ADOPTED REGULATION OF THE STATE

ENVIRONMENTAL COMMISSION

LCB File No. R099-02

Effective December 17, 2002

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

AUTHORITY: §§1-62, 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 Fisheries1	Warm-Water Fisheries2						
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: ACUTE WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR FRESHWATER AQUATIC LIFE

(mg nitrogen/l)

pН	Cold-Water Fisheries1	Warm-Water Fisheries2
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
9.0	0.885	1.32

1 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:

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

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

2 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:

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

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

TABLE 2: CHRONIC WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR

WATERS WHERE FRESHWATER FISH IN EARLY LIFE STAGES MAY BE PRESENT

(mg nitrogen/l)1

	Temperature (°C)									
pН	0	14	16	18	20	22	24	26	28	30
6.5	6.67	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
6.7	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
7.6	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
7.9	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	0.773
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
8.7	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
8.9	0.565	0.565	0.513	0.451	0.397	0.349	0.306	0.269	0.237	0.208

TABLE 2: CHRONIC WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR

WATERS WHERE FRESHWATER FISH IN EARLY LIFE STAGES MAY BE PRESENT

(mg nitrogen/l)1

	Temperature (°C)									
pН	0	14	16	18	20	22	24	26	28	30
9.0	0.486	0.486	0.442	0.389	0.342	0.300	0.264	0.232	0.204	0.179

1 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:

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

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

 $T={}^{\circ}C$

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)1

	Temperature (°C)									
pН	0-7	8	9	10	11	12	13	14	152	162
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
6. 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
7.1	9.20	8.63	8.09	7.58	7.11	6.67	6.25	5.86	5.49	5.15

TABLE 3: CHRONIC WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR
WATERS WHERE FRESHWATER FISH IN EARLY LIFE STAGES ARE ABSENT
(mg nitrogen/l)1

	Temperature (°C)									
pН	0-7	8	9	10	11	12	13	14	152	162
7.2	<i>8.75</i>	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	3.97
7.6	6.46	6.05	5.67	5.32	4.99	4.68	4.38	4.11	3.85	3.61
7.7	5.81	5.45	5.11	4.79	4.49	4.21	3.95	3.70	3.47	3.25
7.8	5.17	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
8.1	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
8. 7	1.26	1.18	1.11	1.04	0.976	0.915	0.858	0.805	0.754	0.707
8.8	1.07	1.01	0.944	0.885	0.829	<i>0.778</i>	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

1 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) =

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

T=°*C*

x means multiplication

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

2 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.147 is hereby amended to read as follows:

445A.147

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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum ΔT ^a	$\Delta T = 0^{\circ}C$	NovMay: ≤13°C June: ≤17°C July: ≤21°C AugOct.: ≤22°C ΔT ≤2°C	Aquatic life ^b and [water contact recreation.] recreation involving contact with the water.
pH Units	7.4 - 8.4	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, aquatic life, irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	A-Avg.: ≤.016 S.V.: ≤.033	A-Avg.: ≤0.10	Aquatic life ^b , [water contact recreationb,] recreation involving contact with the waterb, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.

Nitrogen Species	A-Avg.: ≤0.4	Nitrate S.V.: ≤10	Aquatic life ^b , municipal or domestic supply ^b ,
(N) - mg/l	S.V.: ≤0.5	Nitrite S.V.: ≤.06	[water contact recreation, stock watering, wildlife
		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 lifeb.
(as N) - mg/l			
		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
Dissolved		NovMay: ≥6.0	propagation, stock watering,] recreation
Oxygen – mg/l	_	·	involving contact with the water, propagation of
Oxygen – mg/i		JunOct.: ≥5.0	wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			recreation not involving contact with the water.
Suspended	A-Avg.: ≤15		
Solids - mg/l		S.V.: ≤25	Aquatic life ^b .
Turbidity - NTU	A-Avg.: ≤3		Aquatic life ^b and municipal or domestic supply.
	S.V.: ≤5	S.V.: ≤10	
Color – PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved	A-Avg.: ≤70	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤95		[stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤3		Municipal or domestic supply ^b , [wildlife

	S.V.: ≤5	S.V.: ≤250	propagation,] propagation of wildlife, irrigation
			and [stock watering.] watering of livestock.
Sulfate - mg/l			
	S.V.: ≤4	S.V.: ≤250	Municipal or domestic supply ^b .
Sodium - SAR	A-Avg.: ≤1	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤105 	≤200/400°	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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			Recreation involving contact with the waterb and recreation not involving contact with the water.
Mean Single Value	_	≤126 ≤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. 6.** 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		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMay: ≤13°C	Aquatic life ^b and [water contact recreation.]
Maximum		June: ≤17°C	recreation involving contact with the water.
		July: ≤21°C	
		AugOct.: ≤22°C	
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units			[Water contact recreationb, wildlife

A-Avg.: ≤.036 S.V.: ≤.05	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max. A-Avg.: ≤0.10	propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, aquatic life, irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply. Aquatic lifeb, [water contact recreationb,] recreation involving contact with the waterb, 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 ^b , municipal or domestic supply ^b , [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.
-	e	Aquatic lifeb.
	S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life ^b , [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.
	S.V.: ≤.05 A-Avg.: ≤0.6	A-Avg.: ≤0.36 S.V.: ≤0.05 A-Avg.: ≤0.6 S.V.: ≤1.0 Nitrate S.V.: ≤10 Nitrite S.V.: ≤.02 (un ionized)] e S.V.: NovMay: ≥6.0

Suspended			Aquatic life ^b .
Solids - mg/l		S.V.: ≤25	
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved Solids - mg/l	A-Avg.: ≤375 S.V.: ≤420	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤6 S.V.: ≤7	S.V.: ≤250	Municipal or domestic supply ^b , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply ^b .
Sodium - SAR	A-Avg.: ≤1	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤50 S.V.: ≤90	≤200/400°	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 waterb
Annual Geometric			and recreation not involving contact with the
Mean	_	≤126	water.
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.149 is hereby amended to read as follows:

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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- $Maximum$ ΔT^a	$\Delta T = 0$ °C	NovMay: ≤13°C June: ≤17°C July: ≤21°C AugOct.: ≤22°C ΔT ≤2°C	Aquatic life ^b and [water contact recreation.] recreation involving contact with the water.
PH Units	 	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, aquatic life, irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	A-Avg.: ≤.03 S.V.: ≤.065	A-Avg.: ≤0.10	Aquatic life ^b , [water contact recreationb,] recreation involving contact with the waterb, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
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 ^b , municipal or domestic supply ^b , [water contact recreation, stock watering, wildlife propagation and noncontact recreation.] recreation involving contact with the water, watering of livestock, propagation of wildlife

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
THU INDIEN	QUALITY	BENEFICIAL USES	USES
	QUILITI	BEIVELIEURE OSES	and recreation not involving contact with the
			water.
Trace 1 Amount			4
Total Ammonia	_	e	Aquatic lifeb.
(as N) - mg/l			
		C.V.	Aquatic life ^b , [water contact recreation, wildlife
Discolated		S.V.:	
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.
			, , , , , , , h
Suspended			Aquatic life ^b .
Solids - mg/l		S.V.: ≤25	
Turbidity - NTU	A-Avg.: ≤5		Aquatic life ^b and municipal or domestic supply.
	S.V.: ≤8	S.V.: ≤10	
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved	A-Avg.: ≤145	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤185		[stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤3		Municipal or domestic supply ^b , [wildlife
	-		

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
	S.V.: ≤5	S.V.: ≤250	propagation,] propagation of wildlife, irrigation
			and [stock watering.] watering of livestock.
Sulfate - mg/l	 S.V.: ≤3	S.V.: ≤250	Municipal or domestic supply ^b .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤40 S.V.: ≤60	≤200/400°	[Water contact recreationb, 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.
E. Coli (No./100 ml) Annual Geometric Mean Single Value	-	≤126 ≤410	Recreation involving contact with the waterb 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.150 is hereby amended to read as follows: 445A.150

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.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMay: ≤13°C	Aquatic life ^b and [water contact recreation.]
Maximum		June: ≤17°C	recreation involving contact with the water.
		July: ≤21°C	

		AugOct.: ≤22°C	
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.5 - 8.6	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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 ^b , [water contact recreationb,] recreation involving contact with the waterb, 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 ^b , municipal or domestic supply ^b , [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life ^b , [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 ^b .
Solids - mg/l		S.V.: ≤80	
Turbidity - NTU			Aquatic life ^b and municipal or domestic supply.
		S.V.: ≤10	
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved	A-Avg.: ≤120	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤175	_	[stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤6		Municipal or domestic supply ^b , [wildlife
	S.V.: ≤10	S.V.: ≤250	propagation,] propagation of wildlife, irrigation
	5. V 210	S. v = 2 00	and [stock watering.] watering of livestock.
			33
Sulfate - mg/l			Municipal or domestic supply ^b .
<i>y</i>		S.V.: ≤250	a span as assaying
		S. v =200	
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Soulum Drift	11-Avg 22	71-Avg 20	migation and manierpar of domestic suppry.
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
(as CaCO3) - IIIg/I		nom natural conditions	propagation of whatife.
Fecal Coliform-	A.G.M.: ≤20		[Water contact recreationb, noncontact
No./100 ml		≤200/400°	recreation,] Recreation involving contact with
140./100 IIII	S.V.: ≤85	<u>≥</u> ∠00/400	
			the waterb, 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 waterb 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. 9.** NAC 445A.151 is hereby amended to read as follows:

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 ^a	$\Delta T = 0$ °C	NovMay: ≤13°C June: ≤17°C July: ≤21°C AugOct.: ≤22°C ΔT ≤2°C	Aquatic life ^b 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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 ^b , [water contact recreationb,] recreation involving contact with the waterb, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤0.5 S.V.: ≤0.8	Nitrate S.V.: ≤10 Nitrite S.V.: ≤.06 [Ammonia S.V.: ≤.02 (un_ionized)]	Aquatic life ^b , municipal or domestic supply ^b , [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life ^b , [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 ^b .
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved Solids - mg/l	A-Avg.: ≤180 S.V.: ≤205	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤8 S.V.: ≤10	S.V.: ≤250	Municipal or domestic supply ^b , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l			Municipal or domestic supply ^b .

