogen	Nitrate S.V.: ≤2.0	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(N) - mg/l	A-Avg.: ≤0.3	Nitrite S.V.: ≤.04	recreation involving contact with the water <sup>b</sup> ,
	S.V.: ≤0.43	[Ammonia S.V.:≤.02	municipal or domestic supply and [noncontact

		(un-ionized)]	recreation.] recreation not involving contact with
			the water.
Total Ammonia			
(as N) - mg/l	_	e	Aquatic life <sup>b</sup> .
Total Dissolved	A-Avg.: ≤80.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l	S.V.: ≤95.0		[stock watering.] watering of livestock.
Turbidity - NTU	A-Avg.: ≤6.0	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
	S.V.: ≤9.0		
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤50.0		[Water contact recreation <sup>b</sup> , noncontact
No./100 ml	S.V.: ≤200.0	≤200/400°	recreation,] Recreation involving contact with
			the water <sup>b</sup> , recreation not involving contact with
			the water, municipal or domestic supply,
			irrigation, [wildlife propagation and stock
			watering.] propagation of wildlife and watering
			of livestock.
E. Coli			
(No./100 ml)			Recreation involving contact with the water <sup>b</sup> and
Annual Geometric			recreation not involving contact with the water.
Mean	-	≤126	
Single Value		≤410	
Suspended	A-Avg.: ≤15.0	S.V.: ≤25	Aquatic life <sup>b</sup> .
Solids - mg/l			
Sulfate - mg/l	A-Avg.: ≤7.0		Municipal or domestic supply <sup>b</sup> .
	S.V.: ≤8.0	S.V.: ≤250	
	A-Avg.: ≤0.5	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Sodium - SAR	11 11 vg =0.5		
Sodium - SAR	S.V.: ≤0.6		

	S.V.: ≤3.0	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 39.** NAC 445A.186 is hereby amended to read as follows:

### STANDARDS OF WATER QUALITY

### Truckee River

Control Point at East McCarran Boulevard Bridge. The limits of this table apply from the East McCarran control point to the Idlewild control point.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMar.: ≤7°C	Aquatic life <sup>b</sup> and [water contact recreation.]
Maximum		AprMay: ≤13°C	recreation involving contact with the water.
		June: ≤17°C	

		July: ≤21°C	
		Aug.: ≤22°C	
		SepOct.: ≤23°C	
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.0 - 8.5	S.V.: 6.5 - 9.0	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]
		ΔpH: ±0.5 Max.	Recreation involving contact with the water <sup>b</sup> ,
			propagation of wildlife <sup>b</sup> , aquatic life, irrigation,
			[stock watering,] watering of livestock, municipal
			or domestic supply and industrial supply.
Dissolved		S.V.:	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Oxygen - mg/l		NovMar.: ≥6.0	propagation, stock watering,] recreation
		AprOct.: ≥5.0	involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Chlorides - mg/l	A-Avg.: ≤7.0		Municipal or domestic supply <sup>b</sup> , [wildlife
	S.V.: ≤10.0	S.V.: ≤250	propagation, irrigation and stock watering.]
			propagation of wildlife, irrigation and watering
			of livestock.
Total Phosphates	A-Avg.: ≤0.05	A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(as P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Ortho Phosphate	S.V.: ≤0.02	S.V.: ≤0.05	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species	Total Nitrogen	Nitrate S.V.: ≤2.0	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]

(N) - mg/l	A-Avg.: ≤0.3	Nitrite S.V.: ≤.04	recreation involving contact with the water <sup>b</sup> ,
	S.V.: ≤0.43	<del>[Ammonia S.V.: ≤.02</del>	municipal or domestic supply and <del>[noncontact</del>
		(un-ionized)	recreation.] recreation not involving contact with
		(un folized)	the water.
Total Ammonia			
			Amarcia III.b
(as N) - mg/l		e	Aquatic life <sup>b</sup> .
Total Dissolved	A-Avg.: ≤90.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l	S.V.: ≤120.0		[stock watering.] watering of livestock.
Turbidity - NTU	A-Avg.: ≤6.0	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤75.0		[Water contact recreation <sup>b</sup> , noncontact
No./100 ml	S.V.: ≤350.0	≤200/400°	recreation,] Recreation involving contact with
			the water <sup>b</sup> , recreation not involving contact with
			the water, municipal or domestic supply,
			irrigation, [wildlife propagation and stock
			watering.] propagation of wildlife and watering
			of livestock.
E. Coli			
(No./100 ml)			Recreation involving contact with the water <sup>b</sup> and
Annual Geometric			recreation not involving contact with the water.
Mean	_	≤126	
Single Value	_	≤410	
Suspended	A-Avg.: ≤15.0	S.V.: ≤25	Aquatic life <sup>b</sup> .
Solids - mg/l			
Sulfate - mg/l	A-Avg.: ≤7.0		Municipal or domestic supply <sup>b</sup> .
	S.V.: ≤8.0	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤0.5	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
	S.V.: ≤0.6		

BOD - mg/l	 A-Avg.: ≤3.0	Municipal or domestic supply.
	S.V.: ≤5.0	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 40.** NAC 445A.187 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

### Truckee River

Control Point at Lockwood Bridge. The limits of this table apply from the control point at Lockwood to the East McCarran control point.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMar.: ≤13°C	Aquatic life <sup>b</sup> and [water contact recreation.]
Maximum		Apr.: ≤21°C <sup>e</sup>	recreation involving contact with the water.

		May: ≤22°C <sup>e,f</sup>	
		June-Oct.: ≤23°C <sup>e,f</sup>	
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.1 - 8.5	S.V.: 6.5 - 9.0	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]
		ΔpH: ±0.5 Max.	Recreation involving contact with the water <sup>b</sup> ,
			propagation of wildlife <sup>b</sup> , aquatic life, irrigation,
			[stock watering,] watering of livestock, municipal
			or domestic supply and industrial supply.
Dissolved		S.V.:	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Oxygen - mg/l		NovMar.: ≥6.0	propagation, stock watering,] recreation
		AprOct.: ≥5.0	involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Chlorides - mg/l	A-Avg.: ≤26.0		Municipal or domestic supply <sup>b</sup> , <del>[wildlife</del>
	S.V.: ≤30.0	S.V.: ≤250	propagation, irrigation and stock watering.]
			propagation of wildlife, irrigation and watering
			of livestock.
Total Phosphates		A-Avg.: ≤0.05	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(as P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species		TN A-Avg.: ≤0.75	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(N) - mg/l		TN S.V.: ≤1.2	recreation involving contact with the water <sup>b</sup> ,
		Nitrate S.V.: ≤2.0	municipal or domestic supply and [noncontact
		Nitrite S.V.: ≤.04	recreation.] recreation not involving contact with
		[Ammonia S.V.: ≤.02	the water.
		(un-ionized)]	
Total Ammonia			

(as N) - mg/l		g	Aquatic life <sup>b</sup> .
Total Dissolved	A-Avg.: ≤210.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l	S.V.: ≤260.0		[stock watering.] watering of livestock.
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤90.0		[Water contact recreation <sup>b</sup> , noncontact
No./100 ml	S.V.: ≤300.0	≤200/400°	recreation,] Recreation involving contact with
			the water <sup>b</sup> , recreation not involving contact with
			the water, municipal or domestic supply,
			irrigation, <del>[wildlife propagation and stock</del>
			watering.] propagation of wildlife and watering
			of livestock.
E. Coli			
(No./100 ml)			Recreation involving contact with the water <sup>b</sup> and
Annual Geometric			recreation not involving contact with the water.
Mean	-	≤126	
Single Value	_	≤410	
Suspended	A-Avg.: ≤25.0	S.V.: ≤50	Aquatic life <sup>b</sup> .
Solids - mg/l			
Sulfate - mg/l	A-Avg.: ≤39.0		Municipal or domestic supply <sup>b</sup> .
	S.V.: ≤46.0	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤1.5	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
	S.V.: ≤2.0		

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard. The  $\Delta T$  of  $\leq 2^{\circ}C$  is only for the Reno and Sparks Joint Wastewater Treatment Plant.

- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. When flows are adequate to induce spawning runs of cui-ui and Lahontan cutthroat trout, the standard is 14°C from April through June.
- f. The desired temperature for the protection of juvenile Lahontan cutthroat trout is 21°C, even though that temperature is not attainable at all times.
- g. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 41.** NAC 445A.188 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

#### Truckee River

Control Point at Derby Dam. The limits of this table apply from Derby Dam to the Lockwood Bridge control point.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMar.: ≤13°C	Aquatic life <sup>b</sup> and [water contact recreation.]
Maximum		Apr.: ≤21°C <sup>e</sup>	recreation involving contact with the water.

