

**NEVADA DEPARTMENT OF  
CONSERVATION & NATURAL RESOURCES**

**STATE ENVIRONMENTAL COMMISSION**

**HEARING ARCHIVES FOR**

**REGULATORY PETITIONS**

**COMMISSION PETITION NO. 2002-10**

**LEGISLATIVE COUNSEL BUREAU (LCB) FILE NO. R099-02**

**DOCUMENTS INCLUDED IN THIS FILE:**

**YES SECRETARY OF STATE FILING FORM**

**YES DISCLOSURE STATEMENT PURSUANT TO NRS 233B**

**REGULATORY PETITIONS**

**ORIGINAL DRAFTED BY COMMISSION**

**ADOPTED BY COMMISSION**

**YES AS FILED**

Secretary of State  
Filing Data

**For Filing Administrative  
Regulations**

For Emergency  
Regulations Only

Effective Date

Expiration Date

Governor's Signature

**State Environmental Commission**

Classification [ ] Proposed [ ] Adopted By Agency [XX] Temporary [ ] Emergency [ ]

**Brief description of action: Petition 2002-10 (LCB R099-02)** is a permanent amendment to NAC 445A.119 to 445A.225 the water quality standards program. The amendment updates NAC 445A.119 to revise pH, chloride and nitrite criteria and for the inclusion of total ammonia and E. Coli bacteria. The amendment incorporates the E. Coli bacteria standard in the following rivers and creeks: Carson River, Walker River, Virgin River, Truckee River, Humboldt River, Colorado River, Muddy River, Snake River Basin, Chiatovich Creek, Indian Creek, Leidy Creek, Snake Creek, Beaver Dam Wash and the Meadow Valley Wash. The pH standard, and the new total ammonia standard that replaces the un-ionized ammonia standard is also selectively incorporated into the various water bodies listed above.

**Authority citation other than 233B:** NRS 445A.425 and 445A.520.

**Notice date:** October 17, October 22, October 23, October 29 and October 30, 2002

**Hearing date:** November 19, 2002

**Date of Adoption of Agency:** November 19, 2002

**LEGISLATIVE REVIEW OF ADOPTED REGULATIONS AS REQUIRED  
BY ADMINISTRATIVE PROCEDURES ACT, NRS 233B.066  
PETITION 2002-10 LCB File R099-02  
STATE ENVIRONMENTAL COMMISSION**

The following statement is submitted for adopted amendments to Nevada Administrative Code (NAC) 445A. This regulation deals with amendments to the state water quality standards.

**1. A description of how public comment was solicited, a summary of public response, and an explanation 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 22, 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 persons who:**

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

**3. A description of how comment was solicited from affected businesses, a summary of their 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 proposed 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.

# # # #

**FILED REGULATION OF THE**

**STATE ENVIRONMENTAL COMMISSION  
LCB File No. R099-02 (SEC Petition 2002-10)**

As Adopted on November 19, 2002 and effective December 17, 2002

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

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

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

**Sec. 2.** *“E. Coli” means escherichia coli.*

**Sec. 3. 1.** *The acute criteria of water quality with regard to the concentration of total ammonia are subject to the following:*

*(a) The 1-hour average concentration of total ammonia, in milligrams of nitrogen per liter, for the protection of freshwater aquatic life is shown in Table 1.*

*(b) For cold water fisheries, the concentration of total ammonia, in milligrams of nitrogen per liter, must not exceed the applicable acute criterion listed under “Cold Water Fisheries” set forth in Table 1, more than once every 3 years on average.*

*(c) For warm water fisheries, the concentration of total ammonia, in milligrams of nitrogen per liter, must not exceed the applicable acute criterion listed under “Warm Water Fisheries” set forth in Table 1, more than once every 3 years on average.*

**2.** *The chronic criteria of water quality with regard to the concentration of total ammonia are subject to the following:*

*(a) The 30-day average concentration of total ammonia, in milligrams of nitrogen per liter, for the protection of freshwater aquatic life is shown in Tables 2 and 3.*

*(b) The concentration of total ammonia, in milligrams of nitrogen per liter, expressed as a 30-day average must not exceed the applicable chronic criterion listed in Tables 2 and 3 more than once every 3 years on average, and the highest 4-day average within the 30-day period must not exceed 2.5 times the applicable chronic criterion.*

*(c) Table 3 must not be used unless the division receives acceptable documentation of the absence of freshwater fish in early life stages.*

**TABLE 1: ACUTE WATER QUALITY CRITERIA FOR TOTAL AMMONIA  
FOR FRESHWATER AQUATIC LIFE  
(mg nitrogen/l)**

<i>pH</i>	<i>Cold Water Fisheries<sup>1</sup></i>	<i>Warm Water Fisheries<sup>2</sup></i>
<i>6.5</i>	<i>32.6</i>	<i>48.8</i>
<i>6.6</i>	<i>31.3</i>	<i>46.8</i>
<i>6.7</i>	<i>29.8</i>	<i>44.6</i>

<b>TABLE 1: ACUTE WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR FRESHWATER AQUATIC LIFE (mg nitrogen/l)</b>		
<i>pH</i>	<i>Cold Water Fisheries<sup>1</sup></i>	<i>Warm Water Fisheries<sup>2</sup></i>
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
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

<sup>1</sup> The acute water quality criteria for total ammonia for cold water fisheries were calculated

using the following equation, which may also be used to calculate unlisted values:

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

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

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

*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)<sup>1</sup>**

<i>pH</i>	<i>Temperature (°C)</i>									
	<i>0</i>	<i>14</i>	<i>16</i>	<i>18</i>	<i>20</i>	<i>22</i>	<i>24</i>	<i>26</i>	<i>28</i>	<i>30</i>
<i>6.5</i>	<i>6.67</i>	<i>6.67</i>	<i>6.06</i>	<i>5.33</i>	<i>4.68</i>	<i>4.12</i>	<i>3.62</i>	<i>3.18</i>	<i>2.80</i>	<i>2.46</i>
<i>6.6</i>	<i>6.57</i>	<i>6.57</i>	<i>5.97</i>	<i>5.25</i>	<i>4.61</i>	<i>4.05</i>	<i>3.56</i>	<i>3.13</i>	<i>2.75</i>	<i>2.42</i>
<i>6.7</i>	<i>6.44</i>	<i>6.44</i>	<i>5.86</i>	<i>5.15</i>	<i>4.52</i>	<i>3.98</i>	<i>3.50</i>	<i>3.07</i>	<i>2.70</i>	<i>2.37</i>
<i>6.8</i>	<i>6.29</i>	<i>6.29</i>	<i>5.72</i>	<i>5.03</i>	<i>4.42</i>	<i>3.89</i>	<i>3.42</i>	<i>3.00</i>	<i>2.64</i>	<i>2.32</i>
<i>6.9</i>	<i>6.12</i>	<i>6.12</i>	<i>5.56</i>	<i>4.89</i>	<i>4.30</i>	<i>3.78</i>	<i>3.32</i>	<i>2.92</i>	<i>2.57</i>	<i>2.25</i>
<i>7.0</i>	<i>5.91</i>	<i>5.91</i>	<i>5.37</i>	<i>4.72</i>	<i>4.15</i>	<i>3.65</i>	<i>3.21</i>	<i>2.82</i>	<i>2.48</i>	<i>2.18</i>
<i>7.1</i>	<i>5.67</i>	<i>5.67</i>	<i>5.15</i>	<i>4.53</i>	<i>3.98</i>	<i>3.50</i>	<i>3.08</i>	<i>2.70</i>	<i>2.38</i>	<i>2.09</i>
<i>7.2</i>	<i>5.39</i>	<i>5.39</i>	<i>4.90</i>	<i>4.31</i>	<i>3.78</i>	<i>3.33</i>	<i>2.92</i>	<i>2.57</i>	<i>2.26</i>	<i>1.99</i>
<i>7.3</i>	<i>5.08</i>	<i>5.08</i>	<i>4.61</i>	<i>4.06</i>	<i>3.57</i>	<i>3.13</i>	<i>2.76</i>	<i>2.42</i>	<i>2.13</i>	<i>1.87</i>
<i>7.4</i>	<i>4.73</i>	<i>4.73</i>	<i>4.30</i>	<i>3.78</i>	<i>3.32</i>	<i>2.92</i>	<i>2.57</i>	<i>2.26</i>	<i>1.98</i>	<i>1.74</i>
<i>7.5</i>	<i>4.36</i>	<i>4.36</i>	<i>3.97</i>	<i>3.49</i>	<i>3.06</i>	<i>2.69</i>	<i>2.37</i>	<i>2.08</i>	<i>1.83</i>	<i>1.61</i>
<i>7.6</i>	<i>3.98</i>	<i>3.98</i>	<i>3.61</i>	<i>3.18</i>	<i>2.79</i>	<i>2.45</i>	<i>2.16</i>	<i>1.90</i>	<i>1.67</i>	<i>1.47</i>
<i>7.7</i>	<i>3.58</i>	<i>3.58</i>	<i>3.25</i>	<i>2.86</i>	<i>2.51</i>	<i>2.21</i>	<i>1.94</i>	<i>1.71</i>	<i>1.50</i>	<i>1.32</i>

**TABLE 2: CHRONIC WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR WATERS WHERE FRESHWATER FISH IN EARLY LIFE STAGES MAY BE PRESENT (mg nitrogen/l)<sup>1</sup>**

pH	Temperature (°C)									
	0	14	16	18	20	22	24	26	28	30
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
8.1	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
9.0	0.486	0.486	0.442	0.389	0.342	0.300	0.264	0.232	0.204	0.179

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

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

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

*T=°C*

*x means multiplication*

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

**TABLE 3: CHRONIC WATER QUALITY CRITERIA FOR TOTAL AMMONIA FOR  
WATERS WHERE FRESHWATER FISH IN EARLY LIFE STAGES ARE ABSENT**

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

<i>pH</i>	<i>Temperature (°C)</i>									
	<i>0-7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	<i>13</i>	<i>14</i>	<i>15<sup>2</sup></i>	<i>16<sup>2</sup></i>
<i>6.5</i>	<i>10.8</i>	<i>10.1</i>	<i>9.51</i>	<i>8.92</i>	<i>8.36</i>	<i>7.84</i>	<i>7.35</i>	<i>6.89</i>	<i>6.46</i>	<i>6.06</i>
<i>6.6</i>	<i>10.7</i>	<i>9.99</i>	<i>9.37</i>	<i>8.79</i>	<i>8.24</i>	<i>7.72</i>	<i>7.24</i>	<i>6.79</i>	<i>6.36</i>	<i>5.97</i>
<i>6.7</i>	<i>10.5</i>	<i>9.81</i>	<i>9.20</i>	<i>8.62</i>	<i>8.08</i>	<i>7.58</i>	<i>7.11</i>	<i>6.66</i>	<i>6.25</i>	<i>5.86</i>
<i>6.8</i>	<i>10.2</i>	<i>9.58</i>	<i>8.98</i>	<i>8.42</i>	<i>7.90</i>	<i>7.40</i>	<i>6.94</i>	<i>6.51</i>	<i>6.10</i>	<i>5.72</i>
<i>6.9</i>	<i>9.93</i>	<i>9.31</i>	<i>8.73</i>	<i>8.19</i>	<i>7.68</i>	<i>7.20</i>	<i>6.75</i>	<i>6.33</i>	<i>5.93</i>	<i>5.56</i>
<i>7.0</i>	<i>9.60</i>	<i>9.00</i>	<i>8.43</i>	<i>7.91</i>	<i>7.41</i>	<i>6.95</i>	<i>6.52</i>	<i>6.11</i>	<i>5.73</i>	<i>5.37</i>
<i>7.1</i>	<i>9.20</i>	<i>8.63</i>	<i>8.09</i>	<i>7.58</i>	<i>7.11</i>	<i>6.67</i>	<i>6.25</i>	<i>5.86</i>	<i>5.49</i>	<i>5.15</i>
<i>7.2</i>	<i>8.75</i>	<i>8.20</i>	<i>7.69</i>	<i>7.21</i>	<i>6.76</i>	<i>6.34</i>	<i>5.94</i>	<i>5.57</i>	<i>5.22</i>	<i>4.90</i>
<i>7.3</i>	<i>8.24</i>	<i>7.73</i>	<i>7.25</i>	<i>6.79</i>	<i>6.37</i>	<i>5.97</i>	<i>5.60</i>	<i>5.25</i>	<i>4.92</i>	<i>4.61</i>
<i>7.4</i>	<i>7.69</i>	<i>7.21</i>	<i>6.76</i>	<i>6.33</i>	<i>5.94</i>	<i>5.57</i>	<i>5.22</i>	<i>4.89</i>	<i>4.59</i>	<i>4.30</i>
<i>7.5</i>	<i>7.09</i>	<i>6.64</i>	<i>6.23</i>	<i>5.84</i>	<i>5.48</i>	<i>5.13</i>	<i>4.81</i>	<i>4.51</i>	<i>4.23</i>	<i>3.97</i>
<i>7.6</i>	<i>6.46</i>	<i>6.05</i>	<i>5.67</i>	<i>5.32</i>	<i>4.99</i>	<i>4.68</i>	<i>4.38</i>	<i>4.11</i>	<i>3.85</i>	<i>3.61</i>
<i>7.7</i>	<i>5.81</i>	<i>5.45</i>	<i>5.11</i>	<i>4.79</i>	<i>4.49</i>	<i>4.21</i>	<i>3.95</i>	<i>3.70</i>	<i>3.47</i>	<i>3.25</i>
<i>7.8</i>	<i>5.17</i>	<i>4.84</i>	<i>4.54</i>	<i>4.26</i>	<i>3.99</i>	<i>3.74</i>	<i>3.51</i>	<i>3.29</i>	<i>3.09</i>	<i>2.89</i>
<i>7.9</i>	<i>4.54</i>	<i>4.26</i>	<i>3.99</i>	<i>3.74</i>	<i>3.51</i>	<i>3.29</i>	<i>3.09</i>	<i>2.89</i>	<i>2.71</i>	<i>2.54</i>
<i>8.0</i>	<i>3.95</i>	<i>3.70</i>	<i>3.47</i>	<i>3.26</i>	<i>3.05</i>	<i>2.86</i>	<i>2.68</i>	<i>2.52</i>	<i>2.36</i>	<i>2.21</i>
<i>8.1</i>	<i>3.41</i>	<i>3.19</i>	<i>2.99</i>	<i>2.81</i>	<i>2.63</i>	<i>2.47</i>	<i>2.31</i>	<i>2.17</i>	<i>2.03</i>	<i>1.91</i>
<i>8.2</i>	<i>2.91</i>	<i>2.73</i>	<i>2.56</i>	<i>2.40</i>	<i>2.25</i>	<i>2.11</i>	<i>1.98</i>	<i>1.85</i>	<i>1.74</i>	<i>1.63</i>
<i>8.3</i>	<i>2.47</i>	<i>2.32</i>	<i>2.18</i>	<i>2.04</i>	<i>1.91</i>	<i>1.79</i>	<i>1.68</i>	<i>1.58</i>	<i>1.48</i>	<i>1.39</i>
<i>8.4</i>	<i>2.09</i>	<i>1.96</i>	<i>1.84</i>	<i>1.73</i>	<i>1.62</i>	<i>1.52</i>	<i>1.42</i>	<i>1.33</i>	<i>1.25</i>	<i>1.17</i>
<i>8.5</i>	<i>1.77</i>	<i>1.66</i>	<i>1.55</i>	<i>1.46</i>	<i>1.37</i>	<i>1.28</i>	<i>1.20</i>	<i>1.13</i>	<i>1.06</i>	<i>0.990</i>
<i>8.6</i>	<i>1.49</i>	<i>1.40</i>	<i>1.31</i>	<i>1.23</i>	<i>1.15</i>	<i>1.08</i>	<i>1.01</i>	<i>0.951</i>	<i>0.892</i>	<i>0.836</i>
<i>8.7</i>	<i>1.26</i>	<i>1.18</i>	<i>1.11</i>	<i>1.04</i>	<i>0.976</i>	<i>0.915</i>	<i>0.858</i>	<i>0.805</i>	<i>0.754</i>	<i>0.707</i>

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

pH	Temperature (°C)									
	0-7	8	9	10	11	12	13	14	15 <sup>2</sup>	16 <sup>2</sup>
8.8	1.07	1.01	0.944	0.885	0.829	0.778	0.729	0.684	0.641	0.601
8.9	0.917	0.860	0.806	0.756	0.709	0.664	0.623	0.584	0.548	0.513
9.0	0.790	0.740	0.694	0.651	0.610	0.572	0.536	0.503	0.471	0.442

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

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

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

*T = °C*

*x means multiplication*

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

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

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

*- pH and temperature are field measurements that must be taken at the same time and location as the water sample destined for the laboratory analysis of ammonia.*

*- If the field-measured pH or the temperature values, or both, fall between the tabular values set forth in this section, the field-measured values or temperature values, as appropriate, must be rounded according to standard rounding procedures to the nearest*

*tabular value to determine the applicable ammonia standard, or the equations provided in this section may be used to calculate unlisted values.*

**Sec. 4.** NAC 445A.070 is hereby amended to read as follows:  
 445A.070 As used in NAC 445A.070 to 445A.348, inclusive, *and sections 2 and 3 of this regulation*, unless the context otherwise requires, the words and terms defined in NAC 445A.071 to 445A.116, inclusive, *and section 2 of this regulation* have the meanings ascribed to them in those sections.