		S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤50 	≤200/400°	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 waterb 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.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.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum ΔT ^a	$\Delta T = 0$ °C	NovApr: ≤13°C May-June: ≤17°C JulOct.: ≤23°C ΔT ≤2°C	Aquatic life ^b 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, aquatic life, irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.

Total Phosphates		A-Avg.: ≤0.10	Aquatic life ^b , [water contact recreationb,]
(as P) - mg/l			recreation involving contact with the waterb,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species	Total Nitrogen	Nitrate S.V.: ≤10	Aquatic life ^b , municipal or domestic supply ^b ,
(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,
		(un ionizea)j	watering of livestock, propagation of wildlife
			and recreation not involving contact with the
			water.
Total Ammonia	-	e	Aquatic lifeb.
(as N) - mg/l			
		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
Dissolved		NovApr.: ≥6.0	propagation, stock watering,] recreation
Oxygen - mg/l		May-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.
Suspended			Aquatic life ^b .
Solids - mg/l		S.V.: ≤80	
Turbidity - NTU			Aquatic life ^b and municipal or domestic supply.
		S.V.: ≤10	1 and

Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved Solids - mg/l	A-Avg.: ≤165 S.V.: ≤220	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤8 S.V.: ≤12	S.V.: ≤250	Municipal or domestic supply ^b , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply ^b .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤180 	≤200/400°	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 waterb 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.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	WATER QUALITY STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovApr: ≤13°C	Aquatic life ^b and [water contact recreation.]
Maximum		May-June: ≤17°C	recreation involving contact with the water.

		JulOct.: ≤23°C	
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.5 - 8.4	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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 ^b , [water contact recreationb,] recreation involving contact with the waterb, 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 ^b , municipal or domestic supply ^b , [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: NovApr.: ≥6.0 May-Oct.: ≥5.0	Aquatic life ^b , [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 ^b .
Solids - mg/l		S.V.: ≤80	
Turbidity - NTU			Aquatic life ^b and municipal or domestic supply.
		S.V.: ≤10	
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved	A-Avg.: ≤180	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤230		[stock watering.] watering of livestock.
			Maria de la la companya de la compan
Chlorides - mg/l	A-Avg.: ≤8		Municipal or domestic supply ^b , [wildlife
	S.V.: ≤15	S.V.: ≤250	propagation,] propagation of wildlife, irrigation
			and [stock watering.] watering of livestock.
Sulfate - mg/l			Municipal or domestic supply ^b .
Surface - mg/1		S.V.: ≤250	Numerpar of domestic suppry
		3. V 5230	
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
	Ĭ		
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform-			[Water contact recreationb, noncontact
No./100 ml		≤200/400°	recreation,] Recreation involving contact with
			the waterb, recreation not involving contact with
		l	

			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	1 1	≤126 ≤410	Recreation involving contact with the waterb 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. 12.** NAC 445A.154 is hereby amended to read as follows:

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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum ΔT ^a	$\Delta T = 0$ °C	NovApr.: ≤13°C May-June: ≤17°C JulOct.: ≤23°C ΔT ≤2°C	Aquatic life ^b 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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 ^b , [water contact recreationb,] recreation involving contact with the waterb, 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 ^b , municipal or domestic supply ^b , [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: NovApr.: ≥6.0 May-Oct.: ≥5.0	Aquatic life ^b , [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 ^b .
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved Solids - mg/l	A-Avg.: ≤285 S.V.: ≤360	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤17 S.V.: ≤23	S.V.: ≤250	Municipal or domestic supply ^b , [wildlife 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 ^b .

Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤110 S.V.: ≤295	≤200/400°	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 waterb 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.155 is hereby amended to read as follows:

445A.155

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 $^{\circ}$ C- Maximum ΔT^a	$\Delta T = 0$ °C	NovMay: ≤18°C Jun.Oct.: ≤23°C ΔT ≤2°C	Aquatic life ^b and [water contact recreation.] recreation involving contact with the water.
pH Units	7.4 - 8.4	S.V.: 6.5 - 9.0	[Water contact recreationb, wildlife propagationb,] Recreation involving contact with
		ΔpH: ±0.5 Max.	the waterb, propagation of wildlifeb, 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 ^b , [water contact recreationb,] recreation involving contact with the waterb,

			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 ^b , municipal or domestic supply ^b , [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life ^b , [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 ^b .
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .

Total Dissolved	A-Avg.: ≤260	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤375		[stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤13		Municipal or domestic supply ^b , [wildlife
	S.V.: ≤24	S.V.: ≤250	propagation,] propagation of wildlife, irrigation
			and [stock watering.] watering of livestock.
Sulfate - mg/l			Municipal or domestic supply ^b .
Surface - Ing/1		S.V.: ≤250	Numerpar of domestic suppry
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform-			[Water contact recreationb, noncontact
No./100 ml		≤200/400°	recreation,] Recreation involving contact with
			the waterb, 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 waterb
Annual Geometric			and recreation not involving contact with the
Mean		≤126	water.
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. 14. 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.

	DEOLUDEMENTS		
	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C-		NovMar: ≤11°C	Aquatic life ^b and [water contact recreation.]
Maximum		AprJun.: ≤24°C	recreation involving contact with the water.
		JulOct.: ≤28°C	

ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
[PH] pH Units	7.5 - 8.6	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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 ^b , [water contact recreationb,] recreation involving contact with the waterb, 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 ^b , municipal or domestic supply ^b , [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life ^b , [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 ^b .
Turbidity - NTU	A-Avg.: ≤12 S.V.: ≤25	S.V.: ≤50	Aquatic life ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved Solids - mg/l	A-Avg.: ≤250 S.V.: ≤400	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤10 S.V.: ≤18	S.V.: ≤250	Municipal or domestic supply ^b , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply ^b .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤50 S.V.: ≤280	≤200/400°	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, recreation not involving contact with the water, municipal or domestic supply,

			irrigation, Ewildlife propagation and stock
			watering.] propagation of wildlife and watering
			of livestock.
E. Coli			
(No./100 ml)			Recreation involving contact with the waterb
Annual Geometric			and recreation not involving contact with the
Mean	_	≤126	water.
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.157 is hereby amended to read as follows:

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 °C- Maximum ΔT ^a	$\Delta T = 0$ °C	NovMar.: ≤11°C AprJun.: ≤24°C JulOct.: ≤28°C ΔT ≤2°C	Aquatic life ^b 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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 ^b , [water contact recreationb,] recreation involving contact with the waterb, 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 (un_ionized)]	Aquatic life ^b , municipal or domestic supply ^b , [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life ^b , [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 ^b .
Turbidity - NTU	A-Avg.: ≤25 	S.V.: ≤50	Aquatic life ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved Solids - mg/l	A-Avg.: ≤250 S.V.: ≤380	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤10 S.V.: ≤18	S.V.: ≤250	Municipal or domestic supply ^b , [wildlife propagation,] propagation of wildlife, irrigation and [stock watering.] watering of livestock.
Sulfate - mg/l	A-Avg.: ≤100 S.V.: ≤140	S.V.: ≤250	Municipal or domestic supply ^b .

Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤90 S.V.: ≤240	≤200/400°	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 waterb 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. 16.** NAC 445A.158 is hereby amended to read as follows:

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 $^{\circ}$ C- Maximum ΔT^{a}	$\Delta T = 0$ °C	NovMar.: ≤11°C AprJun.: ≤24°C JulOct.: ≤28°C ΔT ≤2°C	Aquatic life ^b 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildifeb, aquatic life, irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l		S.V.: ≤0.06	Aquatic life ^b , [water contact recreationb,] recreation involving contact with the waterb, 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.: ≤.1.0 [Ammonia S.V.: ≤.02 (un_ionized)]	Aquatic life ^b , municipal or domestic supply ^b , [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life ^b , [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 ^b .
Turbidity - NTU	A-Avg.: ≤15 S.V.: ≤27	S.V.: ≤50	Aquatic life ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply ^b .
Total Dissolved	A-Avg.: ≤175	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and

Solids - mg/l	S.V.: ≤225		[stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤9 S.V.: ≤15	S.V.: ≤250	Municipal or domestic supply ^b , [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 ^b .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤25 S.V.: ≤75	≤200/400°	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 waterb 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.160 is hereby amended to read as follows: 445A.160

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	
		ΔT ≤2°C ^a	
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 (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
C			contact with the water.
Nitrogen Species (as N)	Total Nitrogen		Municipal or domestic supply, or both, 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)]	
Total Ammonia (as N) - mg/l		c	Propagation of aquatic life.
Dissolved		NovMay: ≥6.0 mg/l	Propagation of aquatic life, recreation involving
Oxygen Single Value		JunOct.: ≥5.0 mg/l	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.
Annual Average	≤60 mg/l		

Single Value		≤80 mg/l	
Turbidity Single Value		b	Propagation of aquatic life and municipal or domestic supply, or both.
Color Single Value	≤26 PCU	≤75 PCU	Municipal or domestic supply, or both, and propagation of aquatic life.
Total Dissolved Solids Annual Average Single Value	≤165 mg/l ≤220 mg/l	≤500 mg/l	Municipal or domestic supply, or both, irrigation and watering of livestock.
Chloride Annual Average Single Value	≤15 mg/l ≤20 mg/l	≤250 mg/l	Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.
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 ₃)		less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
[Escherichia coli] E. Coli (No./100 ml)			Recreation involving contact with the water [.] 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	 ≤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. 18. NAC 445A.161 is hereby amended to read as follows:

445A.161

STANDARDS OF WATER QUALITY

Topaz Lake

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

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 ^a	Propagation of aquatic life and recreation involving contact with the water.