		May: ≤22°C <sup>e,f</sup>	
		June-Oct.: ≤23°C <sup>e,f</sup>	
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.0 - 8.6	S.V.: 6.5 - 9.0	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]
		ΔpH: ±0.5 Max.	Recreation involving contact with the water <sup>b</sup> ,
			propagation of wildlife <sup>b</sup> , aquatic life, irrigation,
			[stock watering,] watering of livestock, municipal
			or domestic supply and industrial supply.
Dissolved		S.V.:	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Oxygen - mg/l		NovMar.: ≥6.0	propagation, stock watering,] recreation
		AprOct.: ≥5.0	involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Chlorides - mg/l	A-Avg.: ≤21.0		Municipal or domestic supply <sup>b</sup> , <del>[wildlife</del>
	S.V.: ≤30.0	S.V.: ≤250	propagation, irrigation and stock watering.]
			propagation of wildlife, irrigation and watering
			of livestock.
Total Phosphates		A-Avg.: ≤0.05	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(as P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species		TN A-Avg.: ≤0.75	Aquatic life <sup>b</sup> , <del>[water contact recreation<sup>b</sup>,]</del>
(N) - mg/l		TN S.V.: ≤1.2	recreation involving contact with the water <sup>b</sup> ,
		Nitrate S.V.: ≤2.0	municipal or domestic supply and [noncontact
		Nitrite S.V.: ≤.04	recreation.] recreation not involving contact with
		<del>[Ammonia S.V.: ≤.02</del>	the water.
		(un-ionized)]	
Total Ammonia			

(as N) - mg/l		g	Aquatic life <sup>b</sup> .
Total Dissolved	A-Avg.: ≤215.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l	S.V.: ≤265.0		[stock watering.] watering of livestock.
Turbidity - NTU	A-Avg.: ≤8.0	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤80.0		[Water contact recreation <sup>b</sup> , noncontact
No./100 ml	S.V.: ≤250	≤200/400°	recreation,] Recreation involving contact with
			the water <sup>b</sup> , recreation not involving contact with
			the water, municipal or domestic supply,
			irrigation, <del>[wildlife propagation and stock</del>
			watering.] propagation of wildlife and watering
			of livestock.
E. Coli			
(No./100 ml)			Recreation involving contact with the water <sup>b</sup> and
Annual Geometric			recreation not involving contact with the water.
Mean	_	≤126	
Single Value		≤410	
Suspended	A-Avg.: ≤24.0	S.V.: ≤50	Aquatic life <sup>b</sup> .
Solids - mg/l	S.V.: ≤40.0		
Sulfate - mg/l	A-Avg.: ≤39.0		Municipal or domestic supply <sup>b</sup> .
	S.V.: ≤46.0	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤1.5	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
	S.V.: ≤2.0		

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.

- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. When flows are adequate to induce spawning runs of cui-ui and Lahontan cutthroat trout, the standard is 14°C from April through June.
- f. The desired temperature for the protection of juvenile Lahontan cutthroat trout is 21°C, even though that temperature is not attainable at all times.
- g. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 42.** NAC 445A.189 is hereby amended to read as follows:

# STANDARDS OF WATER QUALITY

### Truckee River

Control Point at Wadsworth Gage. The limits of this table apply from the Wadsworth Gage control point to Derby Dam.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMar.: ≤13°C <sup>e</sup>	Aquatic life <sup>b</sup> and [water contact recreation.]
Maximum		AprJune: ≤14°C <sup>e</sup>	recreation involving contact with the water.
		July-Oct.: ≤25°C <sup>f</sup>	
$\Delta T^a$	$\Delta T = 0$ °C		

		ΔT ≤2°C	
pH Units	7.1 - 8.6	S.V.: 6.5 - 9.0	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]
		ΔpH: ±0.5 Max.	Recreation involving contact with the water <sup>b</sup> ,
			propagation of wildlife <sup>b</sup> , aquatic life, irrigation,
			[stock watering,] watering of livestock, municipal
			or domestic supply and industrial supply.
Dissolved		S.V.:	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife</del>
Oxygen - mg/l		NovJune: ≥6.0	propagation, stock watering,] recreation
		July-Oct.: ≥5.0	involving contact with the water, propagation of
			wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Chlorides - mg/l	A-Avg.: ≤20.0		Municipal or domestic supply <sup>b</sup> , <del>[wildlife</del>
	S.V.: ≤28.0	S.V.: ≤250	propagation, irrigation and stock watering.]
			propagation of wildlife, irrigation and watering
			of livestock.
Total Phosphates		A-Avg.: ≤0.05	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]
(as P) - mg/l			recreation involving contact with the water <sup>b</sup> ,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species		TN A-Avg.: ≤0.75	Aquatic life <sup>b</sup> , <del>[water contact recreation<sup>b</sup>,]</del>
(N) - mg/l		TN S.V.: ≤1.2	recreation involving contact with the water <sup>b</sup> ,
		Nitrate S.V.: ≤2.0	municipal or domestic supply and [noncontact
		Nitrite S.V.: ≤.04	recreation.] recreation not involving contact with
		<del>[Ammonia S.V.: ≤.02</del>	the water.
		(un-ionized)]	
Total Ammonia			
(as N) - mg/l	_	g	Aquatic life <sup>b</sup> .
Total Dissolved	A-Avg.: ≤245.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and

Solids - mg/l	S.V.: ≤310.0		[stock watering.] watering of livestock.
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤50		[Water contact recreation <sup>b</sup> , noncontact
No./100 ml	S.V.: ≤250	≤200/400°	recreation,] Recreation involving contact with
			the water <sup>b</sup> , recreation not involving contact with
			the water, municipal or domestic supply,
			irrigation, <del>[wildlife propagation and stock</del>
			watering.] propagation of wildlife and watering
			of livestock.
E. Coli			
(No./100 ml)			Recreation involving contact with the water <sup>b</sup> and
Annual Geometric			recreation not involving contact with the water.
Mean	-	≤126	
Single Value	_	≤410	
Suspended	A-Avg.: ≤25.0	S.V.: ≤50	Aquatic life <sup>b</sup> .
Solids - mg/l			
Sulfate - mg/l	A-Avg.: ≤39.0		Municipal or domestic supply <sup>b</sup> .
	S.V.: ≤46.0	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤1.5	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
	S.V.: ≤2.0		

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.

- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. When flows are adequate to induce spawning runs of cui-ui and Lahontan cutthroat trout, the standard is 13°C from November through March and 14°C from April through June.
- f. The desired temperature for the protection of juvenile Lahontan cutthroat trout is 21°C, even though that temperature is not attainable at all times.
- g. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 43.** NAC 445A.192 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

### Colorado River

Control Point below Davis Dam. The limits of this table apply from the state line below Davis Dam to Lake Mohave Inlet.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C-		NovApr.: ≤13°C May-June: ≤17°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.

		JulOct.: ≤23°C	
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units		S.V.: [7.0 – 8.3] 6.5 – 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l	A-Avg.: ≤.02 S.V.: ≤.03	A-Avg.: ≤0.05	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Nitrate  A-Avg: ≤1.1  S.V.: ≤1.6	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un-ionized)]	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> ,  [water contact recreation, stock watering, wildlife propagation and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l		f	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0  JunOct.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or

			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Suspended Solids - mg/l		S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU		S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU		e	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved Solids - mg/l		С	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l		less than 25% change from natural conditions	Aquatic life <sup>b</sup> and [wildlife propagation.]  propagation of wildlife.
Fecal Coliform - No./100 ml	A.G.M.: ≤50 S.V.: ≤100	≤200/400 <sup>d</sup>	[Water contact recreation <sup>b</sup> , noncontact recreation,] Recreation involving contact with the water <sup>b</sup> , recreation not involving contact with the water, municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean Single Value		≤126 ≤235	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. The salinity standard for the Colorado River System is specified in NAC 445A.143.
- d. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- e. Increase in color must not be more than 10 PCU above natural conditions.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 44.** NAC 445A.193 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

## Colorado River

Control Point below Hoover Dam. The limits of this table apply from Lake Mohave Inlet to Hoover Dam.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C-		NovApr.: ≤13°C May-June: ≤17°C	Aquatic life <sup>b</sup> and [water contact recreation.]  recreation involving contact with the water.