**Sec. 5.** NAC 445A.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		Nov.-May: ≤13°C  June: ≤17°C	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>

$\Delta T^a$	$\Delta T = 0^\circ\text{C}$	July: $\leq 21^\circ\text{C}$ Aug.-Oct.: $\leq 22^\circ\text{C}$ $\Delta T \leq 2^\circ\text{C}$	
pH Units	7.4 - 8.4 --	S.V.: 6.5 - 9.0 $\Delta\text{pH}: \pm 0.5 \text{ Max.}$	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>,}</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life, irrigation, <del>{stock watering,}</del> watering of livestock, municipal or domestic supply and industrial supply.</i>
Total Phosphates (as P) - mg/l	A-Avg.: $\leq 0.16$ S.V.: $\leq 0.33$	A-Avg.: $\leq 0.10$	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>,}</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>{noncontact recreation.}</del> recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	A-Avg.: $\leq 0.4$ S.V.: $\leq 0.5$	Nitrate S.V.: $\leq 10$ Nitrite S.V.: $\leq 0.6$ <del>Ammonia S.V.: <math>\leq 0.2</math> (un-ionized)</del>	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> , <del>{water contact recreation, stock watering, wildlife propagation and noncontact recreation.}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
	--	S.V.:	Aquatic life <sup>b</sup> , <del>{water contact recreation, wildlife</del>

Dissolved Oxygen – mg/l	--	Nov.-May: ≥6.0 Jun.-Oct.: ≥5.0	<del>propagation, stock watering,} recreation</del> <i>involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>{noncontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	A-Avg.: ≤15 --	S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU	A-Avg.: ≤3 S.V.: ≤5	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color – PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤70 S.V.: ≤95	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>{stock watering.}</del> <i>watering of livestock.</i>
Chlorides - mg/l	A-Avg.: ≤3 S.V.: ≤5	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>{wildlife propagation.}</del> <i>propagation of wildlife</i> , irrigation and <del>{stock watering.}</del> <i>watering of livestock.</i>
Sulfate - mg/l	-- S.V.: ≤4	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤1	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	-- --	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>{wildlife propagation.}</del> <i>propagation of wildlife.</i>

Fecal Coliform- No./100 ml	A.G.M.: ≤105  --	≤200/400 <sup>c</sup>	<del>{Water contact recreation<sup>b</sup>, noncontact recreation.}</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>{wildlife propagation and stock watering.}</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	--  --	≤126  ≤410	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</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. 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:  
445A.148

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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  $\Delta T^a$	   $\Delta T = 0^\circ C$	Nov.-May: $\leq 13^\circ C$  June: $\leq 17^\circ C$  July: $\leq 21^\circ C$  Aug.-Oct.: $\leq 22^\circ C$  $\Delta T \leq 2^\circ C$	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
pH Units	--  --	S.V.: 6.5 - 9.0  $\Delta pH: \pm 0.5$ Max.	<del>Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>;</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>,</i> aquatic life, irrigation, <del>stock watering;</del> <i>watering of livestock,</i> municipal or domestic supply and industrial supply.

Total Phosphates (as P) - mg/l	A-Avg.: ≤0.036 S.V.: ≤0.05	A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup></del> , <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	A-Avg.: ≤0.6 S.V.: ≤1.0	Nitrate S.V.: ≤10 Nitrite S.V.: ≤0.6 <del>Ammonia S.V.: ≤0.02 (un-ionized)}</del>	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> , <del>water contact recreation, stock watering, wildlife propagation and noncontact recreation.</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: Nov.-May: ≥6.0 Jun.-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>water contact recreation, wildlife propagation, stock watering.</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock,</i> municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	-- --	S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU	--		Aquatic life <sup>b</sup> and municipal or domestic supply.

	--	S.V.: ≤10	
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤375 S.V.: ≤420	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Chlorides - mg/l	A-Avg.: ≤6 S.V.: ≤7	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation.</del> <i>propagation of wildlife</i> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Sulfate - mg/l	-- --	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤1	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	-- --	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤50 S.V.: ≤90	≤200/400 <sup>c</sup>	<del>Water contact recreation<sup>b</sup>, noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i>			

<i>(No./100 ml)</i>			<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Annual Geometric Mean</i>	--	<i>≤126</i>	
<i>Single Value</i>	--	<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. 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:  
445A.149

## STANDARDS OF WATER QUALITY

### Carson River

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  $\Delta T^a$	$\Delta T = 0^\circ C$	Nov.-May: $\leq 13^\circ C$  June: $\leq 17^\circ C$  July: $\leq 21^\circ C$  Aug.-Oct.: $\leq 22^\circ C$  $\Delta T \leq 2^\circ C$	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
PH Units	--  --	S.V.: 6.5 - 9.0  $\Delta pH: \pm 0.5$ Max.	<del>Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>;</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>,</i> aquatic life, irrigation, <del>stock watering;</del> <i>watering of livestock,</i> municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	A-Avg.: $\leq 0.3$  S.V.: $\leq 0.65$	A-Avg.: $\leq 0.10$	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup>;</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: $\leq 0.5$  S.V.: $\leq 1.1$	Nitrate S.V.: $\leq 10$  Nitrite S.V.: $\leq 0.6$  <del>Ammonia S.V.: <math>\leq 0.2</math></del>  <del>(un-ionized)</del>	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> , <del>water contact recreation, stock watering, wildlife propagation and noncontact recreation.</del> <i>recreation involving contact with the water,</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
			<i>watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: Nov.-May: ≥6.0 Jun.-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>nonecontact recreation-</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	-- --	S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU	A-Avg.: ≤5 S.V.: ≤8	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved	A-Avg.: ≤145	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Solids - mg/l	S.V.: ≤185		<del>{stock watering.}</del> <i>watering of livestock.</i>
Chlorides - mg/l	A-Avg.: ≤3 S.V.: ≤5	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>{wildlife propagation.}</del> <i>propagation of wildlife</i> , irrigation and <del>{stock watering.}</del> <i>watering of livestock.</i>
Sulfate - mg/l	-- S.V.: ≤3	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	-- --	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>{wildlife propagation.}</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤40 S.V.: ≤60	≤200/400 <sup>c</sup>	<del>{Water contact recreation<sup>b</sup>; noncontact recreation.}</del> <i>Recreation involving contact with the water, recreation not involving contact with the water</i> , municipal or domestic supply, irrigation, <del>{wildlife propagation and stock watering.}</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i>			

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  $\Delta T^a$	   $\Delta T = 0^\circ C$	Nov.-May: $\leq 13^\circ C$  June: $\leq 17^\circ C$  July: $\leq 21^\circ C$  Aug.-Oct.: $\leq 22^\circ C$  $\Delta T \leq 2^\circ C$	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
pH Units	7.5 - 8.6  --	S.V.: 6.5 - 9.0  $\Delta pH: \pm 0.5$ Max.	<del>Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>;</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>,</i> aquatic life, irrigation, <del>stock watering.</del> <i>watering of livestock,</i> municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	--  --	A-Avg.: $\leq 0.10$	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup>;</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>

Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤0.4 S.V.: ≤0.5	Nitrate S.V.: ≤10 Nitrite S.V.: ≤0.6 <del>{Ammonia S.V.: ≤0.2 (un-ionized)}</del>	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> , <del>{water contact recreation, stock watering, wildlife propagation and noncontact recreation.}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: Nov.-May: ≥6.0 Jun.-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>{water contact recreation, wildlife propagation, stock watering.}</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>{noncontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	-- --	S.V.: ≤80	Aquatic life <sup>b</sup> .
Turbidity - NTU	-- --	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤120 S.V.: ≤175	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>{stock watering.}</del> <i>watering of livestock.</i>

Chlorides - mg/l	A-Avg.: ≤6 S.V.: ≤10	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation.</del> <i>propagation of wildlife</i> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Sulfate - mg/l	-- --	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	-- --	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤20 S.V.: ≤85	≤200/400 <sup>c</sup>	<del>Water contact recreation<sup>b</sup>, noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water</i> , municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	≤126 ≤410	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</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. 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:  
445A.151

STANDARDS OF WATER QUALITY

Carson River

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C-		Nov.-May: ≤13°C	Aquatic life <sup>b</sup> and <del>water contact recreation.</del>



Dissolved Oxygen - mg/l	-- --	S.V.: Nov.-May: $\geq 6.0$ Jun.-Oct.: $\geq 5.0$	Aquatic life <sup>b</sup> , <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>noncontact recreation,</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	-- --	S.V.: $\leq 80$	Aquatic life <sup>b</sup> .
Turbidity - NTU	-- --	S.V.: $\leq 10$	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: $\leq 75$	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: $\leq 180$ S.V.: $\leq 205$	A-Avg.: $\leq 500$	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering,</del> <i>watering of livestock.</i>
Chlorides - mg/l	A-Avg.: $\leq 8$ S.V.: $\leq 10$	S.V.: $\leq 250$	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation,</del> <i>propagation of wildlife</i> , irrigation and <del>stock watering,</del> <i>watering of livestock.</i>
Sulfate - mg/l	-- --	S.V.: $\leq 250$	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: $\leq 2$	A-Avg.: $\leq 8$	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity	--	less than 25% change	Aquatic life <sup>b</sup> and <del>wildlife propagation,</del>

(as CaCO <sub>3</sub> ) - mg/l	--	from natural conditions	<i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤50  --	≤200/400°	<del>{Water contact recreation<sup>b</sup>, noncontact recreation.}</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>{wildlife propagation and stock watering.}</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	--  --	≤126  ≤410	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</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. 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:

## 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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  $\Delta T^a$	   $\Delta T = 0^\circ\text{C}$	Nov.-Apr.: $\leq 13^\circ\text{C}$ May-June: $\leq 17^\circ\text{C}$ Jul.-Oct.: $\leq 23^\circ\text{C}$  $\Delta T \leq 2^\circ\text{C}$	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
pH Units	7.4 - 8.5  --	S.V.: 6.5 - 9.0  $\Delta\text{pH}: \pm 0.5 \text{ Max.}$	<del>Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>;</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>,</i> aquatic life, irrigation, <del>stock watering.</del> <i>watering of livestock,</i> municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	--  --	A-Avg.: $\leq 0.10$	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup>;</del> <i>recreation involving contact with the water<sup>b</sup>,</i>

			municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤0.8 S.V.: ≤1.3	Nitrate S.V.: ≤10 Nitrite S.V.: ≤06 <del>Ammonia S.V.: ≤.02</del> (un-ionized)}	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> , <del>water contact recreation, stock watering, wildlife propagation and noncontact recreation.</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: Nov.-Apr.: ≥6.0 May-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	-- --	S.V.: ≤80	Aquatic life <sup>b</sup> .
Turbidity - NTU	-- --	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.

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

<i>Mean</i>	--	<i>≤126</i>	
<i>Single Value</i>	--	<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. 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:  
445A.153

## STANDARDS OF WATER QUALITY

### Carson River

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

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

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

Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	-- --	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	-- --	≤200/400 <sup>c</sup>	<del>Water contact recreation<sup>b</sup>, noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i> (No./100 ml) <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	≤126 ≤410	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</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. 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:  
445A.154

## STANDARDS OF WATER QUALITY

### Carson River

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  $\Delta T^a$	$\Delta T = 0^\circ\text{C}$	Nov.-Apr.: $\leq 13^\circ\text{C}$ May-June: $\leq 17^\circ\text{C}$ Jul.-Oct.: $\leq 23^\circ\text{C}$ $\Delta T \leq 2^\circ\text{C}$	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
pH Units	7.4 - 8.5  --	S.V.: 6.5 - 9.0 $\Delta\text{pH}: \pm 0.5 \text{ Max.}$	<del>Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>.</del> <i>Recreation involving contact with the water<sup>b</sup>,            propagation of wildlife<sup>b</sup>, aquatic life, irrigation,  <del>stock watering,</del> watering of livestock, municipal            or domestic supply and industrial supply.</i>

Total Phosphates (as P) - mg/l	-- --	A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>;</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>{noncontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤0.8 S.V.: ≤1.3	Nitrate S.V.: ≤10 Nitrite S.V.: ≤0.06 <del>{Ammonia S.V.: ≤0.2 (un-ionized)}</del>	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> , <del>{water contact recreation, stock watering, wildlife propagation and noncontact recreation.}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: Nov.-Apr.: ≥6.0 May-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>{water contact recreation, wildlife propagation, stock watering.}</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock,</i> municipal or domestic supply and <del>{noncontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	-- --	S.V.: ≤80	Aquatic life <sup>b</sup> .

Turbidity - NTU	-- --	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤285 S.V.: ≤360	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Chlorides - mg/l	A-Avg.: ≤17 S.V.: ≤23	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation.</del> <i>propagation of wildlife</i> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Sulfate - mg/l	A-Avg.: ≤24 S.V.: ≤100	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	-- --	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤110 S.V.: ≤295	≤200/400 <sup>c</sup>	<del>Water contact recreation<sup>b</sup>, noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water</i> , municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>

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

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. 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 °C- Maximum  $\Delta T^a$	  $\Delta T = 0^\circ\text{C}$	Nov.-May: $\leq 18^\circ\text{C}$  Jun.Oct.: $\leq 23^\circ\text{C}$  $\Delta T \leq 2^\circ\text{C}$	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
pH Units	7.4 - 8.4  --	S.V.: 6.5 - 9.0  $\Delta\text{pH}: \pm 0.5 \text{ Max.}$	<del>Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>;</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>,</i> aquatic life, irrigation, <del>stock watering;</del> <i>watering of livestock,</i> municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	--  --	A-Avg.: $\leq 0.10$	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup>;</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: $\leq 1.3$  S.V.: $\leq 1.7$	Nitrate S.V.: $\leq 10$  Nitrite S.V.: $\leq 0.6$  <del>Ammonia S.V.: <math>\leq 0.2</math> (un-ionized)}</del>	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> , <del>water contact recreation, stock watering, wildlife propagation and noncontact recreation.</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife</i>

			<i>and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: ≥5.0	Aquatic life <sup>b</sup> , <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>noncontact recreation,</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	-- --	S.V.: ≤80	Aquatic life <sup>b</sup> .
Turbidity - NTU	-- --	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤260 S.V.: ≤375	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering,</del> <i>watering of livestock.</i>
Chlorides - mg/l	A-Avg.: ≤13 S.V.: ≤24	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation,</del> <i>propagation of wildlife</i> , irrigation and <del>stock watering,</del> <i>watering of livestock.</i>

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  ΔT <sup>a</sup>	   ΔT = 0°C	Nov.-Mar.: ≤11°C Apr.-Jun.: ≤24°C Jul.-Oct.: ≤28°C  ΔT ≤2°C	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
<del>[PH]</del> pH Units	7.5 - 8.6		<del>Water contact recreation<sup>b</sup>; wildlife propagation<sup>b</sup>.</del>

	--	S.V.: 6.5 - 9.0 ΔpH: ±0.5 Max.	<i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life, irrigation, <del>stock watering,</del> watering of livestock, municipal or domestic supply and industrial supply.</i>
Total Phosphates (as P) - mg/l	-- --	A-Avg.: ≤0.1	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup>,</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>noncontact recreation,</del> recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤1.2 S.V.: ≤1.6	Nitrate S.V.: ≤10 Nitrite S.V.: ≤1.0 <del>Ammonia S.V.: ≤.02 (un-ionized)}</del>	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> , <del>water contact recreation, stock watering, wildlife propagation and noncontact recreation,</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: ≥5.0	Aquatic life <sup>b</sup> , <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and <del>noncontact recreation,</del> recreation not involving contact with the water.</i>