	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)
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.
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			
Dissolved		NovMay: ≥6.0 mg/l	Propagation of aquatic life, recreation involving
Oxygen		June-Oct. ^b : ≥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

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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)
			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	c	domestic supply, or both.
Single Value	≤5.0 NTU		
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.
Sulfate			Municipal or domestic supply, or both.
Single Value	≤25 mg/l	≤250 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)
Sodium			Irrigation, and municipal or domestic supply, or
Adsorption Ratio			both.
Annual Average		≤8	
Alkalinity		less than 25% change	Propagation of aquatic life and propagation of
(as CaCO ₃)		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] ≤ <i>126</i>	
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 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. 19.** 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.

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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 ^a	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.
Nitrogen Species (as N) Annual Average	Total Nitrogen ≤0.6 mg/l		Municipal or domestic supply, or both, propagation of aquatic life, recreation involving contact with the water, 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		
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	_	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			
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.

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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	≤175 mg/l ≤260 mg/l	≤500 mg/l	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 ₃)		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.]

	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		<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. 20. NAC 445A.163 is hereby amended to read as follows:

445A.163

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	$\Delta T = 0^{\circ}C^{a}$	NovApr.: ≤13°C May-Jun.: ≤17°C JulOct.: ≤23°C ΔT ≤2°C ^a	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	-	c	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.

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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)
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 ₃)		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 ≤410	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. 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.164 is hereby amended to read as follows:

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.

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)
$\Delta T = 0$ °C ^a	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.
	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.
	TO MAINTAIN EXISTING HIGHER QUALITY	TO MAINTAIN WATER QUALITY EXISTING STANDARDS FOR HIGHER BENEFICIAL USES Overall May-Jun.: $\leq 13^{\circ}$ C May-Jun.: $\leq 17^{\circ}$ C JulOct.: $\leq 23^{\circ}$ C $\Delta T \leq 2^{\circ}$ C Within range Within range

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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		≤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.

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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	≤45 mg/l	≤80 mg/l	
Turbidity			Propagation of aquatic life and municipal or
Single Value		ь	domestic supply, or both.
Color			Municipal or domestic supply, or both, and
Single Value		≤75 PCU	propagation of aquatic life.
Total Dissolved			Municipal or domestic supply, or both, irrigation
Solids			and watering of livestock.
	220 //	2500 II	and watering of fivestock.
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
Single Value	≤7 mg/l	≤250 mg/l	livestock.
-			
Sulfate			Municipal or domestic supply, or both.
Single Value		≤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 ₃)		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. 22.** 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 ^a	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 ₃)		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. 23. 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 ^a	NovApr.: ≤13°C May-Jun.: ≤17°C JulOct.: ≤23°C ΔT ≤2°C ^a	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.

REQUIREMENTS		BENEFICIAL
TO MAINTAIN	WATER QUALITY	USES
EXISTING HIGHER	STANDARDS FOR	As designated in NAC 445A.159
QUALITY	BENEFICIAL USES	(Most stringent use listed first)
	c	Propagation of aquatic life.
	NovMay: ≥6.0 mg/l	Propagation of aquatic life, recreation involving
	June-Oct.: ≥5.0 mg/l	contact with the water, propagation of wildlife,
		watering of livestock, municipal or domestic
		supply, or both, and recreation not involving
		contact with the water.
		Propagation of aquatic life.
	≤80 mg/l	
		Propagation of aquatic life and municipal or
	b	domestic supply, or both.
		Municipal or domestic supply, or both, and
	<75 PCU	propagation of aquatic life.
	2/3100	propagation of aquatic inc.
		Municipal or domestic supply, or both, irrigation
		and watering of livestock.
≤320 mg/l	≤500 mg/l	
-		
		Municipal or domestic supply, or both,
	TO MAINTAIN EXISTING HIGHER QUALITY	TO MAINTAIN EXISTING HIGHER QUALITY STANDARDS FOR BENEFICIAL USES C NovMay: ≥6.0 mg/l June-Oct.: ≥5.0 mg/l \$\frac{\$\leq 80\$ mg/l}\$ \$\frac{\$\leq 75\$ PCU}\$ \$\leq 320 mg/l \$\leq 500 mg/l \$\leq 500 mg/l \$\leq 500 mg/l

	,		
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 ₃)		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. 24. 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 ^a	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	
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.
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.
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	

	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 ₃)		from natural conditions	wildlife.
[Escherichia coli			Recreation involving contact with the water [.]
Annual Average]			and recreation not involving contact with the
E. Coli			water. [, municipal or domestic supply, or both,
(No./100 ml)			irrigation and watering of livestock.]
Annual Geometric		[126 MF /100 ml	
Mean		235 MF/100 ml] ≤ <i>126</i>	
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.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 ^b 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	WATER CHANTE	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 ^c mg/l	involving contact with the water.
[Single Value]		[Ammonia: ≤.06 mg/l	
		(un-ionized)]	
		(
Total Ammonia		e	Propagation of aquatic life.
			Tropaganon of aquatic tye.
(as N) - mg/l			
Dissolved		New Many SCO morth	Propagation of aquatic life, recreation involving
		NovMay: ≥6.0 mg/l	
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.
		_/5100	FF-Bannon or adjusted into

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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 ₃)		less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
[Escherichia coli] E. Coli (No./100 ml) Annual Geometric		[126 MF /100 ml	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. 26.** 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.

	REQUIREMENTS		BENEFICIAL
	TO MAINTAIN	WATER QUALITY	USES
PARAMETER	EXISTING HIGHER	STANDARDS FOR	Designated in NAC 445A.159
	QUALITY	BENEFICIAL USES	(Most stringent use listed first)
Temperature		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	
		ΔT ≤2°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.
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
Single Value	≤0.13 mg/l	20.1 mg/1	contact with the water.
Single value	≥0.13 Hig/1		contact with the water.
Nitrogen Species	Total Nitrate		Municipal or domestic supply, or both,
(as N)			propagation of aquatic life, recreation involving
Annual Average	≤0.20 mg/l		contact with the water, watering of livestock,
Single Value	≤0.27 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	-	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	
Alkalinity	less than 25% change	Propagation of aquatic life and propagation of
(as CaCO ₃)	 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. 27. 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.

	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 ^a			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
3		6.5 - 9.7 SU	wildlife.
		0.0 7.7 50	
Dissolved			Propagation of aquatic life, recreation involving
Oxygen ^b		≥5 mg/l	contact with the water, recreation not involving
Single Value			contact with the water and propagation of
Single value			wildlife.
			whate.
Suspended Solids			Propagation of aquatic life.
Single Value		≤25 mg/l	
		==0 mg/1	
Nitrogen Species			Propagation of aquatic life and propagation of
[as N] (as N)	Total Inorganic		wildlife.
Single Value	Nitrogen:	Nitrate ≤90 mg/l	which is a second of the secon
Single Value	≤0.3 mg/l		
Single value	=0.5 mg/1	Nitrite ≤0.06 mg/l	
Total 4			Decree of the control of the
Total Ammonia		C	Propagation of aquatic life.
(as N) - mg/l			
Total Phosphorus			Propagation of aquatic life.
[as P] (as P)			

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

- 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. 28.** 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 Temperature °C- Maximum	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES NovApr.: ≤13°C May-Jun.: ≤17°C JulOct.: ≤23°C	BENEFICIAL USES Aquatic life ^b and [water contact recreation.] recreation involving contact with the water.
ΔT^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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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 ^b , [water contact recreationb,] recreation involving contact with the waterb, 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 ^b , aquatic life ^b , [water contact recreation, stock watering, wildlife propagation and noncontact recreation.] recreation involving contact with the water, watering of livestock, propagation of wildlife

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	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
			and recreation not involving contact with the
			water.
Total Ammonia	_	e	Aquatic lifeb.
(as N) - mg/l			Tiquine tyeo.
(us IV) - mg/l			
		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
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 ^b .
		G.W. 225	Aquatic inc .
Solids - mg/l		S.V.: ≤25	
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU		c	Aquatic life ^b and municipal or domestic supply.
Total Dissolved	A-Avg.: ≤50	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤60		[stock watering.] watering of livestock.
Chloridos ====/1	A Aug : <2		Municipal or domestic supply ^b , [wildlife
Chlorides - mg/l	A-Avg.: ≤2		
	S.V.: ≤3	S.V.: ≤250	propagation, irrigation and stock watering.]

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES propagation of wildlife, irrigation and watering of livestock.
Sulfate - mg/l	A-Avg.: ≤4 S.V.: ≤5	 S.V.: ≤250	Municipal or domestic supply ^b .
Sodium - SAR	A-Avg.: ≤1	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤100 S.V.: ≤200	≤200/400 ^d	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 waterb 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. 29.** NAC 445A.172 is hereby amended to read as follows:

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-		NovApr.: ≤13°C May-Jun.: ≤17°C JulOct.: ≤23°C	Aquatic life ^b and [water contact recreation.] recreation involving contact with the water.