		JulOct.: ≤23°C	
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units		S.V.: [7.0 – 8.3] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life, irrigation,  [stock watering,] watering of livestock, municipal  or domestic supply and industrial supply.
Total Phosphates  (as P) - mg/l	A-Avg.: ≤.02 S.V.: ≤.033	A-Avg.: ≤0.05 	Aquatic life <sup>b</sup> , [water contact recreation <sup>b</sup> ,]  recreation involving contact with the water <sup>b</sup> ,  municipal or domestic supply and [noncontact  recreation.] recreation not involving contact with  the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤1.0  S.V.: ≤1.5	Nitrate S.V.: ≤10  Nitrite S.V.: ≤.06  [Ammonia S.V.: ≤.02  (un-ionized)]	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> ,  [water contact recreation, stock watering, wildlife propagation and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	f	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or

			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Suspended			Aquatic life <sup>b</sup> .
Solids - mg/l		S.V.: ≤25	
Turbidity - NTU			Aquatic life <sup>b</sup> and municipal or domestic supply.
		S.V.: ≤10	
Color - PCU		e	Aquatic life <sup>b</sup> and municipal or domestic supply.
			riquitie me una manierpai or domestie suppry.
Total Dissolved			Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l		c	[stock watering.] watering of livestock.
Solids - Hig/1		C	Stock watering, watering of avestock.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
F 10.1%			TW.
Fecal Coliform -	A.G.M.: ≤50	<b>p</b> oottood	[Water contact recreation <sup>b</sup> , noncontact
No./100 ml	S.V.: ≤100	≤200/400 <sup>d</sup>	recreation,] Recreation involving contact with
			the water <sup>b</sup> , recreation not involving contact with
			the water, municipal or domestic supply,
			irrigation, <del>[wildlife propagation and stock</del>
			watering.] propagation of wildlife and watering
			of livestock.
E. Coli			Recreation involving contact with the water <sup>b</sup> and
(No./100 ml)			recreation not involving contact with the water.
Annual Geometric			
Mean		≤126	
Single Value	-	≤235	

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.

- c. The salinity standard for the Colorado River System is specified in NAC 445A.143.
- d. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- e. Increase in color must not be more than 10 PCU above natural conditions.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 45.** NAC 445A.203 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

## **Humboldt River**

Control Point near Osino. The limits in this table apply from the control point near Osino to the upstream source of the main stem.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C -			Aquatic life (warm-water fishery) <sup>b</sup> , [water contact
ΔT - Single Value <sup>a</sup>	$\Delta T = 0$ °C	ΔT ≤2°C	recreation.] and recreation involving contact

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES with the water.
pH Units Standard Units	A-Avg.: 7.0 - 8.3 S.V.: 7.0 - 8.5	S.V.: 6.5 - 9.0 ΔpH: ±0.5	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life (warm-water fishery), irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life (warm-water fishery) <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Chlorides - mg/l	A-Avg.: ≤22 S.V.: ≤25	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife  propagation, irrigation and stock watering.]  propagation of wildlife, irrigation and watering  of livestock.
Total Phosphorus  (as P) - mg/l		AprNov. Seasonal Avg.: ≤0.1	Aquatic life (warm-water fishery) <sup>b</sup> , bathing and  [water contact recreation,] recreation involving  contact with the water, municipal or domestic

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
			supply and [noncontact recreation.] recreation
			not involving contact with the water.
<del>[Nitroten]</del>	Total Nitrogen	Nitrate S.V.: ≤10	Municipal or domestic supply <sup>b</sup> , [wildlife
<i>Nitrogen</i> species	A-Avg.: ≤1.5	Nitrite S.V.: ≤1.0	propagation, irrigation, stock watering]
(N) - mg/l	AprNov. S.V.: ≤2.4	<del>[Ammonia S.V.: ≤0.02</del>	propagation of wildlife, irrigation, watering of
		(un-ionized)]	<i>livestock</i> and aquatic life (warm-water fishery).
Total Ammonia	_	f	Aquatic life <sup>b</sup> .
(as N) - mg/l			
Total Dissolved	A-Avg.: ≤370	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l		A-Avg 2500	[stock watering.] watering of livestock.
Solids - Ilig/1	S.V.: ≤385		tstock watering.] watering of tivestock.
Suspended		Annual Median: ≤80 <sup>e</sup>	Aquatic life (warm-water fishery) <sup>b</sup> .
Solids - mg/l		7 Hilliam Wedian. 200	
Sonds - mg/1			
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply <sup>b</sup> .
T. 1:1: NOTE		Q.V	A control of the cont
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) <sup>b</sup> , <i>and</i> municipal
			or domestic supply.
Fecal Coliform -	Annual Geometric		[Contact recreation <sup>b</sup> , noncontact recreation,]

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
No./100 ml	Mean: ≤75 S.V.: ≤200	≤200/400°	Recreation involving contact with the water <sup>b</sup> ,  recreation not involving contact with the water,  municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli  [No./100 ml]  (No./100 ml)  Annual Geometric  Mean  Single Value		[Annual Geometric  Mean: ≤126  S.V.: ≤406]  ≤126  ≤410	[Contact recreation <sup>b</sup> , noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering.] Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.
Sodium - SAR		A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The maximum allowable point source discharge is S.V. ≤ 80 mg/l of suspended solids.

# f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 46.** NAC 445A.204 is hereby amended to read as follows: 445A.204

# STANDARDS OF WATER QUALITY

## **Humboldt River**

Control Point at the Palisade Gage. The limits of this table apply from the control point at Palisade Gage upstream to the Osino control point.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature $^{\circ}$ C - $\Delta$ T - Single Value <sup>a</sup>	$\Delta T = 0$ °C	ΔT ≤2°C	Aquatic life (warm-water fishery) <sup>b</sup> [, water contact recreation.] and recreation involving contact with the water.
pH Units Standard Units	A-Avg.: 7.0 - 8.5 S.V.: 7.0 - 8.6	S.V.: 6.5 - 9.0 ΔpH: ±0.5	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life (warm-water fishery), irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.
Dissolved			Aquatic life (warm-water fishery) <sup>b</sup> , <del>[water contact</del>

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Oxygen - mg/l		S.V.: ≥5.0	recreation, wildlife propagation, stock watering,]
			recreation involving contact with the water,
			propagation of wildlife, watering of livestock,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Chlorides - mg/l	A-Avg.: ≤21	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>[wildlife</del>
emonaes mg :	S.V.: ≤30	5. V 2230	propagation, irrigation and stock watering.]
	3. v ≤30		propagation of wildlife, irrigation and watering
			of livestock.
			of ivesiock.
Total Phosphorus			Aquatic life (warm-water fishery) <sup>b</sup> , bathing and
(as P) - mg/l		AprNov. Seasonal	[water contact recreation,] recreation involving
		Avg.: ≤0.1	contact with the water, municipal or domestic
			supply and [noncontact recreation.] recreation
			not involving contact with the water.
			-
Nitrogen species	Total Nitrogen	Nitrate S.V.: ≤10	Municipal or domestic supply <sup>b</sup> , <del>[wildlife</del>
(N) - mg/l	A-Avg.: ≤1.4	Nitrite S.V.: ≤1.0	propagation, irrigation, stock watering}
	AprNov. S.V.: ≤2.4	[Ammonia S.V.: ≤0.02	propagation of wildlife, irrigation, watering of
	p-1-1-0	(un-ionized)]	<i>livestock</i> , and aquatic life (warm-water fishery).
		<del>(uir ioinzeu)]</del>	, , , , , , , , , , , , , , , , , , , ,
Total Anymonia			Aquatia lifab
Total Ammonia	_	f	Aquatic life <sup>b</sup> .
(as N) - mg/l			

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Total Dissolved	A-Avg.: ≤350	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l	S.V.: ≤400		[stock watering.] watering of livestock.
Suspended		Annual Median: ≤80 <sup>e</sup>	Aquatic life (warm-water fishery) <sup>b</sup> .
Solids - mg/l			
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply <sup>b</sup> .
Turbidity - NTU		C.V. <50	Aquatic life (warm-water fishery) <sup>b</sup> , <i>and</i> municipal
Turbidity - NTO		S.V.: ≤50	or domestic supply.
			of domestic supply.
Fecal Coliform -	Annual Geometric		[Contact recreation <sup>b</sup> , noncontact recreation,]
No./100 ml	Mean: ≤20	≤200/400°	Recreation involving contact with the water <sup>b</sup> ,
	S.V.: ≤150		recreation not involving contact with the water,
			municipal or domestic supply, irrigation, [wildlife
			propagation and stock watering.] propagation of
			wildlife and watering of livestock.
E. Coli		[Annual Geometric	[Contact recreation <sup>b</sup> , noncontact recreation,
[No./100 ml]		- <del>Mean: ≤126</del>	municipal or domestic supply, irrigation, wildlife
(No./100 ml)		<u>-S.V.:≤406</u> ]	propagation and stock watering.] Recreation
Annual Geometric			involving contact with the water <sup>b</sup> and recreation