Suspended Solids - mg/l	-- --	S.V.: ≤80	Aquatic life <sup>b</sup> .
Turbidity - NTU	A-Avg.: ≤12 S.V.: ≤25	S.V.: ≤50	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤250 S.V.: ≤400	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Chlorides - mg/l	A-Avg.: ≤10 S.V.: ≤18	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation.</del> <i>propagation of wildlife</i> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Sulfate - mg/l	-- --	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	-- --	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤50 S.V.: ≤280	≤200/400 <sup>c</sup>	<del>Water contact recreation<sup>b</sup>, noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply,

			irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	

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:  
445A.157

## STANDARDS OF WATER QUALITY

### Carson River

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  $\Delta T^a$	   $\Delta T = 0^\circ\text{C}$	Nov.-Mar.: $\leq 11^\circ\text{C}$  Apr.-Jun.: $\leq 24^\circ\text{C}$  Jul.-Oct.: $\leq 28^\circ\text{C}$  $\Delta T \leq 2^\circ\text{C}$	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
pH Units	7.5 - 8.5  --	S.V.: 6.5 - 9.0  $\Delta\text{pH}: \pm 0.5 \text{ Max.}$	<del>Water contact recreation<sup>b</sup>; wildlife propagation<sup>b</sup>;</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life, irrigation, <del>stock watering;</del> watering of livestock, municipal or domestic supply and industrial supply.</i>
Total Phosphates (as P) - mg/l	--  --	A-Avg.: $\leq 0.1$	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup>;</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>noncontact recreation.</del> recreation not involving contact with the water.</i>
Nitrogen Species	Total Nitrogen	Nitrate S.V.: $\leq 10$	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> ,

(N) - mg/l	A-Avg.: ≤0.6 S.V.: ≤1.1	Nitrite S.V.: ≤1.0 <del>{Ammonia S.V.: ≤0.02 (un-ionized)}</del>	<del>{water contact recreation, stock watering, wildlife propagation and noncontact recreation.}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: ≥5.0	Aquatic life <sup>b</sup> , <del>{water contact recreation, wildlife propagation, stock watering,}</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and <del>{noncontact recreation.}</del> recreation not involving contact with the water.</i>
Suspended Solids - mg/l	-- --	S.V.: ≤80	Aquatic life <sup>b</sup> .
Turbidity - NTU	A-Avg.: ≤25 --	S.V.: ≤50	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: ≤250 S.V.: ≤380	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>{stock watering.}</del> <i>watering of livestock.</i>

Chlorides - mg/l	A-Avg.: ≤10 S.V.: ≤18	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation.</del> <i>propagation of wildlife</i> , irrigation and <del>stock watering.</del> <i>watering of livestock</i> .
Sulfate - mg/l	A-Avg.: ≤100 S.V.: ≤140	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤2	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	-- --	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife</i> .
Fecal Coliform- No./100 ml	A.G.M.: ≤90 S.V.: ≤240	≤200/400 <sup>c</sup>	<del>Water contact recreation<sup>b</sup>, noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water</i> , municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock</i> .
<i>E. Coli</i> (No./100 ml) <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	≤126 ≤410	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</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. 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:  
445A.158

STANDARDS OF WATER QUALITY

Carson River

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C-		Nov.-Mar.: ≤11°C	Aquatic life <sup>b</sup> and <del>water contact recreation.</del>

Maximum $\Delta T^a$	$\Delta T = 0^\circ\text{C}$	Apr.-Jun.: $\leq 24^\circ\text{C}$ Jul.-Oct.: $\leq 28^\circ\text{C}$ $\Delta T \leq 2^\circ\text{C}$	<i>recreation involving contact with the water.</i>
<del>{PH}</del> <i>pH</i> Units	-- --	S.V.: <del>{7.0-8.3}</del> 6.5-9.0 $\Delta\text{pH}: \pm 0.5$ Max.	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>}</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life, irrigation, watering of livestock, municipal or domestic supply and industrial supply.</i>
Total Phosphates (as P) - mg/l	-- --	S.V.: $\leq 0.06$	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>}</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and noncontact recreation.</i> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: $\leq 1.3$ S.V.: $\leq 1.7$	Nitrate S.V.: $\leq 10$ Nitrite S.V.: $\leq 1.0$ <del>{Ammonia S.V.: <math>\leq 0.02</math> (un-ionized)}</del>	Aquatic life <sup>b</sup> , municipal or domestic supply <sup>b</sup> , <del>{water contact recreation, stock watering, wildlife propagation and noncontact recreation}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia</i> (as N) - mg/l	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved	--		Aquatic life <sup>b</sup> , <del>{water contact recreation, wildlife</del>

Oxygen - mg/l	--	S.V.: $\geq 5.0$	<del>propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>{noncontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l		S.V.: $\leq 25$	Aquatic life <sup>b</sup> .
Turbidity - NTU	A-Avg.: $\leq 15$ S.V.: $\leq 27$	S.V.: $\leq 50$	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: $\leq 75$	Municipal or domestic supply <sup>b</sup> .
Total Dissolved Solids - mg/l	A-Avg.: $\leq 175$ S.V.: $\leq 225$	A-Avg.: $\leq 500$	Municipal or domestic supply <sup>b</sup> , irrigation and <del>{stock watering.}</del> <i>watering of livestock.</i>
Chlorides - mg/l	A-Avg.: $\leq 9$ S.V.: $\leq 15$	S.V.: $\leq 250$	Municipal or domestic supply <sup>b</sup> , <del>{wildlife propagation.}</del> <i>propagation of wildlife</i> , irrigation and <del>{stock watering.}</del> <i>watering of livestock.</i>
Sulfate - mg/l	A-Avg.: $\leq 35$ S.V.: $\leq 50$	S.V.: $\leq 250$	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: $\leq 2$	A-Avg.: $\leq 8$	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	-- --	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>{wildlife propagation.}</del> <i>propagation of wildlife.</i>

Fecal Coliform- No./100 ml	A.G.M.: ≤25  S.V.: ≤75	≤200/400 <sup>c</sup>	<del>{Water contact recreation<sup>b</sup>, noncontact recreation.}</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>{wildlife propagation and stock watering.}</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	--  --	≤126  ≤235	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</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. 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.

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	July-Oct.: $\leq 22^{\circ}\text{C}$  $\Delta T = 0^{\circ}\text{C}^{\text{a}}$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$  May-Jun.: $\leq 17^{\circ}\text{C}$  Jul.-Oct.: $\leq 23^{\circ}\text{C}$  $\Delta T \leq 2^{\circ}\text{C}^{\text{a}}$	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value	--	Within range  6.5-9.0 SU  $\Delta\text{pH}: \pm 0.5 \text{ SU Max.}$	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	--  --	  $\leq 0.1 \text{ mg/l}$	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)	Total Nitrogen		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.
Annual Average	≤0.6 mg/l		
Single Value	≤0.9 mg/l	Nitrate: ≤10 mg/l	
Single Value		Nitrite: ≤.06 mg/l	
<del>{Single Value}</del>		<del>{Ammonia: ≤.02 mg/l (un-ionized)}</del>	
<i>Total Ammonia (as N) - mg/l</i>	--	<i>c</i>	<i>Propagation of aquatic life.</i>
Dissolved Oxygen	--	Nov.-May: ≥6.0 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.
Single Value	--	Jun.-Oct.: ≥5.0 mg/l	
Suspended Solids			Propagation of aquatic life.
Annual Average	≤60 mg/l		
Single Value		≤80 mg/l	
Turbidity			Propagation of aquatic life and municipal or domestic supply, or both.
Single Value	--	<i>b</i>	
Color			Municipal or domestic supply, or both, and

Single Value	≤26 PCU	≤75 PCU	propagation of aquatic life.
Total Dissolved Solids			Municipal or domestic supply, or both, irrigation and watering of livestock.
Annual Average	≤165 mg/l	≤500 mg/l	
Single Value	≤220 mg/l		
Chloride			Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.
Annual Average	≤15 mg/l		
Single Value	≤20 mg/l	≤250 mg/l	
Sulfate			Municipal or domestic supply, or both.
Single Value	≤25 mg/l	≤250 mg/l	
Sodium Adsorption Ratio	--		Irrigation and municipal or domestic supply, or both.
Annual Average		≤8	
Alkalinity (as CaCO <sub>3</sub> )	--	less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
<del>[Escherichia coli]</del> <i>E. Coli</i> (No./100 ml)			Recreation involving contact with the water <del>†</del> <i>and</i> recreation not involving contact with the water . <del>†, municipal or domestic supply, or both, irrigation and watering of livestock.</del>
Annual Geometric Mean	--	<del>†126 MF/100 ml</del> <del>235 MF/100 ml</del> ≤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. 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	$\Delta T = 0^{\circ}\text{C}^a$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$ $\Delta T \leq 2^{\circ}\text{C}^a$	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value	--	Within range 6.5-9.0 SU	Propagation of aquatic life, recreation involving contact with the water, propagation of wildlife,

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)
		ΔpH: ±0.5 SU Max.	irrigation, watering of livestock, municipal or domestic supply, or both, and industrial supply.
Total Phosphates (as P) Annual Average Single Value	-- --	≤0.05 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 <del>{Single Value}</del>	Total Nitrogen ≤0.6 mg/l ≤1.0 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤.06 mg/l <del>{Ammonia: ≤.02 mg/l (un-ionized)}</del>	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.
<i>Total Ammonia (as N) - mg/l</i>	--	<i>d</i>	<i>Propagation of aquatic life.</i>
Dissolved Oxygen Single Value	-- --	Nov.-May: ≥6.0 mg/l June-Oct. <sup>b</sup> : ≥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

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)
			contact with the water.
Suspended Solids Annual Average Single Value	≤0.6 mg/l ≤9.0 mg/l	≤25 mg/l	Propagation of aquatic life.
Turbidity Annual Average Single Value	≤3.0 NTU ≤5.0 NTU	c	Propagation of aquatic life and municipal or domestic supply, or both.
Color Single Value	≤21 PCU	≤75 PCU	Municipal or domestic supply, or both, and propagation of aquatic life.
Total Dissolved Solids Annual Average Single Value	≤105 mg/l ≤120 mg/l	≤500 mg/l	Municipal or domestic supply, or both, irrigation and watering of livestock.
Chloride Annual Average Single Value	≤7 mg/l ≤10 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.

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

- 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:  
445A.162

STANDARDS OF WATER QUALITY

West Walker River

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0^{\circ}\text{C}^{\text{a}}$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$ $\Delta T \leq 2^{\circ}\text{C}^{\text{a}}$	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value	-- --	Within range 6.5 - 9.0 SU $\Delta\text{pH}: \pm 0.5 \text{ SU Max.}$	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			Propagation of aquatic life, recreation involving

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)
(as P) Annual Average Single Value	≤0.07 mg/l ≤0.10 mg/l	≤0.1 mg/l	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 <del>{Single Value}</del>	Total Nitrogen ≤0.6 mg/l ≤1.0 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤.06 mg/l <del>{Ammonia: ≤.02 mg/l (un-ionized)}</del>	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.
<i>Total Ammonia (as N) - mg/l</i>	--	<i>c</i>	<i>Propagation of aquatic life.</i>
Dissolved Oxygen Single Value	-- --	Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥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			Propagation of aquatic life.

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)
Solids Single Value	--	≤80 mg/l	
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 ≤260 mg/l	≤500 mg/l	Municipal or domestic supply, or both, irrigation and watering of livestock.
Chloride Annual Average Single Value	≤16 mg/l ≤30 mg/l	-- ≤250 mg/l	Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.
Sulfate Single Value	--	≤250 mg/l	Municipal or domestic supply, or both.
Sodium	--		Irrigation, and municipal or domestic supply, or

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

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	$\Delta T = 0^{\circ}\text{C}^{\text{a}}$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$  $\Delta T \leq 2^{\circ}\text{C}^{\text{a}}$	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value	--	Within range 6.5 - 9.0 SU $\Delta\text{pH}: \pm 0.5 \text{ SU Max.}$	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)			Propagation of aquatic life, recreation involving contact with the water, municipal or domestic

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)
Annual Average Single Value	≤0.15 mg/l	≤0.10 mg/l	supply, or both, and recreation not involving contact with the water.
Nitrogen Species (as N) Annual Average Single Value Single Value <del>{Single Value}</del>	Total Nitrogen ≤1.0 mg/l ≤1.2 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤.06 mg/l <del>{Ammonia: ≤.02 mg/l (un-ionized)}</del>	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.
<i>Total Ammonia (as N) - mg/l</i>	--	<i>c</i>	<i>Propagation of aquatic life.</i>
Dissolved Oxygen Single Value	-- --	Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥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.

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)
Single Value		≤80 mg/l	
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.
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	--		Irrigation and municipal or domestic supply, or both.

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)
Annual Average		≤8	
Alkalinity (as CaCO <sub>3</sub> )	--	less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
<del>E. coli</del> <i>E. Coli</i> (No./100 ml) Annual Geometric Mean Single Value	-- --	<del>126 MF/100 ml</del> <del>235 MF/100 ml</del> ≤126 ≤410	Recreation involving contact with the water <del>and</del> recreation not involving contact with the water . <del>for municipal or domestic supply, or both, irrigation and watering of livestock.</del>

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:  
445A.164

### STANDARDS OF WATER QUALITY

## Sweetwater Creek

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES  As designated in NAC 445A.159  (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0^{\circ}\text{C}^{\text{a}}$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$ $\Delta T \leq 2^{\circ}\text{C}^{\text{a}}$	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value	--	Within range 6.5 - 9.0 SU $\Delta\text{pH}: \pm 0.5 \text{ SU Max.}$	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	--  --	  $\leq 0.1 \text{ mg/l}$	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with the water.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Nitrogen Species (as N) Annual Average Single Value Single Value <del>{Single Value}</del>	Total Nitrate  ≤0.25 mg/l ≤0.45 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤0.06 mg/l <del>{Ammonia: ≤0.02 mg/l (un-ionized)}</del>	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.
<i>Total Ammonia (as N) - mg/l</i>	--	<i>c</i>	<i>Propagation of aquatic life.</i>
Dissolved Oxygen Single Value	-- --	Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥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	≤45 mg/l	≤80 mg/l	Propagation of aquatic life.

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)
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	≤220 mg/l ≤300 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 Adsorption Ratio Annual Average	--	≤8	Irrigation and municipal or domestic supply, or both.

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

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:  
445A.165

## 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.

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	$\Delta T = 0^{\circ}\text{C}^{\text{a}}$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$ $\Delta T \leq 2^{\circ}\text{C}^{\text{a}}$	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value	--	Within range 6.5 - 9.0 SU $\Delta\text{pH}: \pm 0.5 \text{ SU Max.}$	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	--	$\leq 0.1 \text{ mg/l}$	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)	Total Nitrogen		Municipal or domestic supply, or both, propagation of aquatic life, recreation involving

Annual Average	≤0.8 mg/l		contact with the water, watering of livestock,
Single Value	≤1.4 mg/l	Nitrate: ≤10 mg/l	propagation of wildlife and recreation not
Single Value		Nitrite: ≤.06 mg/l	involving contact with the water.
<del>{Single Value}</del>		<del>{Ammonia: ≤.02 mg/l</del>	
		<del>(un-ionized)}</del>	
<i>Total Ammonia</i>	--	<i>c</i>	<i>Propagation of aquatic life.</i>
<i>(as N) - mg/l</i>			
Dissolved		Nov.-May: ≥6.0 mg/l	Propagation of aquatic life, recreation involving
Oxygen	--	Jun.-Oct.: ≥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	≤30 mg/l	≤80 mg/l	
Turbidity			Propagation of aquatic life and municipal or
Single Value	--	<i>b</i>	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.
Annual Average	≤175 mg/l	≤500 mg/l	

Single Value	≤210 mg/l		
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	≤26 mg/l	≤250 mg/l	Municipal or domestic supply, or both.
Sodium Adsorption Ratio Annual Average	≤2	≤8	Irrigation and municipal or domestic supply, or both.
Alkalinity (as CaCO <sub>3</sub> )	--	less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
<del>Escherichia coli</del> <i>E. Coli</i> (No./100 ml) Annual Geometric Mean Single Value	-- -- --	<del>126 MF/100 ml</del> <del>235 MF/100 ml</del> ≤126 ≤410	Recreation involving contact with the water <del>and</del> <i>and</i> recreation not involving contact with the water . <del>[- municipal or domestic supply, or both,</del> <del>irrigation and watering of livestock.]</del>

- 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	$\Delta T = 0^{\circ}\text{C}^a$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$ $\Delta T \leq 2^{\circ}\text{C}^a$	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value	--	Within range 6.5 - 9.0 SU $\Delta\text{pH}: \pm 0.5 \text{ SU Max.}$	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	--		Propagation of aquatic life, recreation involving

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)
(as P) Annual Average	--	≤0.10 mg/l	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 <del>{Single Value}</del>	Total Nitrogen  ≤0.9 mg/l ≤1.7mg/l	Nitrate: ≤10 mg/l Nitrite: ≤ .06 mg/l <del>{Ammonia: ≤ .02 mg/l (un-ionized)}</del>	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.
<i>Total Ammonia (as N) - mg/l</i>	--	<i>c</i>	<i>Propagation of aquatic life.</i>
Dissolved Oxygen Single Value	--	Nov.-May: ≥6.0 mg/l June-Oct.: ≥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.