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units			[Water contact recreationb, wildlife
		S.V.: [7.0 - 8.3] 6.5-9.0	propagationb,] Recreation involving contact with
		ΔpH: ±0.5 Max.	the waterb, propagation of wildlifeb, aquatic life,
			irrigation, [stock watering,] watering of livestock,
			municipal or domestic supply and industrial
			supply.
Total Phosphates		A-Avg.: ≤0.1	Aquatic life ^b , [water contact recreationb,]
(as P) - mg/l	S.V.: ≤0.13	A-Avg ≤0.1	recreation involving contact with the waterb,
(usi) ingi	5. V 20.13		municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitara Caraira	Nime	N G.V. 410	Municipal or domestic supply ^b , aquatic life ^b ,
Nitrogen Species (N) - mg/l	Nitrate	Nitrate S.V.: ≤10	water contact recreation, stock watering, wildlife
(1 v) - mg/1	S.V.: ≤0.45	Nitrite S.V.: ≤.06	propagation and noncontact recreation.]
	D. V 20.73	[Ammonia S.V.: ≤.02	recreation involving contact with the water,
		(un-ionized)]	watering of livestock, propagation of wildlife
			and recreation not involving contact with the
			water
Total Ammonia	_	e	Aquatic lifeb.
1 Jun 2 Institution			Adminic ageo.

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	REQUIREMENTS TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
(as N) - mg/l			
		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
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 ^b .
Solids - mg/l		S.V.: ≤25	
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU		С	Aquatic life ^b and municipal or domestic supply.
Total Dissolved	A-Avg.: ≤225	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤300		[stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤6		Municipal or domestic supply ^b , [wildlife
	S.V.: ≤10	S.V.: ≤250	propagation, irrigation and stock watering.]
			propagation of wildlife, irrigation and watering
			of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply ^b .

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Sodium - SAR		A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤100 S.V.: ≤200	≤200/400 ^d	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 waterb 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.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 $^{\circ}C$ - Maximum ΔT^a	ΔT = 0°C	NovApr.: ≤13°C May-Jun.: ≤17°C JulOct.: ≤23°C	Aquatic life ^b 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, aquatic life, irrigation, [stock watering,] watering of livestock,

	DEOLIBEMENTS		
	REQUIREMENTS	WATER OLLA LITY	
DAD AMETER	TO MAINTAIN	WATER QUALITY	DENIERICIA
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
			municipal or domestic supply and industrial
			supply.
Total Phosphates	A-Avg.: ≤.013	A-Avg.: ≤0.1	Aquatic life ^b , [water contact recreationb,]
(as P) - mg/l	S.V.: ≤.03		recreation involving contact with the waterb,
	5. v <u>3.05</u>		municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species	Nitrate	Nitrate S.V.: ≤10	Municipal or domestic supply ^b , aquatic life,
(N) - mg/l	A-Avg.: ≤0.18	Nitrite S.V.: ≤.06	[water contact recreation, stock watering, wildlife
	S.V.: ≤0.22	[Ammonia S.V.: ≤.02	propagationb and noncontact recreation.]
		(un-ionized)]	recreation involving contact with the water,
			watering of livestock, propagation of wildlifeb
			and recreation not involving contact with the
			water.
Total Ammonia	_	e	Aquatic lifeb.
(as N) - mg/l			
		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
Dissolved		NovMay: ≥6.0	propagation, stock watering,] recreation
Oxygen - mg/l		JunOct.: ≥5.0	involving contact with the water, propagation of
ONJ BOIL HIE/I		JuiiOct ≥3.0	wildlife, watering of livestock, municipal or
			domestic supply and [noncontact recreation.]
			domestic supply and moneomact recreation.

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	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
			recreation not involving contact with the water.
Suspended			Aquatic life ^b .
Solids - mg/l		S.V.: ≤25	
T. A.: 174 NITH		G.V. 410	A - vi li C b - vi -
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU		[C] c	Aquatic life ^b and municipal or domestic supply.
Total Dissolved	A-Avg.: ≤135	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤150		[stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤3		Municipal or domestic supply ^b , [wildlife
emenae mg r	S.V.: ≤5	S.V.: ≤250	propagation, irrigation and stock watering.]
	5. V <u>2</u> 5	S. v =200	propagation of wildlife, irrigation and watering
			of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply ^b .
Sodium - SAR		A A (0	Irrigation ^b and municipal or domestic supply.
Souluii - SAK		A-Avg.: ≤8	migation and municipal of domestic supply.
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
- 10 to			
Fecal Coliform-	A.G.M.: ≤100		[Water contact recreationb, noncontact

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PARAMETER No./100 ml	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY S.V.: ≤200	WATER QUALITY STANDARDS FOR BENEFICIAL USES ≤200/400 ^d	BENEFICIAL USES recreation,] Recreation involving contact with the waterb, 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 waterb 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.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-		NovJun.: ≤21°C JulOct.: ≤32°C	Aquatic life ^b .
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagationb,] Propagation of wildlifeb, aquatic life ^b , [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 ^b 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 ^b [stock watering, wildlife propagation and noncontact recreation.], watering of

PARAMETER	REQUIREMENTS TO MAINTAIN	WATER QUALITY	DENIEGICIAI
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
	S.V.: ≤1.6	[Ammonia S.V.: ≤.06	livestock, propagation of wildlife and recreation
		(un-ionized)]	not involving contact with the water.
Total Ammonia	_	f	Aquatic lifeb.
(as N) - mg/l			
Dissolved			Aquatic life ^b , [noncontact recreation, wildlife
Oxygen - mg/l		S.V.: ≥5.0	propagation and stock watering.] recreation not
ongen mg/1		5. v =5.0	involving contact with the water, propagation of
			wildlife and watering of livestock.
Turbidity - NTU		e	Aquatic life ^b .
Color - PCU		d	Aquatic life ^b .
Total Dissolved Solids - mg/l		С	Irrigation ^b and [stock watering.] watering of livestock.
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤300 S.V.: ≤550	A.G.M.: ≤1000 S.V.: ≤2000	[Noncontact recreationb, irrigation, wildlife propagation and stock watering.] Recreation not
			involving contact with the waterb, irrigation, propagation of wildlife and watering of

	REQUIREMENTS		
PARAMETER	TO MAINTAIN EXISTING HIGHER	WATER QUALITY STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
			livestock.
E. Coli			Recreation not involving contact with the
(No./100 ml)			waterb.
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. 32.** 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 °C-		NovJun.: ≤21°C JulOct.: ≤32°C	Aquatic life ^b .
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH - Standard Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagationb,] Propagation of wildlifeb, aquatic life ^b , [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 ^b 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 ^b [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 lifeb.
Dissolved			Aquatic life ^b , [noncontact recreation, wildlife

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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 ^b .
Color - PCU		d	Aquatic life ^b .
Total Dissolved Solids - mg/l		c	Irrigation ^b and [stock watering.] watering of livestock.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b 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 recreationb, irrigation, wildlife propagation and stock watering.] Recreation not involving contact with the waterb, irrigation, propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean		≤630	Recreation not involving contact with the waterb.

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

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 propagationb,] Propagation of wildlifeb, aquatic life ^b , [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 ^b 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 ^b [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life ^b , [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 ^b .
		L	↓

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Color - PCU		d	Aquatic life ^b .
Total Dissolved Solids - mg/l		С	Irrigation ^b and [stock watering.] watering of livestock.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b 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 recreationb, irrigation, wildlife propagation and stock watering.] Recreation not involving contact with the waterb, irrigation, propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean	_	≤630	Recreation not involving contact with the waterb.

- 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.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- $Maximum$ ΔT^a	$\Delta T = 0$ °C	NovApr.: ≤13°C May-Jun.: ≤17°C JulOct.: ≤23°C ΔT ≤2°C	Aquatic life ^b 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, aquatic life, irrigation, [stock]

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES watering,] watering of livestock, municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	A-Avg.: ≤.01 S.V.: ≤.013	A-Avg.: ≤0.05	Aquatic life ^b , [water contact recreationb,] recreation involving contact with the waterb, municipal or domestic supply and [noncontact recreation.] recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Nitrate S.V.: ≤.22	Nitrate S.V.: ≤10 Nitrite S.V.: ≤.06 [Ammonia S.V.: ≤.02 (un_ionized)]	Municipal or domestic supply ^b , aquatic life ^b , [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	-	f	

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
(as N) - mg/l			Aquatic lifeb.
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life ^b , [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		S.V.: ≤25	Aquatic life ^b .
Solids - mg/l			
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU		e	Aquatic life ^b and municipal or domestic supply.
Total Dissolved Solids - mg/l		c	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.

PARAMETER Alkalinity (as CaCO ₃) - mg/l	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES less than 25% change from natural conditions	BENEFICIAL USES Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform- No./100 ml		≤200/400 ^d	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 waterb 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. 35.** 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.

	REQUIREMENTS	WATER QUALITY	
PARAMETER	TO MAINTAIN EXISTING HIGHER	WATER QUALITY STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Temperature °C- Maximum		NovApr.: ≤13°C May-Jun.: ≤17°C JulOct.: ≤23°C	Aquatic life ^b and [water contact recreation.] recreation involving contact with the water.
ΔT^{a}	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units			[Water contact recreationb, wildlife

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
		S.V.: [7.0 - 8.3] 6.5 -	propagationb,] Recreation involving contact with
		9.0	the waterb, propagation of wildlifeb, aquatic life,
		ΔpH: ±0.5 Max.	irrigation, [stock watering,] watering of livestock,
			municipal or domestic supply and industrial
			supply.
Total Dhambatas	A A	A A < 0.1	Aquatic life ^b , [water contact recreationb,]
Total Phosphates	A-Avg.: ≤.05	A-Avg.: ≤0.1	
(as P) - mg/l	S.V.: ≤.08		recreation involving contact with the waterb, municipal or domestic supply and fnoncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species	Nitrate	Nitrate S.V.: ≤10	Municipal or domestic supply ^b , aquatic life ^b ,
(N) - mg/l	A-Avg.: ≤.22	Nitrite S.V.: ≤.06	[water contact recreation, stock watering, wildlife
	S.V.: ≤.44	[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 lifeb.
(as N) - mg/l			
		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
Dissolved		NovMay: ≥6.0	propagation, stock watering,] recreation
			32 11 11111