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Mean		≤126	not involving contact with the water.
Single Value		≤410	
Sodium - SAR		A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The maximum allowable point source discharge is S.V. ≤80 mg/l of suspended solids.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 47.** NAC 445A.205 is hereby amended to read as follows:

### STANDARDS OF WATER QUALITY

**Humboldt River** 

Control Point at the Battle Mountain Gage. The limits of this table apply from the control point at Battle Mountain Gage upstream to the Palisade Gage control point.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature $^{\circ}$ C - $\Delta$ T - Single Value <sup>a</sup>	$\Delta T = 0$ °C	ΔT ≤2°C	Aquatic life (warm-water fishery) <sup>b</sup> [, water contact recreation.] and recreation involving contact with the water.
pH Units Standard Units	A-Avg.: 7.0 - 8.4 S.V.: 7.0 - 8.6	S.V.: 6.5 - 9.0 ΔpH: ±0.5	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life (warm-water fishery), irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life (warm-water fishery) <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Chlorides - mg/l	A-Avg.: ≤50	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>[wildlife</del>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY S.V.: ≤70	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL  USES  propagation, irrigation and stock watering.]  propagation of wildlife, irrigation and watering  of livestock.
Total Phosphorus  (as P) - mg/l		AprNov. Seasonal Avg.: ≤0.1	Aquatic life (warm-water fishery) <sup>b</sup> , bathing and [water contact recreation,] recreation involving contact with the water, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Nitrogen species (N) - mg/l	Total Nitrogen  A-Avg.: ≤1.9  AprNov. S.V.: ≤4.0	Nitrate S.V.: ≤10  Nitrite S.V.: ≤1.0  [Ammonia S.V.: ≤0.02  (un_ionized)]	Municipal or domestic supply <sup>b</sup> , [wildlife propagation, irrigation, stock watering]  propagation of wildlife, irrigation, watering of livestock and aquatic life (warm-water fishery).
Total Ammonia (as N) - mg/l	-	f	Aquatic life <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤425 S.V.: ≤520	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Suspended Solids - mg/l		Annual Median: ≤80 <sup>e</sup>	Aquatic life (warm-water fishery) <sup>b</sup> .
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Color - PCU	d	No Adverse Effects	Municipal or domestic supply <sup>b</sup> .
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) <sup>b</sup> , <i>and</i> municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric  Mean: ≤50  S.V.: ≤200	≤200/400°	[Contact recreation <sup>b</sup> noncontact recreation,]  Recreation involving contact with the water <sup>b</sup> ,  recreation not involving contact with the water,  municipal or domestic supply, irrigation, [wildlife propagation and stock watering.] propagation of wildlife and watering of livestock.
E. Coli  [No./100 ml]  (No./100 ml)  Annual Geometric  Mean  Single Value		[Annual Geometric  Mean: ≤126  S.V.: ≤406]  ≤126  ≤410	[Contact recreation <sup>b</sup> , noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering.] Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.
Sodium - SAR		A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.
- b. The most restrictive beneficial use.

- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The maximum allowable point source discharge is S.V. ≤80 mg/l of suspended solids.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 48.** NAC 445A.206 is hereby amended to read as follows: 445A.206

### STANDARDS OF WATER QUALITY

#### **Humboldt River**

Control Point where state highway 789 crosses the Humboldt River. The limits of this table apply from the control point where state highway 789 crosses the Humboldt River upstream to the Battle Mountain Gage control point.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature $^{\circ}$ C - $\Delta$ T - Single Value <sup>a</sup>	$\Delta T = 0$ °C	ΔT ≤2°C	Aquatic life (warm-water fishery) <sup>b</sup> [, water contact recreation.] and recreation involving contact with the water.

PARAMETER  pH Units  Standard Units	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY  A-Avg.: 7.0 - 8.5 S.V.: 7.0 - 8.7	WATER QUALITY STANDARDS FOR BENEFICIAL USES S.V.: 6.5 - 9.0 ΔpH: ±0.5	BENEFICIAL  USES  [Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,
		•	propagation of wildlife <sup>b</sup> , aquatic life (warm-water fishery), irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life (warm-water fishery) <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Chlorides - mg/l	A-Avg.: ≤60 S.V.: ≤110	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation, irrigation and stock watering.]  propagation of wildlife, irrigation and watering of livestock.
Total Phosphorus  (as P) - mg/l		AprNov. Seasonal Avg.: ≤0.1	Aquatic life (warm-water fishery) <sup>b</sup> , bathing and [water contact recreation,] recreation involving contact with the water, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Nitrogen species (N) - mg/l	Total Nitrogen  A-Avg.: ≤2.9  AprNov. S.V.: ≤3.7	Nitrate S.V.: ≤10  Nitrite S.V.: ≤1.0  [Ammonia S.V.: ≤0.02  (un_ionized)]	Municipal or domestic supply <sup>b</sup> , [wildlife propagation, irrigation, stock watering]  propagation of wildlife, irrigation, watering of livestock and aquatic life (warm-water fishery).
Total Ammonia (as N) - mg/l		f	Aquatic life <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤500 S.V.: ≤560	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Suspended Solids - mg/l		Annual Median: ≤80 <sup>e</sup>	Aquatic life (warm-water fishery) <sup>b</sup> .
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply <sup>b</sup> .
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) <sup>b</sup> , <i>and</i> municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric  Mean: ≤40  S.V.: ≤100	≤200/400°	[Contact recreation <sup>b</sup> , noncontact recreation,]  Recreation involving contact with the water <sup>b</sup> ,  recreation not involving contact with the water,

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
			municipal or domestic supply, irrigation, [wildlife
			propagation and stock watering.] propagation of
			wildlife and watering of livestock.
E. Coli		[Annual Geometric	[Contact recreation <sup>b</sup> , noncontact recreation,
[No./100 ml]		<del>Mean: ≤126</del>	municipal or domestic supply, irrigation, wildlife
(No./100 ml)		- <del>S.V.: ≤406]</del>	propagation and stock watering.]
Annual Geometric			Recreation involving contact with the water <sup>b</sup> and
Mean		≤126	recreation not involving contact with the water.
Single Value	-	<i>≤410</i>	
Sodium - SAR		A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The maximum allowable point source discharge is S.V. ≤80 mg/l of suspended solids.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 49.** NAC 445A.207 is hereby amended to read as follows:

445A.207

# STANDARDS OF WATER QUALITY

## Humboldt River

Control Point at Imlay. The limits of this table apply from the control point at Imlay upstream to the Comus Gage control point.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature $^{\circ}$ C - $\Delta$ T - Single Value <sup>a</sup>	$\Delta T = 0$ °C	ΔT ≤2°C	Aquatic life (warm-water fishery) <sup>b</sup> [, water contact recreation.] and recreation involving contact with the water.
pH Units Standard Units	A-Avg.: 7.0 - 8.5 S.V.: 7.0 - 8.7	S.V.: 6.5 - 9.0 ΔpH: ±0.5	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life (warm-water fishery), irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life (warm-water fishery) <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water,

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL  USES  propagation of wildlife, watering of livestock,  municipal or domestic supply and [noncontact recreation.] recreation not involving contact with  the water.
Chlorides - mg/l	A-Avg.: ≤70 S.V.: ≤85	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife  propagation, irrigation and stock watering.]  propagation of wildlife, irrigation and watering  of livestock.
Total Phosphorus  (as P) - mg/l		AprNov. Seasonal Avg.: ≤0.1	Aquatic life (warm-water fishery) <sup>b</sup> , bathing and  [water contact recreation,] recreation involving  contact with the water, municipal or domestic  supply and [noncontact recreation.] recreation  not involving contact with the water.
Nitrogen species (N) – mg/l	Total Nitrogen  A-Avg.: ≤2.4  AprNov. S.V.: ≤2.9	Nitrate S.V.: ≤10  Nitrite S.V.: ≤1.0  [Ammonia S.V.: ≤0.02  (un-ionized)]	Municipal or domestic supply <sup>b</sup> , [wildlife propagation, irrigation, stock watering]  propagation of wildlife, irrigation, watering of livestock and aquatic life (warm-water fishery).
Total Ammonia (as N) – mg/l	_	f	Aquatic life <sup>b</sup> .
Total Dissolved	S.V.: ≤590	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and