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)
Single Value	--	≤80 mg/l	
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	≤320 mg/l ≤390 mg/l	≤500 mg/l	Municipal or domestic supply, or both, irrigation and watering of livestock.
Chloride Annual Average Single Value	≤13 mg/l ≤19 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.

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)
Alkalinity (as CaCO <sub>3</sub> )	--	less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
<del>{Escherichia coli}</del> <i>E. Coli</i> (No./100 ml) Annual Geometric Mean Single Value	-- -- --	<del>{126 MF/100 ml</del> <del>235 MF/100 ml}</del> ≤126 ≤410	Recreation involving contact with the water <del>{}</del> and recreation not involving contact with the water . <del>{, municipal or domestic supply, or both, irrigation and watering of livestock.}</del>

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	$\Delta T = 0^{\circ}\text{C}^{\text{a}}$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$ $\Delta T \leq 2^{\circ}\text{C}^{\text{a}}$	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value	--	Within range 6.5 - 9.0 SU $\Delta\text{pH}: \pm 0.5 \text{ SU Max.}$	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	--	$\leq 0.16 \text{ mg/l}$ $\leq 0.39 \text{ mg/l}$	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with the water.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Nitrogen Species (as N) Annual Average Single Value Single Value <del>{Single Value}</del>	Total Nitrogen  ≤0.9 mg/l ≤1.7 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤.06 mg/l <del>{Ammonia: ≤.02 mg/l (un-ionized)}</del>	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.
<i>Total Ammonia (as N) - mg/l</i>	--	<i>c</i>	<i>Propagation of aquatic life.</i>
Dissolved Oxygen Single Value	-- --	Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥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.

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)
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, propagation of aquatic life.
Total Dissolved Solids Annual Average Single Value	≤320 mg/l ≤390 mg/l	≤500 mg/l	Municipal or domestic supply, or both, irrigation and watering of livestock.
Chloride Annual Average Single Value	≤13 mg/l ≤19 mg/l	-- ≤250 mg/l	Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.
Sulfate Single Value	≤44 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.

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)
Alkalinity (as CaCO <sub>3</sub> )	--	less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
<del>Escherichia coli</del> <del>Annual Average</del> <i>E. Coli</i> (No./100 ml) Annual Geometric Mean Single Value	-- --	<del>126 MF/100 ml</del> <del>235 MF/100 ml</del> ≤126 ≤410	Recreation involving contact with the water <del>and</del> recreation not involving contact with the water . <del>for municipal or domestic supply, or both, irrigation and watering of livestock.</del>

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.

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	$\Delta T = 0^{\circ}\text{C}^{\text{a}}$	Nov.-Mar.: $\leq 13^{\circ}\text{C}$ Apr.-Jun.: $\leq 23^{\circ}\text{C}^{\text{b}}$ Jul.-Oct.: $\leq 28^{\circ}\text{C}$ $\Delta T \leq 2^{\circ}\text{C}$	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value	--	Within range 6.5 - 9.0 SU $\Delta\text{pH}: \pm 0.5 \text{ SU Max.}$	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	--	$\leq 0.26 \text{ mg/l}$ $\leq 0.40 \text{ mg/l}$	Propagation of aquatic life, recreation involving contact with the water, municipal or domestic supply, or both, and recreation not involving contact with the water.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.159 (Most stringent use listed first)
Nitrogen Species (as N) Annual Average Single Value Single Value <del>{Single Value}</del>	Total Nitrogen  ≤1.2 mg/l ≤1.5 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤1 <sup>e</sup> mg/l <del>{Ammonia: ≤.06 mg/l (un-ionized)}</del>	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.
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Propagation of aquatic life.</i>
Dissolved Oxygen Single Value	-- --	Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥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.

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)
Turbidity Single Value	--	d	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	≤400 mg/l ≤450 mg/l	≤500 mg/l	Municipal or domestic supply, or both, irrigation 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.

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)
Alkalinity (as CaCO <sub>3</sub> )	--	less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
<del>{Escherichia coli}</del> <i>E. Coli</i> (No./100 ml) Annual Geometric Mean Single Value		<del>{26 MF/100 ml}</del> <del>235 MF/100 ml</del> ≤126 ≤410	Recreation involving contact with the water <del>{}</del> and recreation not involving contact with the water . <del>{, municipal or domestic supply, or both, irrigation and watering of livestock.}</del>

- 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:  
445A.169

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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES Designated in NAC 445A.159 (Most stringent use listed first)
Temperature Single Value	$\Delta T = 0^{\circ}\text{C}^{\text{a}}$	Nov.-Apr.: $\leq 13^{\circ}\text{C}$ May-Jun.: $\leq 17^{\circ}\text{C}$ Jul.-Oct.: $\leq 23^{\circ}\text{C}$ $\Delta T \leq 2^{\circ}\text{C}^{\text{a}}$	Propagation of aquatic life and recreation involving contact with the water.
pH Single Value	--	Within range 6.5 - 9.0 SU $\Delta\text{pH}: \pm 0.5 \text{ SU Max.}$	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)			Propagation of aquatic life, recreation involving contact with the water, municipal or domestic

Annual Average Single Value	≤0.13 mg/l	≤0.1 mg/l	supply, or both, and recreation not involving contact with the water.
Nitrogen Species (as N) Annual Average Single Value Single Value <del>{Single Value}</del>	Total Nitrate  ≤0.20 mg/l ≤0.27 mg/l	Nitrate: ≤10 mg/l Nitrite: ≤0.06 mg/l <del>{Ammonia: ≤.02 mg/l (un-ionized)}</del>	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.
<i>Total Ammonia (as N) - mg/l</i>	--	<i>c</i>	<i>Propagation of aquatic life.</i>
Dissolved Oxygen Single Value	-- --	Nov.-May: ≥6.0 mg/l Jun.-Oct.: ≥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	--	<i>b</i>	Propagation of aquatic life and municipal or domestic supply, or both.
Color	--		Municipal or domestic supply, or both, and

Single Value		≤75 PCU	propagation of aquatic life.
Total Dissolved Solids			Municipal or domestic supply, or both, irrigation and watering of livestock.
Annual Average	≤110 mg/l	≤500 mg/l	
Single Value	≤130 mg/l		
Chloride			Municipal or domestic supply, or both, propagation of wildlife, irrigation and watering of livestock.
Annual Average	≤5 mg/l	--	
Single Value	≤7 mg/l	≤250 mg/l	
Sulfate	--		Municipal or domestic supply, or both.
Single Value		≤250 mg/l	
Sodium	--		Irrigation and municipal or domestic supply, or both.
Adsorption Ratio			
Annual Average		≤8	
Alkalinity (as CaCO <sub>3</sub> )	--	less than 25% change from natural conditions	Propagation of aquatic life and propagation of wildlife.
<del>Escherichia coli</del> <i>E. Coli</i> (No./100 ml)			Recreation involving contact with the water <del>and</del> <i>and</i> recreation not involving contact with the water. <del>[- municipal or domestic supply, or both, irrigation and watering of livestock.]</del>
Annual Geometric Mean		<del>126 MF/100 ml</del> <del>235 MF/100 ml</del> ≤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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES As designated in NAC 445A.1693 (Most stringent use listed first)
Temperature <sup>a</sup> Single Value	--	$\Delta T \leq 2^{\circ}\text{C}$	Propagation of aquatic life.
pH Single Value	--	Within range 6.5 - 9.7 SU	Propagation of aquatic life, recreation involving contact with the water and propagation of wildlife.

Dissolved Oxygen <sup>b</sup> Single Value	--	≥5 mg/l	Propagation of aquatic life, recreation involving contact with the water, recreation not involving contact with the water and propagation of wildlife.
Suspended Solids Single Value	--	≤25 mg/l	Propagation of aquatic life.
Nitrogen Species <del>{as-N}</del> (as N) Single Value Single Value	Total Inorganic Nitrogen: ≤0.3 mg/l	Nitrate ≤90 mg/l Nitrite ≤0.06 mg/l	Propagation of aquatic life and propagation of wildlife.
<i>Total Ammonia (as N) - mg/l</i>	--	<i>c</i>	<i>Propagation of aquatic life.</i>
Total Phosphorus <del>{as-P}</del> (as P) Single Value	--	≤0.82 mg/l	Propagation of aquatic life.
<del>{Escherichia} E. Coli (No./100 ml)</del> Annual Geometric Mean Single Value	-- --	≤126 <del>{MF/100 ml}</del> ≤235 <del>{MF/100 ml}</del>	Recreation involving contact with the water 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.

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:  
445A.171

STANDARDS OF WATER QUALITY

Chiatovich Creek

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  $\Delta T^a$	   $\Delta T = 0^\circ C$	Nov.-Apr.: $\leq 13^\circ C$  May-Jun.: $\leq 17^\circ C$  Jul.-Oct.: $\leq 23^\circ C$  $\Delta T \leq 2^\circ C$	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
pH Units			<del>Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>.</del>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
	--	S.V.: <del>{7.0-8.3}</del> 6.5-9.0 ΔpH: ±0.5 Max.	<i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life, irrigation, <del>{stock watering,}</del> watering of livestock, municipal or domestic supply and industrial supply.</i>
Total Phosphates (as P) - mg/l	A-Avg.: ≤04 S.V.: ≤06	A-Avg.: ≤0.1 --	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>,}</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>{noncontact recreation,}</del> recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤6 S.V.: ≤8	Nitrate S.V.: ≤10 Nitrite S.V.: ≤06 <del>{Ammonia S.V.: ≤02 (un-ionized)}</del>	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> , <del>{water contact recreation, stock watering, wildlife propagation and noncontact recreation,}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
		S.V.:	Aquatic life <sup>b</sup> , <del>{water contact recreation, wildlife</del>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Dissolved Oxygen - mg/l	--	Nov.-May: $\geq 6.0$ Jun.-Oct.: $\geq 5.0$	<del>propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>noncontact recreation,</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	--	S.V.: $\leq 25$	Aquatic life <sup>b</sup> .
Turbidity - NTU	--	S.V.: $\leq 10$	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	--	c	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved Solids - mg/l	A-Avg.: $\leq 50$ S.V.: $\leq 60$	A-Avg.: $\leq 500$ --	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering,</del> <i>watering of livestock.</i>
Chlorides - mg/l	A-Avg.: $\leq 2$ S.V.: $\leq 3$	-- S.V.: $\leq 250$	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation, irrigation and stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Sulfate - mg/l	A-Avg.: $\leq 4$ S.V.: $\leq 5$	-- S.V.: $\leq 250$	Municipal or domestic supply <sup>b</sup> .

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Sodium - SAR	A-Avg.: ≤1	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤100 S.V.: ≤200	≤200/400 <sup>d</sup>	<del>Water contact recreation<sup>b</sup>; noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i> (No./100 ml) <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	≤126 ≤410	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</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. 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:  
445A.172

### STANDARDS OF WATER QUALITY

#### Indian Creek

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum		Nov.-Apr.: ≤13°C May-Jun.: ≤17°C Jul.-Oct.: ≤23°C	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
$\Delta T^a$	$\Delta T = 0^\circ\text{C}$	$\Delta T \leq 2^\circ\text{C}$	
pH Units	--	S.V.: <del>{7.0-8.3}</del> 6.5-9.0 $\Delta\text{pH}: \pm 0.5$ Max.	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>}</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup></i> , aquatic life, irrigation, <del>{stock watering,}</del> <i>watering of livestock</i> , municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	-- S.V.: $\leq 0.13$	A-Avg.: $\leq 0.1$ --	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>}</del> <i>recreation involving contact with the water<sup>b</sup></i> , municipal or domestic supply and <del>{noncontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Nitrate  S.V.: $\leq 0.45$	Nitrate S.V.: $\leq 10$ Nitrite S.V.: $\leq 0.6$ <del>{Ammonia S.V.: <math>\leq 0.2</math></del> <del>(un-ionized)}</del>	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> , <del>{water contact recreation, stock watering, wildlife propagation and noncontact recreation.}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water</i>
<i>Total Ammonia</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Sulfate - mg/l	--	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	--	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤100 S.V.: ≤200	≤200/400 <sup>d</sup>	<del>Water contact recreation<sup>b</sup>; noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli (No./100 ml) Annual Geometric Mean Single Value</i>	-- --	≤126 ≤410	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</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. 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 °C- Maximum		Nov.-Apr.: ≤13°C May-Jun.: ≤17°C	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
$\Delta T^a$	$\Delta T = 0^\circ\text{C}$	Jul.-Oct.: $\leq 23^\circ\text{C}$ $\Delta T \leq 2^\circ\text{C}$	
pH Units	--	S.V.: <del>7.0-8.3</del> 6.5-9.0 $\Delta\text{pH}: \pm 0.5 \text{ Max.}$	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>}</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup></i> , aquatic life, irrigation, <del>{stock watering,}</del> <i>watering of livestock</i> , municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	A-Avg.: $\leq 0.13$ S.V.: $\leq 0.03$	A-Avg.: $\leq 0.1$ --	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>}</del> <i>recreation involving contact with the water<sup>b</sup></i> , municipal or domestic supply and <del>{noncontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Nitrate A-Avg.: $\leq 0.18$ S.V.: $\leq 0.22$	Nitrate S.V.: $\leq 10$ Nitrite S.V.: $\leq 0.06$ <del>{Ammonia S.V.: <math>\leq 0.02</math> (un-ionized)}</del>	Municipal or domestic supply <sup>b</sup> , aquatic life, <del>{water contact recreation, stock watering, wildlife propagation<sup>b</sup> and noncontact recreation.}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife<sup>b</sup> and recreation not involving contact with the water.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: Nov.-May: ≥6.0 Jun.-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>noncontact recreation,</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	--	S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU	--	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	--	<del>C</del> <i>c</i>	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved Solids - mg/l	A-Avg.: ≤135 S.V.: ≤150	A-Avg.: ≤500 --	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering,</del> <i>watering of livestock.</i>
Chlorides - mg/l	A-Avg.: ≤3 S.V.: ≤5	-- S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation, irrigation and stock watering,</del>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
			<i>propagation of wildlife, irrigation and watering of livestock.</i>
Sulfate - mg/l	--	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	--	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤100 S.V.: ≤200	≤200/400 <sup>d</sup>	<del>Water contact recreation<sup>b</sup>, noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	≤126 ≤410	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</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. 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:  
445A.175

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-		Nov.-Jun.: ≤21°C	Aquatic life <sup>b</sup> .