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PARAMETER Oxygen - mg/l	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES JunOct.: ≥5.0	BENEFICIAL USES involving contact with the water, propagation of
Oxygen mg1		JunOct 23.0	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 ^b .
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU		c	Aquatic life ^b and municipal or domestic supply.
Total Dissolved Solids - mg/l	A-Avg.: ≤100 S.V.: ≤125	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Chlorides - mg/l	A-Avg.: ≤10 S.V.: ≤20	 S.V.: ≤250	Municipal or domestic supply ^b , [wildlife propagation, irrigation and stock watering.] propagation of wildlife, irrigation and watering of livestock.
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply ^b .
Sodium - SAR		A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]

PARAMETER (as CaCO ₃) - mg/l	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES from natural conditions	BENEFICIAL USES propagation of wildlife.
Fecal Coliform- No./100 ml	A.G.M.: ≤100 S.V.: ≤200	≤200/400 ^d	[Water contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 waterb 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. 36. NAC 445A.184 is hereby amended to read as follows:

445A.184

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 ^b 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	
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.0 - 8.3	S.V.: 6.5 - 9.0	[Water contact recreationb, wildlife
		ΔpH: ±0.5 Max.	propagationb,] Recreation involving contact with
			the waterb, propagation of wildlifeb, aquatic life,
			irrigation, [stock watering,] watering of livestock,
			municipal or domestic supply and industrial
			supply.
Dissolved		S.V.:	Aquatic life ^b , [water contact recreation, wildlife

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 ^b , [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.: ≤0.03	A-Avg.: ≤0.10	Aquatic life ^b , [water contact recreationb,]
(as P) - mg/l			recreation involving contact with the waterb,
			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 ^b , [water contact recreationb,]
(P) - mg/l			recreation involving contact with the waterb,
			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 ^b , [water contact recreationb,]
(N) - mg/l	A-Avg.: ≤0.3	Nitrite S.V.: ≤.04	recreation involving contact with the waterb,
	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 lifeb.
Total Dissolved	A-Avg.: ≤70.0	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤85.0		[stock watering.] watering of livestock.
Turbidity - NTU	A-Avg.: ≤5.0	S.V.: ≤10.00	Aquatic life ^b 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 ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤30.0		EWater contact recreationb, noncontact
No./100 ml	S.V.: ≤150.0	≤200/400°	recreation,] Recreation involving contact with
			the waterb, 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 waterb
Annual Geometric			and recreation not involving contact with the
Mean	_	≤126	water.
Single Value		≤410	
Suspended	A-Avg.: ≤15.0	S.V.: ≤25	Aquatic life ^b .
Solids – mg/l			
Sulfate - mg/l	A-Avg.: ≤7.0		Municipal or domestic supply ^b .
	S.V.: ≤8.0	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤0.5	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
	S.V.: ≤0.6		
BOD - mg/l		A-Avg.: ≤2.5	Municipal or domestic supply.
		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. 37. NAC 445A.185 is hereby amended to read as follows:

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 ^b 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	
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.2 - 8.3	S.V.: 6.5 - 9.0	[Water contact recreationb, wildlife
		ΔpH: ±0.5 Max.	propagationb,] Recreation involving contact with

			the waterb, propagation of wildlifeb, aquatic life,
			irrigation, [stock watering,] watering of livestock,
			municipal or domestic supply and industrial
			supply.
Dissolved		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
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 ^b , [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 ^b , [water contact recreationb,]
(as P) - mg/l			recreation involving contact with the waterb,
			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 ^b , [water contact recreationb,]
(P) - mg/l			recreation involving contact with the waterb,
			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 ^b , [water contact recreationb,]
(N) - mg/l	A-Avg.: ≤0.3	Nitrite S.V.: ≤.04	recreation involving contact with the waterb,
	S.V.: ≤0.43	[Ammonia S.V.: ≤.02	municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
		(un-ionized)]	the water.
Total Ammonia			
10tat Ammonta			

(as N) - mg/l		e	Aquatic lifeb.
Total Dissolved	A-Avg.: ≤80.0	A-Avg.: ≤500	Municipal or domestic supply ^b , 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 ^b 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 ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤50.0		[Water contact recreationb, noncontact
No./100 ml	S.V.: ≤200.0	≤200/400°	recreation,] Recreation involving contact with
			the waterb, 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 waterb
Annual Geometric			and recreation not involving contact with the
Mean	_	≤126	water.
Single Value	_	≤410	
Suspended	A-Avg.: ≤15.0	S.V.: ≤25	Aquatic life ^b .
Solids - mg/l			
Sulfate - mg/l	A-Avg.: ≤7.0		Municipal or domestic supply ^b .
	S.V.: ≤8.0	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤0.5	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
	S.V.: ≤0.6		
BOD - mg/l		A-Avg.: ≤2.5	Municipal or domestic supply.
		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. 38. NAC 445A.186 is hereby amended to read as follows: 445A.186

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 ^b 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	
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.0 - 8.5	S.V.: 6.5 - 9.0	[Water contact recreationb, wildlife
		ΔpH: ±0.5 Max.	propagationb,] Recreation involving contact with
			the waterb, propagation of wildlifeb, aquatic life,
			irrigation, [stock watering,] watering of livestock,
			municipal or domestic supply and industrial
			supply.
Dissolved		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
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 ^b , [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 ^b , [water contact recreationb,]
(as P) - mg/l			recreation involving contact with the waterb,
			municipal or domestic supply and Enoncontact
			recreation.] recreation not involving contact with
			the water.
Ortho Phosphate	S.V.: ≤0.02	S.V.: ≤0.05	Aquatic life ^b , [water contact recreationb,]
(P) - mg/l			recreation involving contact with the waterb,
			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 ^b , [water contact recreationb,]
(N) - mg/l	A-Avg.: ≤0.3	Nitrite S.V.: ≤.04	recreation involving contact with the waterb,

	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 lifeb.
Total Dissolved	A-Avg.: ≤90.0	A-Avg.: ≤500	Municipal or domestic supply ^b , 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 ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤75.0		EWater contact recreationb, noncontact
No./100 ml	S.V.: ≤350.0	≤200/400°	recreation,] Recreation involving contact with
			the waterb, 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 waterb
Annual Geometric			and recreation not involving contact with the
Mean	_	≤126	water.
Single Value	_	≤410	
Suspended	A-Avg.: ≤15.0	S.V.: ≤25	Aquatic life ^b .
Solids - mg/l			
Sulfate - mg/l	A-Avg.: ≤7.0		Municipal or domestic supply ^b .
	S.V.: ≤8.0	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤0.5	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
	S.V.: ≤0.6		
	I		

	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. 39.** 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 ^b and [water contact recreation.]
Maximum		Apr.: ≤21°C ^e	recreation involving contact with the water.
		May: ≤22°C ^{e,f}	

		June-Oct.: $\leq 23^{\circ}C^{e,f}$	
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.1 - 8.5	S.V.: 6.5 - 9.0	[Water contact recreationb, wildlife
		ΔpH: ±0.5 Max.	propagationb,] Recreation involving contact with
			the waterb, propagation of wildlifeb, aquatic life,
			irrigation, [stock watering,] watering of livestock,
			municipal or domestic supply and industrial
			supply.
Dissolved		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
Oxygen - mg/l		NovMar.: ≥6.0	propagation, stock watering,] recreation
<i>30</i> 0		AprOct.: ≥5.0	involving contact with the water, propagation of
		14p1. Oct =5.0	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 ^b , [wildlife
emori ac s mg r		S.V.: ≤250	propagation, irrigation and stock watering.]
	S.V.: ≤30.0	5. V 3230	propagation of wildlife, irrigation and watering
			of livestock.
Total Dhagahatas		A A	Aquatic life ^b , [water contact recreationb,]
Total Phosphates		A-Avg.: ≤0.05	
(as P) - mg/l			recreation involving contact with the waterb,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species		TN A-Avg.: ≤0.75	Aquatic life ^b , [water contact recreationb,]
(N) - mg/l		TN S.V.: ≤1.2	recreation involving contact with the waterb,
		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 lifeb.
Total Dissolved	A-Avg.: ≤210.0	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤260.0		[stock watering.] watering of livestock.
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤90.0		[Water contact recreationb, noncontact
No./100 ml	S.V.: ≤300.0	≤200/400°	recreation,] Recreation involving contact with
			the waterb, 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 waterb
Annual Geometric			and recreation not involving contact with the
Mean	-	≤126	water.
Single Value	-	≤410	
Suspended	A-Avg.: ≤25.0	S.V.: ≤50	Aquatic life ^b .
Solids - mg/l			
Sulfate - mg/l	A-Avg.: ≤39.0		Municipal or domestic supply ^b .
	S.V.: ≤46.0	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤1.5	A-Avg.: ≤8	Irrigation ^b 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 ΔT 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. 40.** 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 ^b and [water contact recreation.]
Temperature C-		140V141a1 213 C	require the and [water contact recreation.]
Maximum		Apr.: ≤21°C ^e	recreation involving contact with the water.
		_	

		May: ≤22°C ^{e,f}	
		June-Oct.: ≤23°C ^{e,f}	
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.0 - 8.6	S.V.: 6.5 - 9.0	[Water contact recreationb, wildlife
		ΔpH: ±0.5 Max.	propagationb,] Recreation involving contact with
			the waterb, propagation of wildlifeb, aquatic life,
			irrigation, [stock watering,] watering of livestock,
			municipal or domestic supply and industrial
			supply.
Dissolved		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
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 ^b , [wildlife
	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 ^b , [water contact recreationb,]
(as P) - mg/l			recreation involving contact with the waterb,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species		TN A-Avg.: ≤0.75	Aquatic life ^b , [water contact recreationb,]
(N) - mg/l		TN S.V.: ≤1.2	recreation involving contact with the waterb,
		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			
			4
(as N) - mg/l	_	g	Aquatic lifeb.
Total Dissolved	A-Avg.: ≤215.0	A-Avg.: ≤500	Municipal or domestic supply ^b , 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 ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤80.0		[Water contact recreationb, noncontact
No./100 ml	S.V.: ≤250	≤200/400°	recreation,] Recreation involving contact with
			the waterb, 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 waterb
Annual Geometric			and recreation not involving contact with the
Mean		≤126	water.
Single Value	_	≤410	
Suspended	A-Avg.: ≤24.0	S.V.: ≤50	Aquatic life ^b .
Solids - mg/l	S.V.: ≤40.0		
Sulfate - mg/l	A-Avg.: ≤39.0		Municipal or domestic supply ^b .
	S.V.: ≤46.0	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤1.5	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
	S.V.: ≤2.0		
		1	

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. 41.** NAC 445A.189 is hereby amended to read as follows: 445A.189

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 ^e	Aquatic life ^b and [water contact recreation.]
Maximum		AprJune: ≤14°C ^e	recreation involving contact with the water.