	Т	T	T
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Solids - mg/l			[stock watering.] watering of livestock.
Suspended Solids - mg/l		Annual Median: ≤80 <sup>e</sup>	Aquatic life (warm-water fishery) <sup>b</sup> .
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply <sup>b</sup> .
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) <sup>b</sup> , <i>and</i> municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric  Mean: ≤30  S.V.: ≤150	≤200/400°	[Contact recreation <sup>b</sup> , noncontact recreation,]  Recreation involving contact with the water <sup>b</sup> ,  recreation not involving contact with the water,  municipal or domestic supply, irrigation, [wildlife  propagation and stock watering.] propagation of  wildlife and watering of livestock.
E. Coli  [No./100 ml]  (No./100 ml)  Annual Geometric  Mean  Single Value		[Annual Geometric  Mean: ≤126  S.V.: ≤406]  ≤126  ≤410	[Contact recreation <sup>b</sup> , noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering.] Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Sodium - SAR		A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The maximum allowable point source discharge is S.V. ≤80 mg/l of suspended solids.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 50.** NAC 445A.208 is hereby amended to read as follows: 445A.208

#### STANDARDS OF WATER QUALITY

#### **Humboldt River**

Control Point at Woolsey. The limits of this table apply from the control point at Woolsey upstream to the Imlay control point.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature $^{\circ}$ C - $\Delta$ T - Single Value <sup>a</sup>	$\Delta T = 0$ °C	ΔT ≤2°C	Aquatic life (warm-water fishery) <sup>b</sup> [, water contact recreation.] and recreation involving contact with the water.
pH Units Standard Units	A-Avg.: 7.0 - 8.9 S.V.: 7.0 - 9.0	S.V.: 6.5 - 9.0 ΔpH: ±0.5	[Water contact recreation <sup>b</sup> , wildlife propagation <sup>b</sup> ,]  Recreation involving contact with the water <sup>b</sup> ,  propagation of wildlife <sup>b</sup> , aquatic life (warm-water fishery), irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life (warm-water fishery) <sup>b</sup> , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Chlorides - mg/l	A-Avg.: ≤130 S.V.: ≤175	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , [wildlife propagation, irrigation and stock watering.]  propagation of wildlife, irrigation and watering of livestock.

PARAMETER  Total Phosphorus	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES AprNov. Seasonal	BENEFICIAL  USES  Aquatic life (warm-water fishery) <sup>b</sup> , bathing and
(as P) - mg/l		Avg.: ≤0.1	[water contact recreation,] recreation involving  contact with the water, municipal or domestic  supply and [noncontact recreation.] recreation  not involving contact with the water.
Nitrogen species (N) - mg/l		Nitrate S.V.: ≤10  Nitrite S.V.: ≤1.0  [Ammonia S.V.: ≤0.02]	Municipal or domestic supply <sup>b</sup> , [wildlife propagation, irrigation, stock watering]  propagation of wildlife, irrigation, watering of livestock and aquatic life (warm-water fishery).
Total Ammonia (as N) - mg/l	-	f	Aquatic life <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤600 S.V.: ≤700	A-Avg.: ≤1000	Municipal or domestic supply <sup>b</sup> , irrigation and  [stock watering.] watering of livestock.
Suspended Solids - mg/l		Annual Median: ≤80 <sup>e</sup>	Aquatic life (warm-water fishery) <sup>b</sup> .
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply <sup>b</sup> .
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) <sup>b</sup> , <i>and</i> municipal

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric  Mean: ≤100  S.V.: ≤200	≤200/400°	[Contact recreation <sup>b</sup> , noncontact recreation,]  Recreation involving contact with the water <sup>b</sup> ,  recreation not involving contact with the water,  municipal or domestic supply, irrigation, [wildlife  propagation and stock watering.] propagation of  wildlife and watering of livestock.
E. Coli  [No./100 ml]  (No./100 ml)  Annual Geometric  Mean  Single Value		[Annual Geometric  Mean: ≤126  S.V.: ≤406]  ≤126  ≤410	[Contact recreation <sup>b</sup> , noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering.] Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.
Sodium - SAR		A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.

- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The maximum allowable point source discharge is S.V. ≤80 mg/l of suspended solids.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 51.** NAC 445A.210 is hereby amended to read as follows: 445A.210

# STANDARDS OF WATER QUALITY

# Muddy River

Control Point at Glendale Bridge. The limits of this table apply from the Glendale Bridge upstream to the river source.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature $^{\circ}$ C - Maximum $\Delta T^{a}$	$\Delta T = 0^{\circ}C$	NovJun.: ≤21°C JulOct.: ≤32°C ΔT ≤2°C	Aquatic life <sup>b</sup> .
pH Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagation <sup>b</sup> ,] Propagation of wildlife <sup>b</sup> , aquatic life <sup>b</sup> , [noncontact recreation, irrigation, stock watering,] recreation not involving contact with the water, irrigation, watering of livestock, municipal or domestic supply and industrial

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES supply
Total Phosphates  (as P) - mg/l		A-Avg.: ≤0.1	Aquatic life <sup>b</sup> , [noncontact recreation,] recreation not involving contact with the water, and municipal or domestic supply.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤1.3  S.V.: ≤1.4	Nitrate S.V.: ≤10  Nitrite S.V.: ≤1.0  [Ammonia S.V.: ≤.06  (un_ionized)]	Municipal or domestic supply <sup>b</sup> , aquatic life,  [water contact recreation, stock watering, wildlife propagation and noncontact recreation.]  recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	f	Aquatic life <sup>b</sup> .
Dissolved Oxygen - mg/l		S.V.: ≤5.0	Aquatic life <sup>b</sup> , [noncontact recreation, wildlife propagation, stock watering] recreation not involving contact with the water, propagation of wildlife, watering of livestock, and municipal or domestic supply.
Turbidity – NTU		e	Aquatic life <sup>b</sup> and municipal or domestic supply.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Color - PCU		d	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved			Municipal or domestic supply <sup>b</sup> , irrigation and
Solids - mg/l		С	[stock watering.] watering of livestock.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -		A.G.M.: ≤1000	[Noncontact recreation b.] Recreation not
No./100 ml		S.V.: ≤2000	involving contact with the water <sup>b</sup> , municipal or
			domestic supply <sup>b</sup> , irrigation, <del>[wildlife propagation</del>
			and stock watering.] propagation of wildlife and
			watering of livestock.
E. Coli			Recreation not involving contact with the water <sup>b</sup> .
(No./100 ml)			
Annual Geometric	_	≤630	
Mean			

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. The salinity standard for the Colorado River System is specified in NAC 445A.143.
- d. Increase in color must not be more than 10 PCU above natural conditions.

- e. Increase in turbidity must not be more than 10 NTU above natural conditions.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 52.** NAC 445A.211 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

## Muddy River

Control Point at Overton. The limits of this table apply from the mouth of the river at Lake Mead to the Glendale Bridge.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C - Maximum		NovJun.: ≤21°C JulOct.: ≤32°C	Aquatic life <sup>b</sup> .
$\Delta T^a$	$\Delta T = 0$ °C <sup>a</sup>	ΔT ≤2°C	
pH Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagation <sup>b</sup> ,] Propagation of wildlife <sup>b</sup> , aquatic life <sup>b</sup> , [noncontact recreation, irrigation, stock watering] recreation not involving contact with the water, irrigation, watering of livestock and industrial supply.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Total Phosphates		A-Avg.: ≤0.3	Aquatic life <sup>b</sup> and [noncontact recreation.]
(as P) - mg/l			recreation not involving contact with the water.
Nitrogen Species	Total Nitrogen	Nitrate S.V.: ≤90	Aquatic life <sup>b</sup> , [stock watering, wildlife
(N) - mg/l	A-Avg.: ≤1.3	Nitrite S.V.: ≤5.0	propagation and noncontact recreation.] watering
	S.V.: ≤1.8	[Ammonia S.V.: ≤.06	of livestock, propagation of wildlife and
		(un-ionized)]	recreation not involving contact with the water.
Total Ammonia	_	f	Aquatic life <sup>b</sup> .
(as N) - mg/l			
Dissolved		S.V.: ≥5.0	Aquatic life <sup>b</sup> , <del>[noncontact recreation, wildlife</del>
Oxygen - mg/l			propagation and stock watering.] recreation not
			involving contact with the water, propagation of
			wildlife and watering of livestock.
Turbidity - NTU		e	Aquatic life <sup>b</sup> .
Color - PCU		d	Aquatic life <sup>b</sup> .
T (15)			The contract of the contract o
Total Dissolved			Irrigation <sup>b</sup> and [stock watering.] watering of
Solids - mg/l		С	livestock.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Fecal Coliform - No./100 ml	A.G.M.: ≤500 S.V.: ≤1300	A.G.M.: ≤1000 S.V.: ≤2000	[Noncontact recreation <sup>b</sup> irrigation, wildlife  propagation and stock watering.] Recreation not  involving contact with the water <sup>b</sup> , irrigation,  propagation of wildlife and watering of  livestock.
E. Coli (No./100 ml) Annual Geometric Mean	_	≤630	Recreation not involving contact with the water <sup>b</sup> .