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Maximum $\Delta T^a$	$\Delta T = 0^\circ\text{C}$	Jul.-Oct.: $\leq 32^\circ\text{C}$ $\Delta T \leq 2^\circ\text{C}$	
pH Units	--	S.V.: <del>7.0</del> 6.5 - 9.0 $\Delta\text{pH}: \pm 0.5$ Max.	<del>Wildlife propagation<sup>b</sup></del> ; <i>Propagation of wildlife<sup>b</sup>, aquatic life<sup>b</sup>, noncontact recreation, irrigation, stock watering</i> ; <i>recreation not involving contact with the water, irrigation, watering of livestock and industrial supply.</i>
Total Phosphates (as P) - mg/l	--	A-Avg.: $\leq 0.1$	Aquatic life <sup>b</sup> and <del>noncontact recreation</del> ; <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: $\leq 0.9$ S.V.: $\leq 1.6$	Nitrate S.V.: $\leq 90$ Nitrite S.V.: $\leq 5.0$ <del>Ammonia S.V.: <math>\leq 0.6</math></del> <del>(un-ionized)</del>	Aquatic life <sup>b</sup> <del>stock watering, wildlife propagation and noncontact recreation</del> ; <i>watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia</i> (as N) - mg/l	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved			Aquatic life <sup>b</sup> , <del>noncontact recreation, wildlife</del>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Oxygen - mg/l	--	S.V.: $\geq 5.0$	<del>propagation and stock watering.</del> <i>recreation not involving contact with the water, propagation of wildlife and watering of livestock.</i>
Turbidity - NTU	--	e	Aquatic life <sup>b</sup> .
Color - PCU	--	d	Aquatic life <sup>b</sup> .
Total Dissolved Solids - mg/l	--	c	Irrigation <sup>b</sup> and <del>stock watering.</del> <i>watering of livestock.</i>
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: $\leq 300$ S.V.: $\leq 550$	A.G.M.: $\leq 1000$ S.V.: $\leq 2000$	<del>Noncontact recreation<sup>b</sup>, irrigation, wildlife propagation and stock watering.</del> <i>Recreation not involving contact with the water<sup>b</sup>, irrigation, propagation of wildlife and watering of livestock.</i>
<i>E. Coli (No./100 ml) Annual Geometric</i>	--	$\leq 630$	<i>Recreation not involving contact with the water<sup>b</sup>.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
<i>Mean</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. 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:  
445A.176

### 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- Maximum  $\Delta T^a$	   $\Delta T = 0^\circ\text{C}$	Nov.-Jun.: $\leq 21^\circ\text{C}$  Jul.-Oct.: $\leq 32^\circ\text{C}$  $\Delta T \leq 2^\circ\text{C}$	Aquatic life <sup>b</sup> .
pH - Standard Units	--	S.V.: <del>7.0</del> 6.5 - 9.0  $\Delta\text{pH}: \pm 0.5$ Max.	<del>Wildlife propagation<sup>b</sup>,</del> <i>Propagation of wildlife<sup>b</sup>,</i> aquatic life <sup>b</sup> , <del>noncontact recreation, irrigation,</del> <del>stock watering</del> <i>recreation not involving contact with the water, irrigation, watering of livestock and industrial supply.</i>
Total Phosphates (as P) - mg/l	A-Avg.: $\leq 0.6$  S.V.: $\leq 0.1$	A-Avg.: $\leq 0.1$  --	Aquatic life <sup>b</sup> and <del>noncontact recreation</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: $\leq 2.4$  S.V.: $\leq 3.2$	Nitrate S.V.: $\leq 90$  Nitrite S.V.: $\leq 5.0$  <del>Ammonia S.V.: <math>\leq 0.6</math></del> <del>(un-ionized)</del>	Aquatic life <sup>b</sup> <del>stock watering, wildlife propagation and noncontact recreation</del> , <i>watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia</i> (as N) - mg/l	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>

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 <sup>b</sup> , <del>noncontact recreation, wildlife propagation and stock watering.</del> <i>recreation not involving contact with the water, propagation of wildlife and watering of livestock.</i>
Turbidity - NTU	--	e	Aquatic life <sup>b</sup> .
Color - PCU	--	d	Aquatic life <sup>b</sup> .
Total Dissolved Solids - mg/l	--	c	Irrigation <sup>b</sup> and <del>stock watering.</del> <i>watering of livestock.</i>
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤450 S.V.: ≤1800	A.G.M.: ≤1000 S.V.: ≤2000	<del>Noncontact recreation<sup>b</sup>, irrigation, wildlife propagation and stock watering.</del> <i>Recreation not involving contact with the water<sup>b</sup>, irrigation, propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i>			<i>Recreation not involving contact with the water<sup>b</sup>.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
<i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	≤630	

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

**Sec. 33.** NAC 445A.177 is hereby amended to read as follows:  
445A.177

### 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 QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  $\Delta T^a$	  $\Delta T = 0^\circ C$	Nov.-Jun.: $\leq 21^\circ C$  Jul.-Oct.: $\leq 32^\circ C$  $\Delta T \leq 2^\circ C$	Aquatic life <sup>b</sup> .
pH Units	--	S.V.: <del>{7.0}</del> 6.5 - 9.0  $\Delta pH: \pm 0.5$ Max.	<del>{Wildlife propagation<sup>b</sup>}</del> <i>Propagation of wildlife<sup>b</sup>,</i> aquatic life <sup>b</sup> , <del>{noncontact recreation, irrigation,</del> <del>stock watering}</del> <i>recreation not involving contact</i> <i>with the water, irrigation, watering of livestock</i> and industrial supply.
Total Phosphates (as P) - mg/l	--	A-Avg.: $\leq 0.1$	Aquatic life <sup>b</sup> and <del>{noncontact recreation}</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen  A-Avg.: $\leq 2.9$  S.V.: $\leq 6.1$	Nitrate S.V.: $\leq 90$  Nitrite S.V.: $\leq 5.0$  <del>{Ammonia S.V.: <math>\leq 0.6</math></del> <del>(un-ionized)}</del>	Aquatic life <sup>b</sup> <del>{stock watering, wildlife</del> <del>propagation and noncontact recreation.}</del> , <i>watering of livestock, propagation of wildlife</i> <i>and recreation not involving contact with the</i> <i>water.</i>
<i>Total Ammonia</i>	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
<i>(as N) - mg/l</i>			
Dissolved Oxygen - mg/l	--	S.V.: ≥5.0	Aquatic life <sup>b</sup> , <del>noncontact recreation, wildlife propagation and stock watering.</del> <i>recreation not involving contact with the water, propagation of wildlife and watering of livestock.</i>
Turbidity - NTU	--	e	Aquatic life <sup>b</sup> .
Color - PCU	--	d	Aquatic life <sup>b</sup> .
Total Dissolved Solids - mg/l	--	c	Irrigation <sup>b</sup> and <del>stock watering.</del> <i>watering of livestock.</i>
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform- No./100 ml	A.G.M.: ≤625 S.V.: ≤1250	A.G.M.: ≤1000 S.V.: ≤2000	<del>Noncontact recreation<sup>b</sup>, irrigation, wildlife propagation and stock watering.</del> <i>Recreation not involving contact with the water<sup>b</sup>, irrigation, propagation of wildlife and watering of livestock.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	≤630	<i>Recreation not involving contact with the water<sup>b</sup>.</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. 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  $\Delta T^a$	  $\Delta T = 0^\circ\text{C}$	Nov.-Apr.: $\leq 13^\circ\text{C}$  May-Jun.: $\leq 17^\circ\text{C}$  Jul.-Oct.: $\leq 23^\circ\text{C}$  $\Delta T \leq 2^\circ\text{C}$	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
pH Units	--	S.V.: <del>7.0-8.3</del> 6.5 - 9.0  $\Delta\text{pH}: \pm 0.5 \text{ Max.}$	<del>Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>,</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>,</i> aquatic life, irrigation, <del>stock watering,</del> <i>watering of livestock,</i> municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	A-Avg.: $\leq 01$  S.V.: $\leq 013$	A-Avg.: $\leq 0.05$  --	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup>,</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Nitrate  S.V.: $\leq 22$	Nitrate S.V.: $\leq 10$  Nitrite S.V.: $\leq 06$  <del>Ammonia S.V.: <math>\leq 02</math></del>	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> , <del>water contact recreation, stock watering, wildlife propagation and noncontact recreation.</del>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
		<del>(un-ionized)}</del>	<i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: Nov.-May: ≥6.0 Jun.-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	--	S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU	--	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	--	e	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved	--	c	Municipal or domestic supply <sup>b</sup> , irrigation and

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

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

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

**Sec. 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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum		Nov.-Apr.: ≤13°C May-Jun.: ≤17°C Jul.-Oct.: ≤23°C	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
$\Delta T^a$	$\Delta T = 0^\circ\text{C}$	$\Delta T \leq 2^\circ\text{C}$	
pH Units	--	S.V.: <del>{7.0–8.3}</del> 6.5 - 9.0 $\Delta\text{pH}: \pm 0.5 \text{ Max.}$	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>}</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup></i> , aquatic life, irrigation, <del>{stock watering,}</del> <i>watering of livestock</i> , municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	A-Avg.: $\leq 0.05$ S.V.: $\leq 0.08$	A-Avg.: $\leq 0.1$	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>}</del> <i>recreation involving contact with the water<sup>b</sup></i> , municipal or domestic supply and <del>{noncontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Nitrate A-Avg.: $\leq 22$ S.V.: $\leq 44$	Nitrate S.V.: $\leq 10$ Nitrite S.V.: $\leq 0.6$ <del>{Ammonia S.V.: <math>\leq 0.2</math> (un-ionized)}</del>	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> , <del>{water contact recreation, stock watering, wildlife propagation and noncontact recreation.}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>

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

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum		Nov.-Mar.: ≤7°C  Apr.-May: ≤13°C	Aquatic life <sup>b</sup> and <del>water contact recreation.</del>  <i>recreation involving contact with the water.</i>

$\Delta T^a$	$\Delta T = 0^\circ\text{C}$	June: $\leq 17^\circ\text{C}$ July: $\leq 21^\circ\text{C}$ Aug.: $\leq 22^\circ\text{C}$ Sep.-Oct.: $\leq 23^\circ\text{C}$ $\Delta T \leq 2^\circ\text{C}$	
pH Units	7.0 - 8.3	S.V.: 6.5 - 9.0 $\Delta\text{pH}: \pm 0.5 \text{ Max.}$	<del>[Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>]</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life, irrigation, <del>[stock watering]</del> watering of livestock, municipal or domestic supply and industrial supply.</i>
Dissolved Oxygen - mg/l	--	S.V.: Nov.-Mar.: $\geq 6.0$ Apr.-Oct.: $\geq 5.0$	Aquatic life <sup>b</sup> , <del>[water contact recreation, wildlife propagation, stock watering]</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and <del>[noncontact recreation]</del> recreation not involving contact with the water.</i>
Chlorides - mg/l	A-Avg.: $\leq 7.0$ S.V.: $\leq 10.0$	S.V.: $\leq 250$	Municipal or domestic supply <sup>b</sup> , <del>[wildlife propagation, irrigation and stock watering]</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Total Phosphates (as P) - mg/l	A-Avg.: $\leq 0.03$	A-Avg.: $\leq 0.10$	Aquatic life <sup>b</sup> , <del>[water contact recreation]</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>[noncontact recreation]</del> recreation not involving contact with the water.</i>
Ortho Phosphate (P) - mg/l	S.V.: $\leq 0.01$	S.V.: $\leq 0.05$	Aquatic life <sup>b</sup> , <del>[water contact recreation]</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>[noncontact</del></i>

			<del>recreation.</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤0.3 S.V.: ≤0.43	Nitrate S.V.: ≤2.0 Nitrite S.V.: ≤0.4 <del>Ammonia S.V.: ≤0.02</del> (un-ionized)	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup></del> , <i>recreation involving contact with the water<sup>b</sup></i> , municipal or domestic supply and <del>noncontact</del> <del>recreation.</del> <i>recreation not involving contact with the water.</i>
<i>Total Ammonia</i> (as N) - mg/l	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Total Dissolved Solids - mg/l	A-Avg.: ≤70.0 S.V.: ≤85.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Turbidity - NTU	A-Avg.: ≤5.0 S.V.: ≤9.0	S.V.: ≤10.00	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform - No./100 ml	A.G.M.: ≤30.0 S.V.: ≤150.0	≤200/400 <sup>c</sup>	<del>Water contact recreation<sup>b</sup>, noncontact</del> <del>recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i> (No./100 ml) <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	<i>≤126</i> <i>≤410</i>	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>

Suspended Solids – mg/l	A-Avg.: ≤15.0	S.V.: ≤25	Aquatic life <sup>b</sup> .
Sulfate - mg/l	A-Avg.: ≤7.0 S.V.: ≤8.0	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤0.5 S.V.: ≤0.6	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
BOD - mg/l	--	A-Avg.: ≤2.5 S.V.: ≤3.0	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 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:  
445A.185

## STANDARDS OF WATER QUALITY

### Truckee River



			<i>propagation of wildlife, irrigation and watering of livestock.</i>
Total Phosphates (as P) - mg/l	A-Avg.: ≤0.05	A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>}</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>{nonecontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Ortho Phosphate (P) - mg/l	S.V.: ≤0.02	S.V.: ≤0.05	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>}</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>{nonecontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤0.3 S.V.: ≤0.43	Nitrate S.V.: ≤2.0 Nitrite S.V.: ≤0.04 <del>{Ammonia S.V.: ≤.02 (un-ionized)}</del>	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>}</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>{nonecontact recreation.}</del> <i>recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>
Total Dissolved Solids - mg/l	A-Avg.: ≤80.0 S.V.: ≤95.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>{stock watering.}</del> <i>watering of livestock.</i>
Turbidity - NTU	A-Avg.: ≤6.0 S.V.: ≤9.0	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>{wildlife propagation.}</del> <i>propagation of wildlife.</i>
Fecal Coliform - No./100 ml	A.G.M.: ≤50.0 S.V.: ≤200.0	≤200/400 <sup>c</sup>	<del>{Water contact recreation<sup>b</sup>, nonecontact recreation.}</del> <i>Recreation involving contact with</i>

			<i>the water<sup>b</sup>, recreation not involving contact with the water, municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering</del> propagation of wildlife and watering of livestock.</i>
<i>E. Coli (No./100 ml) Annual Geometric Mean Single Value</i>	--  --	<i>≤126  ≤410</i>	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
Suspended Solids - mg/l	A-Avg.: ≤15.0	S.V.: ≤25	Aquatic life <sup>b</sup> .
Sulfate - mg/l	A-Avg.: ≤7.0 S.V.: ≤8.0	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤0.5 S.V.: ≤0.6	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
BOD - mg/l	--	A-Avg.: ≤2.5 S.V.: ≤3.0	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 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.



			or domestic supply and industrial supply.
Dissolved Oxygen - mg/l	--	S.V.: Nov.-Mar.: ≥6.0 Apr.-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>{water contact recreation, wildlife propagation, stock watering,}</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>{noncontact recreation,}</del> <i>recreation not involving contact with the water.</i>
Chlorides - mg/l	A-Avg.: ≤7.0 S.V.: ≤10.0	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>{wildlife propagation, irrigation and stock watering,}</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Total Phosphates (as P) - mg/l	A-Avg.: ≤0.05	A-Avg.: ≤0.10	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>,}</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>{noncontact recreation,}</del> <i>recreation not involving contact with the water.</i>
Ortho Phosphate (P) - mg/l	S.V.: ≤0.02	S.V.: ≤0.05	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>,}</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>{noncontact recreation,}</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤0.3 S.V.: ≤0.43	Nitrate S.V.: ≤2.0 Nitrite S.V.: ≤0.4 <del>{Ammonia S.V.: ≤.02 (un-ionized)}</del>	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>,}</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>{noncontact recreation,}</del> <i>recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>e</i>	<i>Aquatic life<sup>b</sup>.</i>

Total Dissolved Solids - mg/l	A-Avg.: ≤90.0 S.V.: ≤120.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Turbidity - NTU	A-Avg.: ≤6.0	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform - No./100 ml	A.G.M.: ≤75.0 S.V.: ≤350.0	≤200/400 <sup>c</sup>	<del>Water contact recreation<sup>b</sup>, noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli (No./100 ml) Annual Geometric Mean Single Value</i>	-- --	≤126 ≤410	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
Suspended Solids - mg/l	A-Avg.: ≤15.0	S.V.: ≤25	Aquatic life <sup>b</sup> .
Sulfate - mg/l	A-Avg.: ≤7.0 S.V.: ≤8.0	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤0.5 S.V.: ≤0.6	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.
BOD - mg/l	--	A-Avg.: ≤3.0 S.V.: ≤5.0	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 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:  
445A.187

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.