		July-Oct.: ≤25°C ^f	
ΔT^a	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units	7.1 - 8.6	S.V.: 6.5 - 9.0	[Water contact recreationb, wildlife
		ΔpH: ±0.5 Max.	propagationb,] Recreation involving contact with
			the waterb, propagation of wildlifeb, aquatic life,
			irrigation, [stock watering,] watering of livestock,
			municipal or domestic supply and industrial
			supply.
Dissolved		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
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 ^b , [wildlife
	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 ^b , [water contact recreationb,]
(as P) - mg/l			recreation involving contact with the waterb,
			municipal or domestic supply and [noncontact
			recreation.] recreation not involving contact with
			the water.
Nitrogen Species		TN A-Avg.: ≤0.75	Aquatic life ^b , [water contact recreationb,]
(N) - mg/l		TN S.V.: ≤1.2	recreation involving contact with the waterb,
		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 lifeb.
Total Dissolved	A-Avg.: ≤245.0	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and
Solids - mg/l	S.V.: ≤310.0		[stock watering.] watering of livestock.
Turbidity - NTU		S.V.: ≤10	Aquatic life ^b and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
Fecal Coliform -	A.G.M.: ≤50		[Water contact recreationb, noncontact
No./100 ml	S.V.: ≤250	≤200/400°	recreation,] Recreation involving contact with
			the waterb, 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 waterb
Annual Geometric			and recreation not involving contact with the
Mean	-	≤126	water.
Single Value	_	≤410	
Suspended	A-Avg.: ≤25.0	S.V.: ≤50	Aquatic life ^b .
Solids - mg/l			
Sulfate - mg/l	A-Avg.: ≤39.0		Municipal or domestic supply ^b .
	S.V.: ≤46.0	S.V.: ≤250	
Sodium - SAR	A-Avg.: ≤1.5	A-Avg.: ≤8	Irrigation ^b 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. 42.** 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 ^b and [water contact recreation.] recreation involving contact with the water.

		JulOct.: ≤23°C	
$\Delta \mathrm{T}^{\mathrm{a}}$	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units		S.V.: [7.0 – 8.3] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Water contact recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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 ^b , [water contact recreationb,] recreation involving contact with the waterb, 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 ^b , aquatic life ^b , [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: NovMay: ≥6.0 JunOct.: ≥5.0	Aquatic life ^b , [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 ^b .
Solids - mg/l		S.V.: ≤25	
Turbidity - NTU			Aquatic life ^b and municipal or domestic supply.
1		S.V.: ≤10	Transcense and manoparor demone supply
Color - PCU		e	Aquatic life ^b and municipal or domestic supply.
Total Dissolved			Municipal or domestic supply ^b , irrigation and
Solids - mg/l		с	[stock watering.] watering of livestock.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
(as eaces;) mg/1			propagation of manager
Fecal Coliform - No./100 ml	A.G.M.: ≤50	≤200/400 ^d	[Water contact recreationb, noncontact recreation,] Recreation involving contact with
100.7100 IIII	S.V.: ≤100	3200/400	the waterb, 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 waterb
(No./100 ml)			and recreation not involving contact with the
Annual Geometric			water.
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. 43.** 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.

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

Temperature $^{\circ}$ C-Maximum ΔT^a	$\Delta T = 0$ °C	NovApr.: ≤13°C May-June: ≤17°C JulOct.: ≤23°C ΔT ≤2°C	Aquatic life ^b 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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 ^b , [water contact recreationb,] recreation involving contact with the waterb, 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 ^b , aquatic life ^b , [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 lifeb.
-	•	•	•

		S.V.:	Aquatic life ^b , [water contact recreation, wildlife
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 ^b .
Solids - mg/l		S.V.: ≤25	Aquatic life .
Solids - Ilig/1		S. V ≤23	
Turbidity - NTU			Aquatic life ^b and municipal or domestic supply.
,		S.V.: ≤10	
Galan BOU			A control of the cont
Color - PCU		e	Aquatic life ^b and municipal or domestic supply.
Total Dissolved			Municipal or domestic supply ^b , irrigation and
Solids - mg/l		c	[stock watering.] watering of livestock.
Alkalinity		less than 25% change	Aquatic life ^b and [wildlife propagation.]
(as CaCO ₃) - mg/l		from natural conditions	propagation of wildlife.
D 10 10			
Fecal Coliform -	A.G.M.: ≤50	no o uno d	[Water contact recreationb, noncontact
No./100 ml	S.V.: ≤100	≤200/400 ^d	recreation,] Recreation involving contact with
			the waterb, 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 waterb

(No./100 ml)			and recreation not involving contact with the
Annual Geometric			water.
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. 44.** 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.

	<u> </u>	<u> </u>	1
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C - ΔT - Single Value ^a	$\Delta T = 0$ °C	ΔT ≤2°C	Aquatic life (warm-water fishery) ^b , [water contact recreation.] and recreation involving contact 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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) ^b , [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 ^b , [wildlife propagation, irrigation and stock watering.] propagation of wildlife, irrigation and watering of livestock.
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	<u> </u>	T	T
PARAMETER Total Phosphorus	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES Aquatic life (warm-water fishery) ^b , 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.
			not involving contact with the water.
[Nitroten]	Total Nitrogen	Nitrate S.V.: ≤10	Municipal or domestic supply ^b , [wildlife
Nitrogen species	A-Avg.: ≤1.5	Nitrite S.V.: ≤1.0	propagation, irrigation, stock watering]
(N) - mg/l	AprNov. S.V.: ≤2.4	[Ammonia S.V.: ≤0.02	propagation of wildlife, irrigation, watering of livestock and aquatic life (warm-water fishery).
		(un-ionized)]	ivestock and aquatic me (warm-water risnery).
Total Ammonia (as N) - mg/l	-	f	Aquatic lifeb.
Total Dissolved Solids - mg/l	A-Avg.: ≤370 S.V.: ≤385	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Suspended Solids - mg/l		Annual Median: ≤80 ^e	Aquatic life (warm-water fishery) ^b .
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply ^b .
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) ^b , <i>and</i> municipal

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: ≤75 S.V.: ≤200	≤200/400°	[Contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 recreationb, noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering.] Recreation involving contact with the waterb and recreation not involving contact with the water.
Sodium - SAR		A-Avg.: ≤8	Irrigation ^b 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. \leq 80 mg/l of suspended solids.
- f. The ambient water quality criteria for ammonia are specified in section 3 of this regulation.
 - **Sec. 45.** NAC 445A.204 is hereby amended to read as follows:

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 °C - ΔT - Single Value ^a	$\Delta T = 0$ °C	ΔT ≤2°C	Aquatic life (warm-water fishery) ^b [, 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, aquatic life (warm-water fishery), irrigation, [stock watering,] watering of livestock, municipal or domestic supply and industrial supply.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life (warm-water fishery) ^b , [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.: ≤21 S.V.: ≤30	S.V.: ≤250	Municipal or domestic supply ^b , [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) ^b , 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.: ≤1.4 AprNov. S.V.: ≤2.4	Nitrate S.V.: ≤10 Nitrite S.V.: ≤1.0 [Ammonia S.V.: ≤0.02 (un-ionized)]	Municipal or domestic supply ^b , [wildlife propagation, irrigation, stock watering] propagation of wildlife, irrigation, watering of livestock, and aquatic life (warm-water fishery).

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER	WATER QUALITY STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Total Ammonia (as N) - mg/l		f	Aquatic lifeb.
Total Dissolved Solids - mg/l	A-Avg.: ≤350 S.V.: ≤400	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Suspended Solids - mg/l		Annual Median: ≤80 ^e	Aquatic life (warm-water fishery) ^b .
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply ^b .
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) ^b , <i>and</i> municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric Mean: ≤20 S.V.: ≤150	≤200/400°	[Contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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	[Contact recreationb, noncontact recreation, municipal or domestic supply, irrigation, wildlife

	REQUIREMENTS		
	TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
(No./100 ml)		<u>-S.V.: ≤406</u>]	propagation and stock watering.] Recreation
Annual Geometric			involving contact with the waterb and recreation
Mean		≤126	not involving contact with the water.
Single Value		≤410	
Sodium - SAR		A-Avg.: ≤8	Irrigation ^b 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.205 is hereby amended to read as follows: 445A.205

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 - Δ T - Single Value ^a	$\Delta T = 0^{\circ}C$	ΔT ≤2°C	Aquatic life (warm-water fishery) ^b [, water eontact 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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) ^b , [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 ^b , [wildlife

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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) ^b , 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 ^b , [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 lifeb.
Total Dissolved Solids - mg/l	A-Avg.: ≤425 S.V.: ≤520	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Suspended Solids - mg/l		Annual Median: ≤80 ^e	Aquatic life (warm-water fishery) ^b .
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 ^b .
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) ^b , <i>and</i> municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric Mean: ≤50 S.V.: ≤200	≤200/400°	[Contact recreationb noncontact recreation,] Recreation involving contact with the waterb, 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 recreationb, noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering.] Recreation involving contact with the waterb and recreation not involving contact with the water.
Sodium - SAR		A-Avg.: ≤8	Irrigation ^b 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.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 - Δ T - Single Value ^a	$\Delta T = 0$ °C	ΔT ≤2°C	Aquatic life (warm-water fishery) ^b [, water contact recreation.] and recreation involving contact with the water.