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. The salinity standard for the Colorado River System is specified in NAC 445A.143.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. Increase in turbidity must not be more than 10 NTU above natural conditions.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 53.** NAC 445A.212 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

# Meadow Valley Wash

Control Point at confluence with Muddy River. The limits of this table apply from the confluence of the Meadow Valley Wash with the Muddy River to the bridge above Rox.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C - Maximum		NovJun.: ≤21°C JulOct.: ≤32°C	Aquatic life <sup>b</sup> .
$\Delta T^a$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagation <sup>b</sup> ,] Propagation of wildlife <sup>b</sup> , aquatic life <sup>b</sup> , [noncontact recreation, irrigation, stock watering] recreation not involving contact with the water, irrigation, watering of livestock and industrial supply.
Total Phosphates (as P) - mg/l		A-Avg.: ≤0.1	Aquatic life <sup>b</sup> and [noncontact recreation.]  recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: ≤2.0  S.V.: ≤3.3	Nitrate S.V.: ≤90  Nitrite S.V.: ≤5.0  [Ammonia S.V.: ≤.06	Aquatic life <sup>b</sup> , [stock watering, wildlife  propagation and noncontact recreation.] watering  of livestock, propagation of wildlife and  recreation not involving contact with the water.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
		(un-ionized)]	
Total Ammonia		f	Aquatic life <sup>b</sup> .
(as N) - mg/l			
Dissolved		S.V.: ≥5.0	Aquatic life <sup>b</sup> , <del>[noncontact recreation, wildlife</del>
Oxygen - mg/l			propagation, stock watering.] recreation not
			involving contact with the water, propagation of
			wildlife and watering of livestock.
Turbidity – NTU		e	Aquatic life <sup>b</sup> .
Color - PCU		d	Aquatic life <sup>b</sup> .
Total Dissolved			Irrigation <sup>b</sup> and [stock watering.] watering of
Solids - mg/l		c	livestock.
Alkalinity		less than 25% change	Aquatic life <sup>b</sup> and [wildlife propagation.]
(as CaCO <sub>3</sub> ) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -		A.G.M.: ≤1000	[Noncontact recreation <sup>b</sup> , irrigation, wildlife
No./100 ml		S.V.: ≤2000	propagation and stock watering.] Recreation not
			involving contact with the water <sup>b</sup> , irrigation,
			propagation of wildlife and watering of
			livestock.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
E. Coli (No./100 ml) Annual Geometric Mean	_	≤630	Recreation not involving contact with the water <sup>b</sup> .

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The most restrictive beneficial use.
- c. The salinity standard for the Colorado River System is specified in NAC 445A.143.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. Increase in turbidity must not be more than 10 NTU above natural conditions.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 54.** NAC 445A.215 is hereby amended to read as follows:

## STANDARDS OF WATER QUALITY

Big Goose Creek

Control Point at Ranch.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C  Maximum a  ΔT°C	$\Delta T = 0^{\circ}$	May-Oct <21° Nov-Apr <13° ΔT <1°	Aquatic life [, water contact recreation.] and recreation involving contact with the water.
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply [, water contact recreation.] and recreation involving contact with the water.
Total Phosphorus  (as P) - mg/l		<0.1	Aquatic life, [water contact recreation,]  recreation involving contact with the water,  municipal and domestic supply, [noncontact  recreation.] and recreation not involving contact  with the water.
Nitrogen Species (N) - mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06  [Ammonia S.V. <0.02 (un_ionized)]	Municipal and domestic supply, aquatic life,  [water contact recreation, noncontact recreation.]  recreation involving contact with the water and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	d	Aquatic life.
Dissolved Oxygen in mg/l		>6.0	Aquatic life, [water contact recreation, wildlife propagation, stock watering,] recreation

			involving contact with the water, propagation of wildlife, watering of livestock, municipal and domestic supply, [noncontact recreation.] and recreation not involving contact with the water.
Suspended Solids - mg/l		S.V. <25	Aquatic life, <i>and</i> municipal and domestic supply.
Turbidity - NTU		S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved Solids - mg/l	S.V. <185	S.V. <500	Municipal and domestic supply, irrigation [, stock watering.] and watering of livestock.
Chlorides - mg/l	S.V. <9.0	S.V. <250	Municipal and domestic supply, [wildlife propagation, irrigation, stock watering.]  propagation of wildlife, irrigation and watering of livestock.
Alkalinity (as CO <sub>3</sub> ) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.
Fecal Coliform - No./100 ml		<200/400 <sup>b</sup>	[Water contact recreation, noncontact recreation,]  Recreation involving contact with the water,  recreation not involving contact with the water,  municipal and domestic supply, irrigation [,  wildlife propagation.] and propagation of  wildlife.
E. Coli (No./100 ml)			Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.

Annual Geometric			
Mean	_	≤126	
Single Value	_	≤410	
Color		С	Municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.
- c. Increase in color must not be more than 10 color units above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 55.** NAC 445A.216 is hereby amended to read as follows:

# STANDARDS OF WATER QUALITY

### Salmon Falls Creek

Control Point at Highway 93 south of Jackpot.

445A.216

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C		May-Oct <21°	Aquatic life [, water contact recreation.] and

Maximum (a)		Nov-Apr <13°	recreation involving contact with the water.
ΔT°C	$\Delta T = 0^{\circ}$	ΔT <1°	
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply [, water contact recreation.] and recreation involving contact with the water.
Total Phosphorus  (as P) in mg/l		<0.1	Aquatic life, [water contact recreation,]  recreation involving contact with the water,  municipal and domestic supply, [noncontact  recreation.] and recreation not involving contact  with the water.
Nitrogen Species (N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06  [Ammonia S.V. <0.02  (un-ionized)]	Municipal and domestic supply, aquatic life,  [water contact recreation, noncontact recreation.]  recreation involving contact with the water and  recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	d	Aquatic life.
Dissolved Oxygen in mg/l		>6.0	Aquatic life, [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal and domestic supply, [noncontact recreation.] and recreation not involving contact with the water.
Suspended Solids - mg/l		S.V. <25	Aquatic life, <i>and</i> municipal and domestic supply.

Turbidity - NTU		S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved			Municipal and domestic supply, irrigation [, stock
Solids - mg/l	S.V. <250	S.V. <500	watering.] and watering of livestock.
Chlorides - mg/l	S.V. <14.0	S.V. <250	Municipal and domestic supply, [wildlife]
			propagation, irrigation, stock watering.]
			propagation of wildlife, irrigation and watering
			of livestock.
Alkalinity		<25% change from	Aquatic life [, wildlife propagation.] and
(as CO <sub>3</sub> ) - mg/l		natural conditions	propagation of wildlife.
Fecal Coliform -			[Water contact recreation, noncontact recreation,]
No./100 ml	S.V. <90	<200/400 <sup>b</sup>	Recreation involving contact with the water,
			recreation not involving contact with the water,
			municipal and domestic supply, irrigation [,
			wildlife propagation.] and propagation of
			wildlife.
E. Coli			Recreation involving contact with the water <sup>b</sup> and
(No./100 ml)			recreation not involving contact with the water.
Annual Geometric			
Mean		≤126	
Single Value		≤410	
Color		c	Municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.
- c. Increase in color must not be more than 10 color units above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 56.** NAC 445A.217 is hereby amended to read as follows:

445A.217

## STANDARDS OF WATER QUALITY

#### Shoshone Creek

Control Point: Jackpot to Delaplain Road.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C  Maximum (a)  ΔT°C	$\Delta T = 0^{\circ}$	May-Oct <21° Nov-Apr <13° ΔT <1°	Aquatic life [, water contact recreation.] and recreation involving contact with the water.
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply [, water contact recreation.] and recreation involving contact with the water.

Total Phosphorus (as P) in mg/l		<0.1	Aquatic life, [water contact recreation,]  recreation involving contact with the water,  municipal and domestic supply, [noncontact  recreation.] and recreation not involving contact  with the water.
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06  [Ammonia S.V. <0.02 (un_ionized)]	Municipal and domestic supply, aquatic life,  [water contact recreation, noncontact recreation.]  recreation involving contact with the water and  recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	d	Aquatic life.
Dissolved Oxygen in mg/l		>6.0	Aquatic life, [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal and domestic supply, [noncontact recreation.] and recreation not involving contact with the water.
Suspended Solids - mg/l		S.V. <25	Aquatic life, <i>and</i> municipal and domestic supply.
Turbidity - NTU		S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved Solids - mg/l	S.V. <250	S.V. <500	Municipal and domestic supply, irrigation [, stock watering.] and watering of livestock.