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

$\Delta T^a$	$\Delta T = 0^\circ\text{C}$	May: $\leq 22^\circ\text{C}^{e,f}$ June-Oct.: $\leq 23^\circ\text{C}^{e,f}$ $\Delta T \leq 2^\circ\text{C}$	
pH Units	7.1 - 8.5	S.V.: 6.5 - 9.0 $\Delta\text{pH}: \pm 0.5$ Max.	<del>{Water contact recreation<sup>b</sup>; wildlife propagation<sup>b</sup>}</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life, irrigation, <del>{stock watering,}</del> watering of livestock, municipal or domestic supply and industrial supply.</i>
Dissolved Oxygen - mg/l	--	S.V.: Nov.-Mar.: $\geq 6.0$ Apr.-Oct.: $\geq 5.0$	Aquatic life <sup>b</sup> , <del>{water contact recreation, wildlife propagation, stock watering,}</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and <del>{noncontact recreation,}</del> recreation not involving contact with the water.</i>
Chlorides - mg/l	A-Avg.: $\leq 26.0$ S.V.: $\leq 30.0$	S.V.: $\leq 250$	Municipal or domestic supply <sup>b</sup> , <del>{wildlife propagation, irrigation and stock watering,}</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Total Phosphates (as P) - mg/l	--	A-Avg.: $\leq 0.05$	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>}</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>{noncontact recreation,}</del> recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	--	TN A-Avg.: $\leq 0.75$ TN S.V.: $\leq 1.2$ Nitrate S.V.: $\leq 2.0$ Nitrite S.V.: $\leq 0.4$ <del>{Ammonia S.V.: <math>\leq 0.2</math>}</del>	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>}</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>{noncontact recreation,}</del> recreation not involving contact with the water.</i>

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

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, but the increase must not cause a violation of the single value standard. The  $\Delta T$  of  $\leq 2^{\circ}\text{C}$  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  $14^{\circ}\text{C}$  from April through June.
- f. The desired temperature for the protection of juvenile Lahontan cutthroat trout is  $21^{\circ}\text{C}$ , 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:  
445A.188

## 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		
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Nitrogen Species (N) - mg/l	--	TN A-Avg.: ≤0.75 TN S.V.: ≤1.2 Nitrate S.V.: ≤2.0 Nitrite S.V.: ≤0.4 <del>Ammonia S.V.: ≤0.02</del> <del>(un-ionized)</del>	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup></del> , <i>recreation involving contact with the water<sup>b</sup></i> , municipal or domestic supply and <del>noncontact</del> <del>recreation.</del> <i>recreation not involving contact with</i> <i>the water.</i>
<i>Total Ammonia</i> <i>(as N) - mg/l</i>	--	<i>g</i>	<i>Aquatic life<sup>b</sup>.</i>
Total Dissolved Solids - mg/l	A-Avg.: ≤215.0 S.V.: ≤265.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Turbidity - NTU	A-Avg.: ≤8.0	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform - No./100 ml	A.G.M.: ≤80.0 S.V.: ≤250	≤200/400 <sup>c</sup>	<del>Water contact recreation<sup>b</sup>, noncontact</del> <del>recreation.</del> <i>Recreation involving contact with</i> <i>the water<sup>b</sup>, recreation not involving contact with</i> <i>the water</i> , municipal or domestic supply, irrigation, <del>wildlife propagation and stock</del> <del>watering.</del> <i>propagation of wildlife and watering</i> <i>of livestock.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric</i> <i>Mean</i> <i>Single Value</i>	-- --	≤126 ≤410	<i>Recreation involving contact with the water<sup>b</sup> and</i> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	A-Avg.: ≤24.0 S.V.: ≤40.0	S.V.: ≤50	Aquatic life <sup>b</sup> .

Sulfate - mg/l	A-Avg.: ≤39.0 S.V.: ≤46.0	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: ≤1.5 S.V.: ≤2.0	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, 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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  ΔT <sup>a</sup>	   ΔT = 0°C	Nov.-Mar.: ≤13°C <sup>e</sup> Apr.-June: ≤14°C <sup>e</sup> July-Oct.: ≤25°C <sup>f</sup>  ΔT ≤2°C	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
pH Units	7.1 - 8.6	S.V.: 6.5 - 9.0  ΔpH: ±0.5 Max.	<del>Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>;</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>,</i> aquatic life, irrigation, <del>stock watering,</del> <i>watering of livestock,</i> municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l	--	S.V.: Nov.-June: ≥6.0 July-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>water contact recreation, wildlife propagation, stock watering;</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock,</i> municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Chlorides - mg/l	A-Avg.: ≤20.0  S.V.: ≤28.0	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation, irrigation and stock watering.</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Total Phosphates	--	A-Avg.: ≤0.05	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup>;</del>

(as P) - mg/l			<i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>nonecontact recreation.</del> recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	--	TN A-Avg.: ≤0.75 TN S.V.: ≤1.2 Nitrate S.V.: ≤2.0 Nitrite S.V.: ≤0.04 <del>Ammonia S.V.: ≤0.02</del> <del>(un-ionized)</del>	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup>;</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>nonecontact recreation.</del> recreation not involving contact with the water.</i>
<i>Total Ammonia</i> <i>(as N) - mg/l</i>	--	<i>g</i>	<i>Aquatic life<sup>b</sup>.</i>
Total Dissolved Solids - mg/l	A-Avg.: ≤245.0 S.V.: ≤310.0	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Turbidity - NTU	--	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	d	S.V.: ≤75	Municipal or domestic supply.
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform - No./100 ml	A.G.M.: ≤50 S.V.: ≤250	≤200/400°	<del>Water contact recreation<sup>b</sup>, nonecontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water, municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric</i>			<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>

<i>Mean</i>	--	$\leq 126$	
<i>Single Value</i>	--	$\leq 410$	
Suspended Solids - mg/l	A-Avg.: $\leq 25.0$	S.V.: $\leq 50$	Aquatic life <sup>b</sup> .
Sulfate - mg/l	A-Avg.: $\leq 39.0$ S.V.: $\leq 46.0$	S.V.: $\leq 250$	Municipal or domestic supply <sup>b</sup> .
Sodium - SAR	A-Avg.: $\leq 1.5$ S.V.: $\leq 2.0$	A-Avg.: $\leq 8$	Irrigation <sup>b</sup> and municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone, 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:  
445A.192

# 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- Maximum  $\Delta T^a$	   $\Delta T = 0^\circ\text{C}$	Nov.-Apr.: $\leq 13^\circ\text{C}$  May-June: $\leq 17^\circ\text{C}$  Jul.-Oct.: $\leq 23^\circ\text{C}$  $\Delta T \leq 2^\circ\text{C}$	Aquatic life <sup>b</sup> and <del>water contact recreation.</del> <i>recreation involving contact with the water.</i>
pH Units	--  --	S.V.: <del>7.0-8.3</del> 6.5 - <i>9.0</i>  $\Delta\text{pH}: \pm 0.5 \text{ Max.}$	<del>Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>,</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>,</i> aquatic life, irrigation, <del>stock watering,</del> <i>watering of livestock,</i> municipal or domestic supply and industrial supply.
Total Phosphates (as P) - mg/l	A-Avg.: $\leq 0.02$  S.V.: $\leq 0.03$	A-Avg.: $\leq 0.05$  --	Aquatic life <sup>b</sup> , <del>water contact recreation<sup>b</sup>,</del> <i>recreation involving contact with the water<sup>b</sup>,</i> municipal or domestic supply and <del>noncontact</del>

			<del>recreation.</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Nitrate A-Avg: ≤1.1 S.V.: ≤1.6	Nitrate S.V.: ≤10 Nitrite S.V.: ≤.06 <del>Ammonia S.V.: ≤.02</del> (un-ionized)}	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> , <del>water contact recreation, stock watering, wildlife propagation and noncontact recreation.</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia</i> (as N) - mg/l	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: Nov.-May: ≥6.0 Jun.-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Suspended Solids - mg/l	-- --	S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU	-- --	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	--	e	Aquatic life <sup>b</sup> and municipal or domestic supply.

Total Dissolved Solids - mg/l	--	c	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform - No./100 ml	A.G.M.: ≤50 S.V.: ≤100	≤200/400 <sup>d</sup>	<del>Water contact recreation<sup>b</sup>, noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli (No./100 ml) Annual Geometric Mean</i>	--	≤126	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	≤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:  
445A.193

### STANDARDS OF WATER QUALITY

#### Colorado River

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C- Maximum  ΔT <sup>a</sup>	   ΔT = 0°C	Nov.-Apr.: ≤13°C  May-June: ≤17°C  Jul.-Oct.: ≤23°C  ΔT ≤2°C	Aquatic life <sup>b</sup> and <del>water contact recreation.</del>  <i>recreation involving contact with the water.</i>
pH Units	--		<del>Water contact recreation<sup>b</sup>; wildlife propagation<sup>b</sup>.</del>

	--	S.V.: <del>{7.0-8.3}</del> 6.5 - <b>9.0</b> ΔpH: ±0.5 Max.	<i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life, irrigation, <del>{stock watering,}</del> watering of livestock, municipal or domestic supply and industrial supply.</i>
Total Phosphates (as P) - mg/l	A-Avg.: ≤0.2 S.V.: ≤0.33	A-Avg.: ≤0.05 --	Aquatic life <sup>b</sup> , <del>{water contact recreation<sup>b</sup>,}</del> <i>recreation involving contact with the water<sup>b</sup>, municipal or domestic supply and <del>{noncontact recreation.}</del> recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤1.0 S.V.: ≤1.5	Nitrate S.V.: ≤10 Nitrite S.V.: ≤0.6 <del>{Ammonia S.V.: ≤.02 (un-ionized)}</del>	Municipal or domestic supply <sup>b</sup> , aquatic life <sup>b</sup> , <del>{water contact recreation, stock watering, wildlife propagation and noncontact recreation.}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>
Dissolved Oxygen - mg/l	-- --	S.V.: Nov.-May: ≥6.0 Jun.-Oct.: ≥5.0	Aquatic life <sup>b</sup> , <del>{water contact recreation, wildlife propagation, stock watering,}</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and <del>{noncontact recreation.}</del> recreation not involving contact with the water.</i>

Suspended Solids - mg/l	-- --	S.V.: ≤25	Aquatic life <sup>b</sup> .
Turbidity - NTU	-- --	S.V.: ≤10	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	--	e	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved Solids - mg/l	--	c	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	-- --	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform - No./100 ml	A.G.M.: ≤50 S.V.: ≤100	≤200/400 <sup>d</sup>	<del>Water contact recreation<sup>b</sup>, noncontact recreation.</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>wildlife propagation and stock watering.</del> <i>propagation of wildlife and watering of livestock.</i>
<i>E. Coli (No./100 ml) Annual Geometric Mean Single Value</i>	-- --	≤126 ≤235	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</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. 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:  
445A.203

### 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.

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C - ΔT - Single Value <sup>a</sup>	ΔT = 0°C	ΔT ≤2°C	Aquatic life (warm-water fishery) <sup>b</sup> , <del>water-contact recreation.</del> <i>and recreation involving contact with the water.</i>
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	<del>Water-contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>;</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life (warm-water fishery), irrigation, <del>stock watering;</del> watering of livestock,</i> municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l	--	S.V.: ≥5.0	Aquatic life (warm-water fishery) <sup>b</sup> , <del>water-contact recreation, wildlife propagation, stock watering;</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock,</i> municipal or domestic supply and <del>nonecontact recreation.</del> <i>recreation not involving contact with the water.</i>
Chlorides - mg/l	A-Avg.: ≤22 S.V.: ≤25	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation, irrigation and stock watering.</del> <i>propagation of wildlife, irrigation and watering</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
			<i>of livestock.</i>
Total Phosphorus (as P) - mg/l	--	Apr.-Nov. Seasonal Avg.: ≤0.1	Aquatic life (warm-water fishery) <sup>b</sup> , bathing and <del>water contact recreation,</del> <i>recreation involving contact with the water</i> , municipal or domestic supply and <del>noncontact recreation,</del> <i>recreation not involving contact with the water.</i>
<del>Nitroten</del> <i>Nitrogen</i> species (N) - mg/l	Total Nitrogen A-Avg.: ≤1.5 Apr.-Nov. S.V.: ≤2.4	Nitrate S.V.: ≤10 Nitrite S.V.: ≤1.0 <del>Ammonia S.V.: ≤0.02</del> <del>(un-ionized)</del>	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation, irrigation, stock watering</del> <i>propagation of wildlife, irrigation, watering of livestock</i> and aquatic life (warm-water fishery).
<i>Total Ammonia</i> (as N) - mg/l	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>
Total Dissolved Solids - mg/l	A-Avg.: ≤370 S.V.: ≤385	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering,</del> <i>watering of livestock.</i>
Suspended Solids - mg/l	--	Annual Median: ≤80°	Aquatic life (warm-water fishery) <sup>b</sup> .
Sulfate - mg/l	--	S.V.: ≤250	Municipal or domestic supply.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Color - PCU	d	No Adverse Effects	Municipal or domestic supply <sup>b</sup> .
Turbidity - NTU	--	S.V.: ≤50	Aquatic life (warm-water fishery) <sup>b</sup> , <i>and</i> municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric Mean: ≤75 S.V.: ≤200	≤200/400 <sup>c</sup>	<del>{Contact recreation<sup>b</sup>, noncontact recreation,}</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>{wildlife propagation and stock watering.}</del> <i>propagation of wildlife and watering of livestock.</i>
E. Coli <del>{No./100 ml}</del> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	<del>{Annual Geometric Mean: ≤126 S.V.: ≤406}</del> <i>≤126</i> <i>≤410</i>	<del>{Contact recreation<sup>b</sup>, noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering.}</del> <i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
Sodium - SAR	--	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

- a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.
- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The maximum allowable point source discharge is S.V.  $\leq$  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:  
445A.204

### STANDARDS OF WATER QUALITY

#### Humboldt River

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

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C - ΔT - Single Value <sup>a</sup>	ΔT = 0°C	ΔT ≤2°C	Aquatic life (warm-water fishery) <sup>b</sup> <del>[-water contact recreation-]</del> <i>and recreation involving contact with the water.</i>
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	<del>[Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>]</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life (warm-water fishery), irrigation, <del>[stock watering,]</del> watering of livestock, municipal or domestic supply and industrial supply.</i>
Dissolved Oxygen - mg/l	--	S.V.: ≥5.0	Aquatic life (warm-water fishery) <sup>b</sup> , <del>[water contact recreation, wildlife propagation, stock watering,]</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock, municipal or domestic supply and <del>[noncontact recreation-]</del> recreation not involving contact with the water.</i>
Chlorides - mg/l	A-Avg.: ≤21 S.V.: ≤30	S.V.: ≤250	Municipal or domestic supply <sup>b</sup> , <del>[wildlife propagation, irrigation and stock watering-]</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Total Phosphorus (as P) - mg/l	--	Apr.-Nov. Seasonal Avg.: ≤0.1	Aquatic life (warm-water fishery) <sup>b</sup> , bathing and <del>water contact recreation,</del> <i>recreation involving contact with the water</i> , municipal or domestic supply and <del>noncontact recreation,</del> <i>recreation not involving contact with the water.</i>
Nitrogen species (N) - mg/l	Total Nitrogen A-Avg.: ≤1.4 Apr.-Nov. S.V.: ≤2.4	Nitrate S.V.: ≤10 Nitrite S.V.: ≤1.0 <del>Ammonia S.V.: ≤0.02 (un-ionized)}</del>	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation, irrigation, stock watering}</del> <i>propagation of wildlife, irrigation, watering of livestock</i> , and aquatic life (warm-water fishery).
<i>Total Ammonia (as N) - mg/l</i>	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>
Total Dissolved Solids - mg/l	A-Avg.: ≤350 S.V.: ≤400	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering,</del> <i>watering of livestock.</i>
Suspended Solids - mg/l	--	Annual Median: ≤80°	Aquatic life (warm-water fishery) <sup>b</sup> .
Sulfate - mg/l	--	S.V.: ≤250	Municipal or domestic supply.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Color - PCU	d	No Adverse Effects	Municipal or domestic supply <sup>b</sup> .
Turbidity - NTU	--	S.V.: ≤50	Aquatic life (warm-water fishery) <sup>b</sup> , <i>and</i> municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric Mean: ≤20 S.V.: ≤150	≤200/400 <sup>c</sup>	<del>{Contact recreation<sup>b</sup>, noncontact recreation,}</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>{wildlife propagation and stock watering.}</del> <i>propagation of wildlife and watering of livestock.</i>
E. Coli <del>{No./100 ml}</del> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	<del>{Annual Geometric Mean: ≤126 S.V.: ≤406}</del> <i>≤126</i> <i>≤410</i>	<del>{Contact recreation<sup>b</sup>, noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering.}</del> <i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
Sodium - SAR	--	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.