	REQUIREMENTS TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
pH Units	A-Avg.: 7.0 - 8.5	S.V.: 6.5 - 9.0	[Water contact recreationb, wildlife
Standard Units	S.V.: 7.0 - 8.7	ΔpH: ±0.5	propagationb,] Recreation involving contact with
			the waterb, propagation of wildlifeb, aquatic life
			(warm-water fishery), irrigation, [stock watering,]
			watering of livestock, municipal or domestic
			supply and industrial supply.
Dissolved			Aquatic life (warm-water fishery) ^b , [water contact
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.: ≤60	S.V.: ≤250	Municipal or domestic supply ^b , [wildlife
C	S.V.: ≤110		propagation, irrigation and stock watering.]
	5. V 2110		propagation of wildlife, irrigation and watering
			of livestock.
Total Phosphorus		AprNov. Seasonal	Aquatic life (warm-water fishery) ^b , 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.

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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 ^b , [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 lifeb.
Total Dissolved Solids - mg/l	A-Avg.: ≤500 S.V.: ≤560	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Suspended Solids - mg/l		Annual Median: ≤80 ^e	Aquatic life (warm-water fishery) ^b .
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply ^b .
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) ^b , <i>and</i> municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric Mean: ≤40 S.V.: ≤100	≤200/400°	[Contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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
			municipal or domestic supply, irrigation, [wildlife
			propagation and stock watering.] propagation of
			wildlife and watering of livestock.
E. Coli		[Annual Geometric	[Contact recreationb, noncontact recreation,
[No./100 ml]		Mean: ≤126	municipal or domestic supply, irrigation, wildlife
(No./100 ml)		- S.V.: ≤406]	propagation and stock watering.]
Annual Geometric			Recreation involving contact with the waterb
Mean		≤126	and recreation not involving contact with the
Single Value		≤410	water.
Sodium - SAR		A-Avg.: ≤8	Irrigation ^b 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.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 °C - ΔT - Single Value ^a	$\Delta T = 0$ °C	ΔT ≤2°C	Aquatic life (warm-water fishery) ^b [, 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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) ^b , [water contact recreation, wildlife propagation, stock watering,] recreation involving contact with the water,

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	REQUIREMENTS TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	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.: ≤250	Municipal or domestic supply ^b , [wildlife
Č	S.V.: ≤85		propagation, irrigation and stock watering.]
	5.1 =03		propagation of wildlife, irrigation and watering
			of livestock.
Total Phosphorus		AprNov. Seasonal	Aquatic life (warm-water fishery) ^b , 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	Total Nitrogen	Nitrate S.V.: ≤10	Municipal or domestic supply ^b , [wildlife
(N) – mg/l	A-Avg.: ≤2.4	Nitrite S.V.: ≤1.0	propagation, irrigation, stock watering]
(14) 1118/1	ArNov. S.V.: ≤2.9		propagation of wildlife, irrigation, watering of
	Apr100v. S. v ≤2.9	[Ammonia S.V.: ≤0.02	livestock and aquatic life (warm-water fishery).
		(un-ionized)]	(
Total Ammonia		f	Aquatic lifeb.
(as N) – mg/l			
Total Dissolved	S.V.: ≤590	A-Avg.: ≤500	Municipal or domestic supply ^b , irrigation and

	REQUIREMENTS TO MAINTAIN	WATER QUALITY	
PARAMETER	EXISTING HIGHER	STANDARDS FOR	BENEFICIAL
	QUALITY	BENEFICIAL USES	USES
Solids - mg/l			[stock watering.] watering of livestock.
Suspended Solids - mg/l		Annual Median: ≤80 ^e	Aquatic life (warm-water fishery) ^b .
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply ^b .
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) ^b , <i>and</i> municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric Mean: ≤30 S.V.: ≤150	≤200/400°	[Contact recreationb, noncontact recreation,] Recreation involving contact with the waterb, 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 recreationb, noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering.] Recreation involving contact with the waterb 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 ^b 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.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 - Δ T - Single Value ^a	$\Delta T = 0$ °C	ΔT ≤2°C	Aquatic life (warm-water fishery) ^b [, 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 recreationb, wildlife propagationb,] Recreation involving contact with the waterb, propagation of wildlifeb, 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) ^b , [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 ^b , [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) ^b , 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 ^b , [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 lifeb.
Total Dissolved Solids - mg/l	A-Avg.: ≤600 S.V.: ≤700	A-Avg.: ≤1000	Municipal or domestic supply ^b , irrigation and [stock watering.] watering of livestock.
Suspended Solids - mg/l		Annual Median: ≤80 ^e	Aquatic life (warm-water fishery) ^b .
Sulfate - mg/l		S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply ^b .
Turbidity - NTU		S.V.: ≤50	Aquatic life (warm-water fishery) ^b , <i>and</i> municipal

REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES or domestic supply.
Annual Geometric		[Contact recreationb, noncontact recreation,]
Mean: ≤100	≤200/400°	Recreation involving contact with the waterb,
S.V.: ≤200		recreation not involving contact with the water,
		municipal or domestic supply, irrigation, [wildlife
		propagation and stock watering.] propagation of
		wildlife and watering of livestock.
	[Annual Geometric	[Contact recreationb, noncontact recreation,
	<u>Mean: ≤126</u>	municipal or domestic supply, irrigation, wildlife
	- S.V.: ≤406]	propagation and stock watering.] Recreation
		involving contact with the waterb and recreation
	≤126	not involving contact with the water.
	≤235	
	A-Avg.: ≤8	Irrigation ^b and municipal or domestic supply.
	TO MAINTAIN EXISTING HIGHER QUALITY Annual Geometric Mean: ≤100	TO MAINTAIN EXISTING HIGHER QUALITY STANDARDS FOR BENEFICIAL USES Annual Geometric Mean: ≤100 S.V.: ≤200 [Annual Geometric Mean: ≤126 S.V.: ≤406] ≤126 ≤235

- 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.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 ΔT^{a}	$\Delta T = 0$ °C	NovJun.: ≤21°C JulOct.: ≤32°C ΔT ≤2°C	Aquatic life ^b .
pH Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagationb,] Propagation of wildlifeb, aquatic life ^b , [noncontact recreation, irrigation, stock watering,] recreation not involving contact with the water, irrigation, watering of livestock, municipal or domestic

REQUIREMENTS TO MAINTAIN WATER QUALITY PARAMETER EXISTING HIGHER STANDARDS FOR BENEFICIAL QUALITY BENEFICIAL USES supply and industrial supply	
Total Phosphates $(as P) - mg/l \qquad \qquad A-Avg.: \leq 0.1 \qquad \qquad \begin{array}{c} Aquatic \ life^b, \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	
Nitrogen Species Total Nitrogen Nitrate S.V.: ≤ 10 Municipal or domestic supply ^b , aquat (N) - mg/l A-Avg.: ≤ 1.3 Nitrite S.V.: ≤ 1.0 [water contact recreation, stock water propagation and noncontact recreation involving contact with the watering of livestock, propagation of and recreation not involving contact water.	ering, wildlife on.] ne water, of wildlife
Total Ammonia f Aquatic lifeb. (as N) - mg/l	
Dissolved S.V.: ≤5.0 Aquatic life ^b , [noncontact recreation, propagation, stock watering] recreation involving contact with the water, prowildlife, watering of livestock, and make domestic supply.	tion not copagation of
Turbidity – NTU e Aquatic life ^b and municipal or domes	estic supply.

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PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Color - PCU		d	Aquatic life ^b and municipal or domestic supply.
Total Dissolved			Municipal or domestic supply ^b , irrigation and
Solids - mg/l		С	[stock watering.] watering of livestock.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] propagation of wildlife.
Fecal Coliform -		A.G.M.: ≤1000	[Noncontact recreationb,] Recreation not
No./100 ml		S.V.: ≤2000	involving contact with the waterb, municipal or
			domestic supply ^b , irrigation, [wildlife propagation
			and stock watering.] propagation of wildlife and
			watering of livestock.
E. Coli			Recreation not involving contact with the
(No./100 ml)			waterb.
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. 51. NAC 445A.211 is hereby amended to read as follows:

445A.211

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 ^b .
$\Delta \mathrm{T}^{\mathrm{a}}$	$\Delta T = 0$ °C ^a	ΔT ≤2°C	
pH Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagationb,] Propagation of wildlifeb, aquatic life ^b , [noncontact recreation, irrigation, stock watering] recreation not involving contact with the water, irrigation, watering of livestock and industrial supply.
			watering of livestock and industrial supply.

			<u> </u>
PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Total Phosphates		A-Avg.: ≤0.3	Aquatic life ^b and [noncontact recreation.]
(as P) - mg/l			recreation not involving contact with the water.
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤1.3 S.V.: ≤1.8	Nitrate S.V.: ≤90 Nitrite S.V.: ≤5.0 [Ammonia S.V.: ≤.06 (un_ionized)]	Aquatic life ^b , [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 lifeb.
Dissolved Oxygen - mg/l		S.V.: ≥5.0	Aquatic life ^b , [noncontact recreation, wildlife propagation and stock watering.] recreation not involving contact with the water, propagation of wildlife and watering of livestock.
Turbidity - NTU		е	Aquatic life ^b .
Color - PCU		d	Aquatic life ^b .
Total Dissolved Solids - mg/l		c	Irrigation ^b and [stock watering.] watering of livestock.
Alkalinity (as CaCO ₃) - mg/l		less than 25% change from natural conditions	Aquatic life ^b and [wildlife propagation.] 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 recreationb irrigation, wildlife propagation and stock watering.] Recreation not involving contact with the waterb, irrigation, propagation of wildlife and watering of livestock.
E. Coli (No./100 ml) Annual Geometric Mean	_	≤630	Recreation not involving contact with the waterb.