Chlorides - mg/l	S.V. <15.0	S.V. <250	Municipal and domestic supply, [wildlife propagation, irrigation, stock watering.]  propagation of wildlife, irrigation and watering
			of livestock.
Alkalinity (as CO <sub>3</sub> ) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.
Fecal Coliform - No./100 ml		<200/400 <sup>b</sup>	[Water contact recreation, noncontact recreation,]  Recreation involving contact with the water,  recreation not involving contact with the water,  municipal and domestic supply, irrigation [,  wildlife propagation.] and propagation of  wildlife.
E. Coli (No./100 ml) Annual Geometric Mean Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.
Color		c	Municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.
- c. Increase in color must not be more than 10 color units above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 57.** NAC 445A.218 is hereby amended to read as follows:

445A.218

# STANDARDS OF WATER QUALITY

# East Fork Jarbidge River

Control Point at the Nevada-Idaho state line.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C  Maximum (a)  ΔT°C	$\Delta T = 0^{\circ}$	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life [, water contact recreation.] and recreation involving contact with the water.
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply [, water contact recreation.] and recreation involving contact with the water.
Total Phosphorus  (as P) in mg/l		<0.1	Aquatic life, [water contact recreation,]  recreation involving contact with the water,  municipal and domestic supply, [noncontact  recreation.] and recreation not involving contact  with the water.
Nitrogen Species		Nitrate S.V. <10	Municipal and domestic supply, aquatic life,

(as N) in mg/l	Nitrate S.V. <1.0	Nitrite S.V. < 0.06	[water contact recreation, noncontact recreation.]
		[Ammonia S.V. <0.02	recreation involving contact with the water and
		(un-ionized)]	recreation not involving contact with the water.
Total Ammonia (as N) - mg/l		d	Aquatic life.
Dissolved Oxygen in mg/l		> 6.0	Aquatic life, [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal and domestic supply, [noncontact recreation.] and recreation not involving contact with the water.
Suspended Solids - mg/l		S.V. <25	Aquatic life, <i>and</i> municipal and domestic supply.
Turbidity - NTU		S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved Solids - mg/l	S.V. <200	S.V. <500	Municipal and domestic supply, irrigation [, stock watering.] and watering of livestock.
Chlorides - mg/l	S.V. <6.0	S.V. <250	Municipal and domestic supply, [wildlife propagation, irrigation, stock watering.]  propagation of wildlife, irrigation and watering of livestock.
Alkalinity (as CO <sub>3</sub> ) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.

Fecal Coliform -			[Water contact recreation, noncontact recreation,]
No./100 ml	S.V. <100	<200/400 <sup>b</sup>	Recreation involving contact with the water,
			recreation not involving contact with the water,
			municipal and domestic supply, irrigation [,
			wildlife propagation.] and propagation of
			wildlife.
E. Coli			Recreation involving contact with the water <sup>b</sup> and
(No./100 ml)			recreation not involving contact with the water.
Annual Geometric			
Mean	_	≤126	
Single Value	_	≤410	
Color		С	Municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.
- c. Increase in color must not be more than 10 color units above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 58.** NAC 445A.219 is hereby amended to read as follows: 445A.219

### STANDARDS OF WATER QUALITY

Jarbidge River

Control Point upstream from Jarbidge at bridge.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C  Maximum (a)  ΔT°C	$\Delta T = 0^{\circ}$	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life [, water contact recreation.] and recreation involving contact with the water.
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply [, water contact recreation.] and recreation involving contact with the water.
Total Phosphorus  (as P) in mg/l	S.V. <0.05	<0.1	Aquatic life, [water contact recreation,]  recreation involving contact with the water,  municipal and domestic supply, [noncontact  recreation.] and recreation not involving contact  with the water.
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06  [Ammonia S.V. <0.02  (un_ionized)]	Municipal and domestic supply, aquatic life,  [water contact recreation, noncontact recreation.]  recreation involving contact with the water and  recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	d	Aquatic life.
Dissolved			Aquatic life, [water contact recreation, wildlife

Oxygen in mg/l		>6.0	propagation, stock watering,] recreation
			involving contact with the water, propagation of
			wildlife, watering of livestock, municipal and
			domestic supply, [noncontact recreation.] and
			recreation not involving contact with the water.
			3
Suspended			Aquatic life, <i>and</i> municipal and domestic supply.
Solids - mg/l		S.V. <25	riquate me, and manerpar and domestic suppris-
Solids - Hig/I		5. 7. 123	
Tk.: dia. NITH		C.V. <10	A soutie life, and associated and demonstration much
Turbidity - NTU		S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved			Municipal and domestic supply, irrigation [, stock
Solids - mg/l	S.V. <65	S.V. <500	watering.] and watering of livestock.
Chlorides - mg/l	S.V. <7.0	S.V. <250	Municipal and domestic supply, [wildlife
			propagation, irrigation, stock watering.]
			propagation of wildlife, irrigation and watering
			of livestock.
Alkalinity		<25% change from	Aquatic life [, wildlife propagation.] and
(as CO <sub>3</sub> ) - mg/l		natural conditions	propagation of wildlife.
Fecal Coliform -			[Water contact recreation, noncontact recreation,]
No./100 ml	S.V. <10	<200/400 <sup>b</sup>	Recreation involving contact with the water,
			recreation not involving contact with the water,
			municipal and domestic supply, irrigation [-
			wildlife propagation.] and propagation of
			wildlife.
			munge.
E C !			
E. Coli			Recreation involving contact with the water <sup>b</sup> and

(No./100 ml)			recreation not involving contact with the water.
Annual Geometric			
Mean	_	≤126	
Single Value	_	≤410	
Color		С	Municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.
- c. Increase in color must not be more than 10 color units above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 59.** NAC 445A.220 is hereby amended to read as follows:

445A.220

### STANDARDS OF WATER QUALITY

Jarbidge River

Control Point downstream from Jarbidge at bridge.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES

Temperature °C		May-Oct <21°	Aquatic life [, water contact recreation.] and
Maximum (a)		Nov-Apr <7°	recreation involving contact with the water.
ΔT°C	$\Delta T = 0^{\circ}$	ΔT <1°	
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply [, water contact recreation.] and recreation involving contact with the water.
Total Phosphorus  (as P) in mg/l	S.V. <0.05	<0.1	Aquatic life, [water contact recreation,]  recreation involving contact with the water,  municipal and domestic supply, [noncontact  recreation.] and recreation not involving contact  with the water.
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06  [Ammonia S.V. <0.02 (un-ionized)]	Municipal and domestic supply, aquatic life,  [water contact recreation, noncontact recreation.]  recreation involving contact with the water and  recreation not involving contact with the water.
Total Ammonia (as N) - mg/l		d	Aquatic life.
Dissolved Oxygen in mg/l		> 6.0	Aquatic life, [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal and domestic supply, [noncontact recreation.] and recreation not involving contact with the water.
Suspended			Aquatic life, <i>and</i> municipal and domestic supply.

Solids - mg/l		S.V. <25	
Turbidity - NTU		S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved Solids - mg/l	S.V. <80	S.V. <500	Municipal and domestic supply, irrigation [, stock watering.] and watering of livestock.
Chlorides - mg/l	S.V. <7.0	S.V. <250	Municipal and domestic supply, [wildlife propagation, irrigation, stock watering.]  propagation of wildlife, irrigation and watering of livestock.
Alkalinity (as CO <sub>3</sub> ) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.
Fecal Coliform - No./100 ml		<200/400 <sup>b</sup>	[Water contact recreation, noncontact recreation,]  Recreation involving contact with the water,  recreation not involving contact with the water,  municipal and domestic supply, irrigation [,  wildlife propagation.] and propagation of  wildlife.
E. Coli (No./100 ml) Annual Geometric Mean		≤126	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.
Single Value	-	≤126 ≤410	
Color		c	Municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.
- c. Increase in color must not be more than 10 color units above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 60.** NAC 445A.221 is hereby amended to read as follows: 445A.221

### STANDARDS OF WATER QUALITY

#### Bruneau River

Control Point at Diamond "A" Road.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C  Maximum (a)  ΔT°C	$\Delta T = 0^{\circ}$	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life [, water contact recreation.] and recreation involving contact with the water.
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply [, water contact recreation.] and recreation involving contact with the water.