- b. The most restrictive beneficial use.
- c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.
- d. Increase in color must not be more than 10 PCU above natural conditions.
- e. The maximum allowable point source discharge is S.V.  $\leq 80$  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 °C - $\Delta T$ - Single Value <sup>a</sup>	$\Delta T = 0^{\circ}\text{C}$	$\Delta T \leq 2^{\circ}\text{C}$	Aquatic life (warm-water fishery) <sup>b</sup> <del>[-water contact recreation.]</del> <i>and recreation involving contact with the water.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
pH Units Standard Units	A-Avg.: 7.0 - 8.4 S.V.: 7.0 - 8.6	S.V.: 6.5 - 9.0 $\Delta$ pH: $\pm$ 0.5	<del>{Water contact recreation<sup>b</sup>; wildlife propagation<sup>b</sup>;</del> <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup>, aquatic life (warm-water fishery), irrigation, <del>{stock watering;}</del> watering of livestock,</i> municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l	--	S.V.: $\geq$ 5.0	Aquatic life (warm-water fishery) <sup>b</sup> , <del>{water contact recreation, wildlife propagation, stock watering;}</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock,</i> municipal or domestic supply and <del>{noncontact recreation.}</del> <i>recreation not involving contact with the water.</i>
Chlorides - mg/l	A-Avg.: $\leq$ 50 S.V.: $\leq$ 70	S.V.: $\leq$ 250	Municipal or domestic supply <sup>b</sup> , <del>{wildlife propagation, irrigation and stock watering.}</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Total Phosphorus (as P) - mg/l	--	Apr.-Nov. Seasonal	Aquatic life (warm-water fishery) <sup>b</sup> , bathing and <del>{water contact recreation.}</del> <i>recreation involving</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
		Avg.: ≤0.1	<i>contact with the water</i> , municipal or domestic supply and <del>noncontact recreation</del> <i>recreation not involving contact with the water</i> .
Nitrogen species (N) - mg/l	Total Nitrogen A-Avg.: ≤1.9 Apr.-Nov. S.V.: ≤4.0	Nitrate S.V.: ≤10 Nitrite S.V.: ≤1.0 <del>Ammonia S.V.: ≤0.02 (un-ionized)</del>	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation, irrigation, stock watering</del> <i>propagation of wildlife, irrigation, watering of livestock</i> and aquatic life (warm-water fishery).
<i>Total Ammonia (as N) - mg/l</i>	--	<i>f</i>	<i>Aquatic life<sup>b</sup></i> .
Total Dissolved Solids - mg/l	A-Avg.: ≤425 S.V.: ≤520	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering</del> <i>watering of livestock</i> .
Suspended Solids - mg/l	--	Annual Median: ≤80 <sup>e</sup>	Aquatic life (warm-water fishery) <sup>b</sup> .
Sulfate - mg/l	--	S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply <sup>b</sup> .
Turbidity - NTU	--	S.V.: ≤50	Aquatic life (warm-water fishery) <sup>b</sup> , <i>and</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
			municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric Mean: $\leq 50$ S.V.: $\leq 200$	$\leq 200/400^c$	<del>{Contact recreation<sup>b</sup>, noncontact recreation,}</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>{wildlife propagation and stock watering,}</del> <i>propagation of wildlife and watering of livestock.</i>
E. Coli <del>{No./100 ml}</del> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	--	<del>{Annual Geometric Mean: <math>\leq 126</math> S.V.: <math>\leq 406</math>}</del> $\leq 126$ $\leq 410$	<del>{Contact recreation<sup>b</sup>, noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering,}</del> <i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
Sodium - SAR	--	A-Avg.: $\leq 8$	Irrigation <sup>b</sup> and municipal or domestic supply.

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

c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.

d. Increase in color must not be more than 10 PCU above natural conditions.

e. The maximum allowable point source discharge is S.V.  $\leq 80$  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 °C - $\Delta T$ - Single Value <sup>a</sup>	$\Delta T = 0^{\circ}\text{C}$	$\Delta T \leq 2^{\circ}\text{C}$	Aquatic life (warm-water fishery) <sup>b</sup> <del>[-water contact recreation.]</del> <i>and recreation involving contact with the water.</i>

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

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
			municipal or domestic supply.
Fecal Coliform - No./100 ml	Annual Geometric Mean: $\leq 40$ S.V.: $\leq 100$	$\leq 200/400^c$	<del>{Contact recreation<sup>b</sup>, noncontact recreation,}</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water,</i> municipal or domestic supply, irrigation, <del>{wildlife propagation and stock watering,}</del> <i>propagation of wildlife and watering of livestock.</i>
E. Coli <del>{No./100 ml}</del> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	<del>{Annual Geometric Mean: <math>\leq 126</math> S.V.: <math>\leq 406</math>}</del> <i><math>\leq 126</math></i> <i><math>\leq 410</math></i>	<del>{Contact recreation<sup>b</sup>, noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering,}</del> <i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
Sodium - SAR	--	A-Avg.: $\leq 8$	Irrigation <sup>b</sup> and municipal or domestic supply.

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

c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.

d. Increase in color must not be more than 10 PCU above natural conditions.

e. The maximum allowable point source discharge is S.V.  $\leq 80$  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 - $\Delta T$ - Single Value <sup>a</sup>	$\Delta T = 0^\circ\text{C}$	$\Delta T \leq 2^\circ\text{C}$	Aquatic life (warm-water fishery) <sup>b</sup> <del>water</del> <del>contact recreation</del> and recreation involving contact with the water.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
pH Units Standard Units	A-Avg.: 7.0 - 8.5  S.V.: 7.0 - 8.7	S.V.: 6.5 - 9.0  $\Delta$ pH: $\pm$ 0.5	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>};</del>  <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup></i> , aquatic life (warm-water fishery), irrigation, <del>{stock watering;}</del> <i>watering of livestock</i> , municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l	--	S.V.: $\geq$ 5.0	Aquatic life (warm-water fishery) <sup>b</sup> , <del>{water contact recreation, wildlife propagation, stock watering;}</del>  <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>{nonecontact recreation;}</del> <i>recreation not involving contact with the water.</i>
Chlorides - mg/l	A-Avg.: $\leq$ 70  S.V.: $\leq$ 85	S.V.: $\leq$ 250	Municipal or domestic supply <sup>b</sup> , <del>{wildlife propagation, irrigation and stock watering;}</del>  <i>propagation of wildlife, irrigation and watering of livestock.</i>
Total Phosphorus (as P) - mg/l	--	Apr.-Nov. Seasonal Avg.: $\leq$ 0.1	Aquatic life (warm-water fishery) <sup>b</sup> , bathing and <del>{water contact recreation;}</del> <i>recreation involving contact with the water</i> , municipal or domestic

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
			supply and <del>noncontact recreation.</del> <i>recreation not involving contact with the water.</i>
Nitrogen species (N) – mg/l	Total Nitrogen A-Avg.: ≤2.4 Apr.-Nov. S.V.: ≤2.9	Nitrate S.V.: ≤10 Nitrite S.V.: ≤1.0 <del>Ammonia S.V.: ≤0.02 (un-ionized)}</del>	Municipal or domestic supply <sup>b</sup> , <del>wildlife propagation, irrigation, stock watering</del> <i>propagation of wildlife, irrigation, watering of livestock</i> and aquatic life (warm-water fishery).
<i>Total Ammonia (as N) – mg/l</i>	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>
Total Dissolved Solids - mg/l	S.V.: ≤590	A-Avg.: ≤500	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering.</del> <i>watering of livestock.</i>
Suspended Solids - mg/l	--	Annual Median: ≤80 <sup>e</sup>	Aquatic life (warm-water fishery) <sup>b</sup> .
Sulfate - mg/l	--	S.V.: ≤250	Municipal or domestic supply.
Color - PCU	d	No Adverse Effects	Municipal or domestic supply <sup>b</sup> .
Turbidity - NTU	--	S.V.: ≤50	Aquatic life (warm-water fishery) <sup>b</sup> , <i>and</i> municipal or domestic supply.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Fecal Coliform - No./100 ml	Annual Geometric Mean: ≤30 S.V.: ≤150	≤200/400 <sup>c</sup>	<del>{Contact recreation<sup>b</sup>, noncontact recreation,}</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water, municipal or domestic supply, irrigation, <del>{wildlife propagation and stock watering,}</del> propagation of wildlife and watering of livestock.</i>
E. Coli <del>{No./100 ml}</del> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	<del>{Annual Geometric Mean: ≤126 S.V.: ≤406}</del> <i>≤126</i> <i>≤410</i>	<del>{Contact recreation<sup>b</sup>, noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering,}</del> <i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
Sodium - SAR	--	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.

b. The most restrictive beneficial use.

c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.

d. Increase in color must not be more than 10 PCU above natural conditions.

e. The maximum allowable point source discharge is S.V.  $\leq 80$  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.

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
pH Units Standard Units	A-Avg.: 7.0 - 8.9  S.V.: 7.0 - 9.0	S.V.: 6.5 - 9.0  $\Delta$ pH: $\pm$ 0.5	<del>{Water contact recreation<sup>b</sup>, wildlife propagation<sup>b</sup>};</del>  <i>Recreation involving contact with the water<sup>b</sup>, propagation of wildlife<sup>b</sup></i> , aquatic life (warm-water fishery), irrigation, <del>{stock watering;}</del> <i>watering of livestock</i> , municipal or domestic supply and industrial supply.
Dissolved Oxygen - mg/l	--	S.V.: $\geq$ 5.0	Aquatic life (warm-water fishery) <sup>b</sup> , <del>{water contact recreation, wildlife propagation, stock watering;}</del>  <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal or domestic supply and <del>{noncontact recreation;}</del> <i>recreation not involving contact with the water.</i>
Chlorides - mg/l	A-Avg.: $\leq$ 130  S.V.: $\leq$ 175	S.V.: $\leq$ 250	Municipal or domestic supply <sup>b</sup> , <del>{wildlife propagation, irrigation and stock watering;}</del>  <i>propagation of wildlife, irrigation and watering of livestock.</i>
Total Phosphorus (as P) - mg/l	--	Apr.-Nov. Seasonal Avg.: $\leq$ 0.1	Aquatic life (warm-water fishery) <sup>b</sup> , bathing and <del>{water contact recreation;}</del> <i>recreation involving contact with the water</i> , municipal or domestic

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Fecal Coliform - No./100 ml	Annual Geometric Mean: ≤100 S.V.: ≤200	≤200/400 <sup>c</sup>	<del>{Contact recreation<sup>b</sup>, noncontact recreation,}</del> <i>Recreation involving contact with the water<sup>b</sup>, recreation not involving contact with the water, municipal or domestic supply, irrigation, <del>{wildlife propagation and stock watering,}</del> propagation of wildlife and watering of livestock.</i>
E. Coli <del>{No./100 ml}</del> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i> <i>Single Value</i>	-- --	<del>{Annual Geometric Mean: ≤126 S.V.: ≤406}</del> <i>≤126</i> <i>≤235</i>	<del>{Contact recreation<sup>b</sup>, noncontact recreation, municipal or domestic supply, irrigation, wildlife propagation and stock watering,}</del> <i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
Sodium - SAR	--	A-Avg.: ≤8	Irrigation <sup>b</sup> and municipal or domestic supply.

a. Maximum allowable increase in temperature above water temperature at the boundary of an approved mixing zone.

b. The most restrictive beneficial use.

c. Based on the minimum of not less than 5 samples taken over a 30-day period, the fecal coliform bacterial level may not exceed a geometric mean of 200 per 100 ml nor may more than 10 percent of the total samples taken during any 30-day period exceed 400 per 100 ml.

d. Increase in color must not be more than 10 PCU above natural conditions.

e. The maximum allowable point source discharge is S.V.  $\leq 80$  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 °C - Maximum $\Delta T^a$	$\Delta T = 0^\circ\text{C}$	Nov.-Jun.: $\leq 21^\circ\text{C}$ Jul.-Oct.: $\leq 32^\circ\text{C}$ $\Delta T \leq 2^\circ\text{C}$	Aquatic life <sup>b</sup> .

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
pH Units	--	S.V.: <del>{7.0}</del> 6.5 - 9.0 ΔpH: ±0.5 Max.	<del>{Wildlife propagation<sup>b</sup>}</del> <i>Propagation of wildlife<sup>b</sup></i> , aquatic life <sup>b</sup> , <del>{noncontact recreation, irrigation, stock watering}</del> <i>recreation not involving contact with the water, irrigation, watering of livestock</i> , municipal or domestic supply and industrial supply
Total Phosphates (as P) - mg/l	--	A-Avg.: ≤0.1	Aquatic life <sup>b</sup> , <del>{noncontact recreation}</del> <i>recreation not involving contact with the water</i> , and municipal or domestic supply.
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: ≤1.3 S.V.: ≤1.4	Nitrate S.V.: ≤10 Nitrite S.V.: ≤1.0 <del>{Ammonia S.V.: ≤.06 (un-ionized)}</del>	Municipal or domestic supply <sup>b</sup> , aquatic life, <del>{water contact recreation, stock watering, wildlife propagation and noncontact recreation}</del> <i>recreation involving contact with the water, watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>

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 <sup>b</sup> , <del>noncontact recreation, wildlife propagation, stock watering</del> <i>recreation not involving contact with the water, propagation of wildlife, watering of livestock</i> , and municipal or domestic supply.
Turbidity – NTU	--	e	Aquatic life <sup>b</sup> and municipal or domestic supply.
Color - PCU	--	d	Aquatic life <sup>b</sup> and municipal or domestic supply.
Total Dissolved Solids - mg/l	--	c	Municipal or domestic supply <sup>b</sup> , irrigation and <del>stock watering</del> <i>watering of livestock</i> .
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation</del> <i>propagation of wildlife</i> .
Fecal Coliform - No./100 ml	--	A.G.M.: ≤1000 S.V.: ≤2000	<del>Noncontact recreation<sup>b</sup></del> <i>Recreation not involving contact with the water<sup>b</sup></i> , municipal or domestic supply <sup>b</sup> , irrigation, <del>wildlife propagation and stock watering</del> <i>propagation of wildlife and watering of livestock</i> .
<i>E. Coli</i>			<i>Recreation not involving contact with the water<sup>b</sup></i> .