- 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.212 is hereby amended to read as follows:

445A.212

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 ^b .
ΔT^{a}	$\Delta T = 0$ °C	ΔT ≤2°C	
pH Units		S.V.: [7.0] 6.5 - 9.0 ΔpH: ±0.5 Max.	[Wildlife propagationb,] Propagation of wildlifeb, aquatic life ^b , [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 ^b 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 ^b , [stock watering, wildlife propagation and noncontact recreation.] watering of livestock, propagation of wildlife and recreation not involving contact with the water.

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

- 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.215 is hereby amended to read as follows:

445A.215

STANDARDS OF WATER QUALITY

Big Goose Creek

Control Point at Ranch.

REQUIREMENTS TO MAINTAIN WATER QUALITY PARAMETER EXISTING HIGHER STANDARDS FOR BENEFICIAL QUALITY BENEFICIAL USES USES	
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.	
$\Delta T^{\circ}C$ $\Delta T = 0^{\circ}$ $\Delta T < 1^{\circ}$	
pH Units Δ pH ±0.5 6.5 - 9.0 Aquatic life, municipal and domestic supply $\frac{1}{5}$	
water contact recreation.] and recreation	
involving contact with the water.	
Total Phosphorus Aquatic life, [water contact recreation,]	
(as P) - mg/l <0.1 recreation involving contact with the water,	
municipal and domestic supply, [noncontact	
recreation.] and recreation not involving conta	act
with the water.	
Nitrogen Species Nitrate S.V. <10 Municipal and domestic supply, aquatic life,	
(N) - mg/l Nitrate S.V. <1.0 Nitrite S.V. <0.06 [water contact recreation, noncontact recreation]	n.]
[Ammonia S.V. < 0.02 recreation involving contact with the water and	nd
(un-ionized)] recreation not involving contact with the water	er.
Total Ammonia d Aquatic life.	
(as N) - mg/l	
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	
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. <185	S.V. <500	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		<25% change from	Aquatic life [, wildlife propagation.] and
(as CO ₃) - mg/l		natural conditions	propagation of wildlife.
Fecal Coliform -			[Water contact recreation, noncontact recreation,]
No./100 ml		<200/400 ^b	Recreation involving contact with the water,
NO./ 100 IIII		\200/ 4 00	
			recreation not involving contact with the water,
			municipal and domestic supply, irrigation [,
			wildlife propagation.] and propagation of wildlife.
E Coli			Pagration involving contact with the water
E. Coli			Recreation involving contact with the waterb
(No./100 ml)			and recreation not involving contact with the

Annual Geometric			water.
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. 54. NAC 445A.216 is hereby amended to read as follows:

445A.216

STANDARDS OF WATER QUALITY

Salmon Falls Creek

Control Point at Highway 93 south of Jackpot.

	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 (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. <14.0	S.V. <250	Municipal and domestic supply, [wildlife propagation, irrigation, stock watering.] propagation of wildlife, irrigation and watering of livestock.
Alkalinity (as CO ₃) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.
Fecal Coliform - No./100 ml	 S.V. <90	<200/400 ^b	[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 waterb 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. 55. 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 ₃) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.
Fecal Coliform - No./100 ml		<200/400 ^b	[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 waterb 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. 56. 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 ₃) - 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 ^b	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 waterb
(No./100 ml)			and recreation not involving contact with the
Annual Geometric			water.
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. 57. 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.
Suspended			Aquatic life, <i>and</i> municipal and domestic supply.
Solids - mg/l		S.V. <25	riquate me, was manierpar and domestic supprij.
Solids - Hig/1	-	3. v. \23	
T 1:1: NET		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. <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 ₃) - mg/l		natural conditions	propagation of wildlife.
Fecal Coliform -			[Water contact recreation, noncontact recreation,]
No./100 ml	S.V. <10	<200/400 ^b	Recreation involving contact with the water,
			recreation not involving contact with the water,
			municipal and domestic supply, irrigation [-
			wildlife propagation.] and propagation of
			wildlife.
			,,,,,,,
n a "			
E. Coli			Recreation involving contact with the waterb

(No./100 ml)			and recreation not involving contact with the
Annual Geometric			water.
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.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 ₃) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.
Fecal Coliform - No./100 ml		<200/400 ^b	[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 waterb 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. 59. 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		<25% change from	Aquatic life [, wildlife propagation.] and
(as CO ₃) - mg/l		natural conditions	propagation of wildlife.
(us CO3) mg/r		natural conditions	propagation of whatty.
Fecal Coliform -			[Water contact recreation, noncontact recreation,]
No./100 ml	S.V. <80	<200/400 ^b	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 waterb
(No./100 ml)			and recreation not involving contact with the
Annual Geometric			water.
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. 60. 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 ₃) - 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 ^b	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 waterb
(No./100 ml)			and recreation not involving contact with the
Annual Geometric			water.
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. 61.** NAC 445A.223 is hereby amended to read as follows:

445A.223

STANDARDS OF WATER QUALITY

Owyhee River

Control Point at New China Dam.

	1	1	
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			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, was manierpar and domestic supprij.
Solids - Hig/1	-	3. v. ×23	
T 1:1: NET		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 ₃) - mg/l		natural conditions	propagation of wildlife.
Fecal Coliform -			[Water contact recreation, noncontact recreation,]
No./100 ml	S.V. <125	<200/400 ^b	Recreation involving contact with the water,
			recreation not involving contact with the water,
			municipal and domestic supply, irrigation [,
			wildlife propagation.] and propagation of
			wildlife.
			,,,,,,,,
n a "			
E. Coli			Recreation involving contact with the waterb

(No./100 ml)			and recreation not involving contact with the
Annual Geometric			water.
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. 62. 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 ₃) - mg/l		<25% change from natural conditions	Aquatic life [, wildlife propagation.] and propagation of wildlife.
Fecal Coliform - No./100 ml		<200/400 ^b	[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 waterb 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.

NOTICE OF ADOPTION OF PROPOSED REGULATION LCB File No. R099-02

The State Environmental Commission adopted regulations assigned LCB File No. R099-02 which pertain to chapter 445A of the Nevada Administrative Code on November 19, 2002.

Notice date: 10/17/2002, 10/22/2002, 10/23/2002, 10/29/2002, 10/30/2002

Hearing date: 11/19/2002

Date of adoption by agency: 11/19/2002 Filing date: 12/17/2002

INFORMATIONAL STATEMENT

1. A description of how public comment was solicited, a summary of public response, and an explanation of how other interested persons may obtain a copy of the summary.

Petition 2002-10 (LCB File No. R099-02), was noticed on October 17, October 23, October 29 and October 30, 2002 as a permanent regulation in the Las Vegas Review Journal and the Reno-Gazette-Journal newspapers. Regulatory workshops were conducted by the Division of Environmental Protection's Bureau of Water Quality Planning August 27, 2002 in Carson City, August 29, 2002 in Elko and September 4, 2002 in Las Vegas. The regulation was adopted by the State Environmental Commission as a permanent regulation on November 19, 2002. There was no public oral or written comments received by the Commission during adoption. The public was also mailed the notice of intent and agenda through the Environmental Commission's mailing list. A copy of the written comments may be obtained by calling the Nevada State Environmental Commission (775) 687-9308, or writing to the Commission at 333 W. Nye Lane, Room 138, Carson City, Nevada 89706-0851.

2. The number of persons who:

(a) Attended each hearing:	25
(b) Testified at each hearing:	0
(c) Submitted to the agency written comments:	0

3. A description of how comment was solicited from affected businesses, a summary of the response and an explanation how other interested persons may obtain a copy of the summary.

Comments were solicited from affected businesses by the notices in the newspapers, as outlined in #1 and by direct mail to interested persons subscribing to the Commission's mailing list. No written or oral comment was received from affected businesses. See above statement for dates of the public notices and public workshops. A copy of the written comments may be obtained by calling the Nevada State Environmental Commission (775) 687-9308 or writing to the Commission at 333 W. Nye Lane, Room 138, Carson City, Nevada 89706-0851.

4. If the regulation was adopted without changing any part of the proposed regulation, a summary of the reasons for adopting the regulation without change.

The regulation was adopted by the State Environmental Commission on November 19, 2002 with amendments. See exhibit #8 for the amendments.

- 5. The estimated economic effect of the adopted regulation on the business which it is to regulate and on the public. These must be stated separately, and each case must include:
 - (a) Estimated economic effect of the regulation on the business which it is to regulate:

The proposed amendments are not expected to have any economic short or long-term adverse impact upon the public.

(b) Estimated economic effect on the public:

The proposed amendments are not expected to have any economic short or long-term adverse impact upon the public.

6. The estimated cost to the agency for enforcement of the adopted regulation.

The implementation of the adopted regulation is not expected to result in any additional cost by the Division of Environmental Protection.

7. A description of any regulations of other state or government agencies which the regulation overlaps or duplicates and a statement explaining why the duplication or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.

The regulations do not overlap or duplicate any regulations of another state or local governmental agency.

8. If the regulation includes provisions which are more stringent than a federal regulation which regulates the same activity, a summary of such provisions.

This regulation is no more restrictive or stringent than federal requirements. The federal government has delegated the responsibility of establishing water quality standards to the state; therefore, there is no federal regulation for proposed water quality standards revisions.

9. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.

The regulations do not provide a new fee nor increase an existing fee.