Total Phosphorus (as P) in mg/l		<0.1	Aquatic life, [water contact recreation,]  recreation involving contact with the water,  municipal and domestic supply, [noncontact  recreation.] and recreation not involving contact  with the water.
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06  [Ammonia S.V. <0.02  (un_ionized)]	Municipal and domestic supply, aquatic life,  [water contact recreation, noncontact recreation.]  recreation involving contact with the water and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	d	Aquatic life.
Dissolved Oxygen in mg/l		>6.0	Aquatic life, [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal and domestic supply, [noncontact recreation.] and recreation not involving contact with the water.
Suspended Solids - mg/l		S.V. <25	Aquatic life, <i>and</i> municipal and domestic supply.
Turbidity - NTU		S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved Solids - mg/l	S.V. <180	S.V. <500	Municipal and domestic supply, irrigation [, stock watering.] and watering of livestock.

Chlorides - mg/l	S.V. <7.0	S.V. <250	Municipal and domestic supply, [wildlife propagation, irrigation, stock watering.]  propagation of wildlife, irrigation and watering of livestock.
Alkalinity (as CO <sub>3</sub> ) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.
Fecal Coliform - No./100 ml	 S.V. <80	<200/400 <sup>b</sup>	[Water contact recreation, noncontact recreation,]  Recreation involving contact with the water,  recreation not involving contact with the water,  municipal and domestic supply, irrigation [,  wildlife propagation.] and propagation of  wildlife.
E. Coli (No./100 ml) Annual Geometric Mean Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.
Color		с	Municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.
- c. Increase in color must not be more than 10 color units above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

# **Sec. 61.** NAC 445A.222 is hereby amended to read as follows:

## 445A.222

# STANDARDS OF WATER QUALITY

# Owyhee River

## Control Point above Mill Creek.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C  Maximum (a)  ΔT°C	$\Delta T = 0^{\circ}$	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life [, water contact recreation.] and recreation involving contact with the water.
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply [, water contact recreation.] and recreation involving contact with the water.
Total Phosphorus (as P) in mg/l		<0.1	Aquatic life, [water contact recreation,]  recreation involving contact with the water,  municipal and domestic supply, [noncontact  recreation.] and recreation not involving contact  with the water.
Nitrogen Species		Nitrate S.V. <10	Municipal and domestic supply, aquatic life,

(as N) in mg/l	Nitrate S.V. <1.0	Nitrite S.V. <0.06	[water contact recreation, noncontact recreation.]
		[Ammonia S.V. <0.02	recreation involving contact with the water and
		(un-ionized)]	recreation not involving contact with the water.
Total Ammonia (as N) - mg/l		d	Aquatic life.
Dissolved Oxygen in mg/l		>6.0	Aquatic life, [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal and domestic supply, [noncontact recreation.] and recreation not involving contact with the water.
Suspended Solids - mg/l		S.V. <25	Aquatic life, <i>and</i> municipal and domestic supply.
Turbidity - NTU		S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved Solids - mg/l	S.V. <200	S.V. <500	Municipal and domestic supply, irrigation [, stock watering.] and watering of livestock.
Chlorides - mg/l	S.V. <8.0	S.V. <250	Municipal and domestic supply, [wildlife propagation, irrigation, stock watering.]  propagation of wildlife, irrigation and watering of livestock.
Alkalinity (as CO <sub>3</sub> ) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.

Fecal Coliform -		[Water contact recreation, noncontact recreation,]
No./100 ml	<200/400 <sup>b</sup>	Recreation involving contact with the water,
		recreation not involving contact with the water,
		municipal and domestic supply, irrigation [-,
		wildlife propagation.] and propagation of
		wildlife.
E. Coli		Recreation involving contact with the water <sup>b</sup> and
(No./100 ml)		recreation not involving contact with the water.
Annual Geometric		
Mean	 ≤126	
Single Value	 ≤410	
Color	 С	Municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.
- c. Increase in color must not be more than 10 color units above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
  - **Sec. 62.** NAC 445A.223 is hereby amended to read as follows:

445A.223

### STANDARDS OF WATER QUALITY

Owyhee River

Control Point at New China Dam.

	T	T	<u></u>
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C  Maximum (a)  ΔΤ°C	$\Delta T = 0^{\circ}$	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life [, water contact recreation.] and recreation involving contact with the water.
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply [, water contact recreation.] and recreation involving contact with the water.
Total Phosphorus  (as P) in mg/l		<0.1	Aquatic life, [water contact recreation,]  recreation involving contact with the water,  municipal and domestic supply, [noneontact  recreation.] and recreation not involving contact  with the water.
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06  [Ammonia S.V. <0.02  (un_ionized)]	Municipal and domestic supply, aquatic life,  [water contact recreation, noncontact recreation.]  recreation involving contact with the water and recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	_	d	Aquatic life.
Dissolved			Aquatic life, [water contact recreation, wildlife

Oxygen in mg/l		>6.0	propagation, stock watering,] recreation
			involving contact with the water, propagation of
			wildlife, watering of livestock, municipal and
			domestic supply, [noncontact recreation.] and
			recreation not involving contact with the water.
Suspended			Aquatic life, <i>and</i> municipal and domestic supply.
Solids - mg/l		S.V. <25	riquate me, and manorpar and domestic suppris-
Solids - Ilig/1		3. v. \23	
T. 1:1: NELL		GW 410	
Turbidity - NTU		S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved			Municipal and domestic supply, irrigation [, stock
Solids - mg/l	S.V. <250	S.V. <500	watering.] and watering of livestock.
Chlorides - mg/l	S.V. <8.0	S.V. <250	Municipal and domestic supply, [wildlife
			propagation, irrigation, stock watering.]
			propagation of wildlife, irrigation and watering
			of livestock.
Alkalinity		<25% change from	Aquatic life [, wildlife propagation.] and
(as CO <sub>3</sub> ) - mg/l		natural conditions	propagation of wildlife.
Fecal Coliform -			[Water contact recreation, noncontact recreation,]
No./100 ml	S.V. <125	<200/400 <sup>b</sup>	Recreation involving contact with the water,
			recreation not involving contact with the water,
			municipal and domestic supply, irrigation [-
			wildlife propagation.] and propagation of
			wildlife.
E. Coli			Recreation involving contact with the water <sup>b</sup> and
2. 000			neer canon involving connect with the water and

(No./100 ml)			recreation not involving contact with the water.
Annual Geometric			
Mean	_	≤126	
Single Value		≤410	
Color		c	Municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.
- c. Increase in color must not be more than 10 color units above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.

**Sec. 63.** NAC 445A.225 is hereby amended to read as follows:

445A.225

#### STANDARDS OF WATER QUALITY

South Fork Owyhee River

Control Point at Petan Access Road.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES

Temperature °C		May-Oct <21°	Aquatic life [, water contact recreation.] and
Maximum (a)		Nov-Apr <13°	recreation involving contact with the water.
ΔT°C	$\Delta T = 0^{\circ}$	ΔT <1°	
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply [, water contact recreation.] and recreation involving contact with the water.
Total Phosphorus (as P) in mg/l		<0.1	Aquatic life, [water contact recreation,]  recreation involving contact with the water,  municipal and domestic supply, [noncontact  recreation.] and recreation not involving contact  with the water.
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06  [Ammonia S.V. <0.02 (un_ionized)]	Municipal and domestic supply, aquatic life,  [water contact recreation, noncontact recreation.]  recreation involving contact with the water and  recreation not involving contact with the water.
Total Ammonia (as N) - mg/l	-	d	Aquatic life.
Dissolved Oxygen in mg/l		>6.0	Aquatic life, [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal and domestic supply, [noncontact recreation.] and recreation not involving contact with the water.
Suspended			Aquatic life, <i>and</i> municipal and domestic supply.

Solids - mg/l		S.V. <25	
Turbidity - NTU		S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved Solids - mg/l	S.V. <280	S.V. <500	Municipal and domestic supply, irrigation [, stock watering.] and watering of livestock.
Chlorides - mg/l	S.V. <15.0	S.V. <250	Municipal and domestic supply, [wildlife propagation, irrigation, stock watering.]  propagation of wildlife, irrigation and watering of livestock.
Alkalinity (as CO <sub>3</sub> ) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.
Fecal Coliform - No./100 ml		<200/400 <sup>b</sup>	[Water contact recreation, noncontact recreation,]  Recreation involving contact with the water,  recreation not involving contact with the water,  municipal and domestic supply, irrigation [,  wildlife propagation.] and propagation of  wildlife.
E. Coli (No./100 ml)  Annual Geometric  Mean  Single Value		≤126 ≤410	Recreation involving contact with the water <sup>b</sup> and recreation not involving contact with the water.
Color		c	Municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard.
- b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.
- c. Increase in color must not be more than 10 color units above natural conditions.
- d. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.