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
<i>(No./100 ml)</i> <i>Annual Geometric</i> <i>Mean</i>	--	≤630	

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

**Sec. 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  $\Delta T^a$	  $\Delta T = 0^\circ C^a$	Nov.-Jun.: $\leq 21^\circ C$  Jul.-Oct.: $\leq 32^\circ C$  $\Delta T \leq 2^\circ C$	Aquatic life <sup>b</sup> .
pH Units	--	S.V.: <del>7.0</del> 6.5 - 9.0  $\Delta pH: \pm 0.5$ Max.	<del>Wildlife propagation<sup>b</sup></del> <i>Propagation of wildlife<sup>b</sup>, aquatic life<sup>b</sup>, noncontact recreation, irrigation, stock watering</i> <i>recreation not involving contact with the water, irrigation, watering of livestock and industrial supply.</i>
Total Phosphates (as P) - mg/l	--	A-Avg.: $\leq 0.3$	Aquatic life <sup>b</sup> and <del>noncontact recreation</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: $\leq 1.3$  S.V.: $\leq 1.8$	Nitrate S.V.: $\leq 90$  Nitrite S.V.: $\leq 5.0$  <del>Ammonia S.V.: <math>\leq 0.6</math></del>  (un-ionized)	Aquatic life <sup>b</sup> , <del>stock watering, wildlife propagation and noncontact recreation</del> <i>watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Dissolved Oxygen - mg/l	--	S.V.: $\geq 5.0$	Aquatic life <sup>b</sup> , <del>noncontact recreation, wildlife propagation and stock watering.</del> <i>recreation not involving contact with the water, propagation of wildlife and watering of livestock.</i>
Turbidity - NTU	--	e	Aquatic life <sup>b</sup> .
Color - PCU	--	d	Aquatic life <sup>b</sup> .
Total Dissolved Solids - mg/l	--	c	Irrigation <sup>b</sup> and <del>stock watering.</del> <i>watering of livestock.</i>
Alkalinity (as CaCO <sub>3</sub> ) - mg/l	--	less than 25% change from natural conditions	Aquatic life <sup>b</sup> and <del>wildlife propagation.</del> <i>propagation of wildlife.</i>
Fecal Coliform - No./100 ml	A.G.M.: $\leq 500$ S.V.: $\leq 1300$	A.G.M.: $\leq 1000$ S.V.: $\leq 2000$	<del>Noncontact recreation<sup>b</sup> - irrigation, wildlife propagation and stock watering.</del> <i>Recreation not involving contact with the water<sup>b</sup>, irrigation, propagation of wildlife and watering of livestock.</i>
<i>E. Coli</i>			<i>Recreation not involving contact with the water<sup>b</sup>.</i>

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
<i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	≤630	

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

**Sec. 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  $\Delta T^a$	  $\Delta T = 0^\circ C$	Nov.-Jun.: $\leq 21^\circ C$  Jul.-Oct.: $\leq 32^\circ C$  $\Delta T \leq 2^\circ C$	Aquatic life <sup>b</sup> .
pH Units	--	S.V.: <del>7.0</del> 6.5 - 9.0  $\Delta pH: \pm 0.5$ Max.	<del>Wildlife propagation<sup>b</sup></del> <i>Propagation of wildlife<sup>b</sup>, aquatic life<sup>b</sup>, noncontact recreation, irrigation, stock watering</i> <i>recreation not involving contact with the water, irrigation, watering of livestock and industrial supply.</i>
Total Phosphates (as P) - mg/l	--	A-Avg.: $\leq 0.1$	Aquatic life <sup>b</sup> and <del>noncontact recreation</del> <i>recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Total Nitrogen A-Avg.: $\leq 2.0$  S.V.: $\leq 3.3$	Nitrate S.V.: $\leq 90$  Nitrite S.V.: $\leq 5.0$  <del>Ammonia S.V.: <math>\leq 0.6</math></del>  <del>(un-ionized)</del>	Aquatic life <sup>b</sup> , <del>stock watering, wildlife propagation and noncontact recreation</del> <i>watering of livestock, propagation of wildlife and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>f</i>	<i>Aquatic life<sup>b</sup>.</i>

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

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
<i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	<i>≤630</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. 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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C Maximum a ΔT°C	ΔT = 0°	May-Oct <21° Nov-Apr <13° ΔT <1°	Aquatic life <del>†</del> <del>water contact recreation.</del> <i>and recreation involving contact with the water.</i>
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply <del>†</del> <del>water contact recreation.</del> <i>and recreation involving contact with the water.</i>
Total Phosphorus (as P) - mg/l	--	<0.1	Aquatic life, <del>†</del> <del>water contact recreation.</del> <i>recreation involving contact with the water,</i> municipal and domestic supply, <del>†</del> <del>noncontact recreation.</del> <i>and recreation not involving contact with the water.</i>
Nitrogen Species (N) - mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06 <del>†</del> <del>Ammonia S.V. &lt;0.02</del> <del>(un-ionized)</del>	Municipal and domestic supply, aquatic life, <del>†</del> <del>water contact recreation, noncontact recreation.</del> <i>recreation involving contact with the water and recreation not involving contact with the water.</i>
<i>Total Ammonia</i> <i>(as N) - mg/l</i>	--	<i>d</i>	<i>Aquatic life.</i>

Dissolved Oxygen in mg/l	--	>6.0	Aquatic life, <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal and domestic supply, <del>noncontact recreation,</del> <i>and recreation not involving contact with the water.</i>
Suspended Solids - mg/l	--	S.V. <25	Aquatic life, <i>and</i> municipal and domestic supply.
Turbidity - NTU	--	S.V. <10	Aquatic life, <i>and</i> municipal and domestic supply.
Total Dissolved Solids - mg/l	S.V. <185	S.V. <500	Municipal and domestic supply, irrigation <del>stock watering,</del> <i>and watering of livestock.</i>
Chlorides - mg/l	S.V. <9.0	S.V. <250	Municipal and domestic supply, <del>wildlife propagation, irrigation, stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Alkalinity (as CO <sub>3</sub> ) - mg/l	--	<25% change from natural conditions	Aquatic life <del>wildlife propagation,</del> <i>and propagation of wildlife.</i>
Fecal Coliform - No./100 ml	--	<200/400 <sup>b</sup>	<del>Water contact recreation, noncontact recreation,</del> <i>Recreation involving contact with the water, recreation not involving contact with the water,</i> municipal and domestic supply, irrigation <del>wildlife propagation,</del> <i>and propagation of</i>

			<i>wildlife.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	
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. 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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C Maximum (a) ΔT°C	ΔT = 0°	May-Oct <21° Nov-Apr <13° ΔT <1°	Aquatic life <del>†</del> <del>water contact recreation.</del> <i>and recreation involving contact with the water.</i>
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply <del>†</del> <del>water contact recreation.</del> <i>and recreation involving contact with the water.</i>
Total Phosphorus (as P) in mg/l	--	<0.1	Aquatic life, <del>†</del> <del>water contact recreation.</del> <i>recreation involving contact with the water,</i> municipal and domestic supply, <del>†</del> <del>noncontact recreation.</del> <i>and recreation not involving contact with the water.</i>
Nitrogen Species (N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06 <del>†</del> <del>Ammonia S.V. &lt;0.02 (un-ionized)</del>	Municipal and domestic supply, aquatic life, <del>†</del> <del>water contact recreation, noncontact recreation.</del> <i>recreation involving contact with the water and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>d</i>	<i>Aquatic life.</i>

Dissolved Oxygen in mg/l	--	>6.0	Aquatic life, <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal and domestic supply, <del>noncontact recreation,</del> <i>and recreation not involving contact with the water.</i>
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 <del>stock watering,</del> <i>and watering of livestock.</i>
Chlorides - mg/l	S.V. <14.0	S.V. <250	Municipal and domestic supply, <del>wildlife propagation, irrigation, stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Alkalinity (as CO <sub>3</sub> ) - mg/l	--	<25% change from natural conditions	Aquatic life <del>wildlife propagation,</del> <i>and propagation of wildlife.</i>
Fecal Coliform - No./100 ml	-- S.V. <90	<200/400 <sup>b</sup>	<del>Water contact recreation, noncontact recreation,</del> <i>Recreation involving contact with the water, recreation not involving contact with the water,</i> municipal and domestic supply, irrigation <del>wildlife propagation,</del> <i>and propagation of</i>

			<i>wildlife.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	
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. 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	ΔT = 0°	May-Oct <21° Nov-Apr <13° ΔT <1°	Aquatic life <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
Total Phosphorus (as P) in mg/l	--	<0.1	Aquatic life, <del>†water contact recreation.†</del> <i>recreation involving contact with the water,</i> municipal and domestic supply, <del>†nonecontact recreation.†</del> and <i>recreation not involving contact with the water.</i>
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06 <del>†Ammonia S.V. &lt;0.02 (un-ionized)†</del>	Municipal and domestic supply, aquatic life, <del>†water contact recreation, nonecontact recreation.†</del> <i>recreation involving contact with the water and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>d</i>	<i>Aquatic life.</i>

Dissolved Oxygen in mg/l	--	>6.0	Aquatic life, <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal and domestic supply, <del>noncontact recreation,</del> <i>and recreation not involving contact with the water.</i>
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 <del>stock watering,</del> <i>and watering of livestock.</i>
Chlorides - mg/l	S.V. <15.0	S.V. <250	Municipal and domestic supply, <del>wildlife propagation, irrigation, stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Alkalinity (as CO <sub>3</sub> ) - mg/l	--	<25% change from natural conditions	Aquatic life <del>wildlife propagation,</del> <i>and propagation of wildlife.</i>
Fecal Coliform - No./100 ml	--	<200/400 <sup>b</sup>	<del>Water contact recreation, noncontact recreation,</del> <i>Recreation involving contact with the water, recreation not involving contact with the water,</i> municipal and domestic supply, irrigation <del>wildlife propagation,</del> <i>and propagation of</i>

			<i>wildlife.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	
Color	--	c	Municipal or domestic supply.

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

b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.

c. Increase in color must not be more than 10 color units above natural conditions.

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

**Sec. 56.** NAC 445A.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	ΔT = 0°	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
Total Phosphorus (as P) in mg/l	--	<0.1	Aquatic life, <del>†water contact recreation.†</del> <i>recreation involving contact with the water,</i> municipal and domestic supply, <del>†noncontact recreation.†</del> and <i>recreation not involving contact with the water.</i>
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06 <del>†Ammonia S.V. &lt;0.02 (un-ionized)†</del>	Municipal and domestic supply, aquatic life, <del>†water contact recreation, noncontact recreation.†</del> <i>recreation involving contact with the water and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>d</i>	<i>Aquatic life.</i>

Dissolved Oxygen in mg/l	--	> 6.0	Aquatic life, <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal and domestic supply, <del>noncontact recreation,</del> <i>and recreation not involving contact with the water.</i>
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 <del>stock watering,</del> <i>and watering of livestock.</i>
Chlorides - mg/l	S.V. <6.0	S.V. <250	Municipal and domestic supply, <del>wildlife propagation, irrigation, stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Alkalinity (as CO <sub>3</sub> ) - mg/l	--	<25% change from natural conditions	Aquatic life <del>wildlife propagation,</del> <i>and propagation of wildlife.</i>
Fecal Coliform - No./100 ml	-- S.V. <100	<200/400 <sup>b</sup>	<del>Water contact recreation, noncontact recreation,</del> <i>Recreation involving contact with the water, recreation not involving contact with the water,</i> municipal and domestic supply, irrigation <del>wildlife propagation,</del> <i>and propagation of</i>

			<i>wildlife.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	
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. 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	ΔT = 0°	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
Total Phosphorus (as P) in mg/l	S.V. <0.05	<0.1	Aquatic life, <del>†water contact recreation.†</del> <i>recreation involving contact with the water,</i> municipal and domestic supply, <del>†noncontact recreation.†</del> and <i>recreation not involving contact with the water.</i>
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06 <del>†Ammonia S.V. &lt;0.02 (un-ionized)†</del>	Municipal and domestic supply, aquatic life, <del>†water contact recreation, noncontact recreation.†</del> <i>recreation involving contact with the water and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>d</i>	<i>Aquatic life.</i>

Dissolved Oxygen - mg/l	--	>6.0	Aquatic life, <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal and domestic supply, <del>noncontact recreation,</del> <i>and recreation not involving contact with the water.</i>
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. <65	S.V. <500	Municipal and domestic supply, irrigation <del>stock watering,</del> <i>and watering of livestock.</i>
Chlorides - mg/l	S.V. <7.0	S.V. <250	Municipal and domestic supply, <del>wildlife propagation, irrigation, stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Alkalinity (as CO <sub>3</sub> ) - mg/l	--	<25% change from natural conditions	Aquatic life <del>wildlife propagation,</del> <i>and propagation of wildlife.</i>
Fecal Coliform - No./100 ml	S.V. <10	<200/400 <sup>b</sup>	<del>Water contact recreation, noncontact recreation,</del> <i>Recreation involving contact with the water, recreation not involving contact with the water,</i> municipal and domestic supply, irrigation <del>wildlife propagation,</del> <i>and propagation of</i>

			<i>wildlife.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	
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. 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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C Maximum (a) ΔT°C	ΔT = 0°	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life <del>†</del> <del>water contact recreation</del> and <i>recreation involving contact with the water.</i>
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply <del>†</del> <del>water contact recreation</del> and <i>recreation involving contact with the water.</i>
Total Phosphorus (as P) in mg/l	S.V. <0.05	<0.1	Aquatic life, <del>water contact recreation</del> <i>recreation involving contact with the water</i> , municipal and domestic supply, <del>noncontact recreation</del> and <i>recreation not involving contact with the water.</i>
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06 <del>Ammonia S.V. &lt;0.02 (un-ionized)</del>	Municipal and domestic supply, aquatic life, <del>water contact recreation, noncontact recreation</del> <i>recreation involving contact with the water and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>d</i>	<i>Aquatic life.</i>

Dissolved Oxygen - mg/l	--	> 6.0	Aquatic life, <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal and domestic supply, <del>noncontact recreation,</del> <i>and recreation not involving contact with the water.</i>
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. <80	S.V. <500	Municipal and domestic supply, irrigation <del>stock watering,</del> <i>and watering of livestock.</i>
Chlorides - mg/l	S.V. <7.0	S.V. <250	Municipal and domestic supply, <del>wildlife propagation, irrigation, stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Alkalinity (as CO <sub>3</sub> ) - mg/l	--	<25% change from natural conditions	Aquatic life <del>wildlife propagation,</del> <i>and propagation of wildlife.</i>
Fecal Coliform - No./100 ml	--	<200/400 <sup>b</sup>	<del>Water contact recreation, noncontact recreation,</del> <i>Recreation involving contact with the water, recreation not involving contact with the water,</i> municipal and domestic supply, irrigation <del>wildlife propagation,</del> <i>and propagation of</i>

			<i>wildlife.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	
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. 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	ΔT = 0°	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
Total Phosphorus (as P) in mg/l	--	<0.1	Aquatic life, <del>†water contact recreation.†</del> <i>recreation involving contact with the water,</i> municipal and domestic supply, <del>†nonecontact recreation.†</del> and <i>recreation not involving contact with the water.</i>
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06 <del>†Ammonia S.V. &lt;0.02 (un-ionized)†</del>	Municipal and domestic supply, aquatic life, <del>†water contact recreation, nonecontact recreation.†</del> <i>recreation involving contact with the water and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>d</i>	<i>Aquatic life.</i>

Dissolved Oxygen in mg/l	--	>6.0	Aquatic life, <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal and domestic supply, <del>noncontact recreation,</del> <i>and recreation not involving contact with the water.</i>
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 <del>stock watering,</del> <i>and watering of livestock.</i>
Chlorides - mg/l	S.V. <7.0	S.V. <250	Municipal and domestic supply, <del>wildlife propagation, irrigation, stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Alkalinity (as CO <sub>3</sub> ) - mg/l	--	<25% change from natural conditions	Aquatic life <del>wildlife propagation,</del> <i>and propagation of wildlife.</i>
Fecal Coliform - No./100 ml	-- S.V. <80	<200/400 <sup>b</sup>	<del>Water contact recreation, noncontact recreation,</del> <i>Recreation involving contact with the water, recreation not involving contact with the water,</i> municipal and domestic supply, irrigation <del>wildlife propagation,</del> <i>and propagation of</i>

			<i>wildlife.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	
Color	--	c	Municipal or domestic supply.

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

b. The annual geometric mean must not exceed 200 per 100 milliliters nor may the number of fecal coliform in a single sample exceed 400 per 100 milliliters.

c. Increase in color must not be more than 10 color units above natural conditions.

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

**Sec. 60.** NAC 445A.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	ΔT = 0°	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
Total Phosphorus (as P) in mg/l	--	<0.1	Aquatic life, <del>†water contact recreation.†</del> <i>recreation involving contact with the water,</i> municipal and domestic supply, <del>†noncontact recreation.†</del> and <i>recreation not involving contact with the water.</i>
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06 <del>†Ammonia S.V. &lt;0.02 (un-ionized)†</del>	Municipal and domestic supply, aquatic life, <del>†water contact recreation, noncontact recreation.†</del> <i>recreation involving contact with the water and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>d</i>	<i>Aquatic life.</i>

Dissolved Oxygen in mg/l	--	>6.0	Aquatic life, <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal and domestic supply, <del>noncontact recreation,</del> <i>and recreation not involving contact with the water.</i>
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 <del>stock watering,</del> <i>and watering of livestock.</i>
Chlorides - mg/l	S.V. <8.0	S.V. <250	Municipal and domestic supply, <del>wildlife propagation, irrigation, stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Alkalinity (as CO <sub>3</sub> ) - mg/l	--	<25% change from natural conditions	Aquatic life <del>wildlife propagation,</del> <i>and propagation of wildlife.</i>
Fecal Coliform - No./100 ml	--	<200/400 <sup>b</sup>	<del>Water contact recreation, noncontact recreation,</del> <i>Recreation involving contact with the water, recreation not involving contact with the water,</i> municipal and domestic supply, irrigation <del>wildlife propagation,</del> <i>and propagation of</i>

			<i>wildlife.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	
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. 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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C Maximum (a) ΔT°C	ΔT = 0°	May-Oct <21° Nov-Apr <7° ΔT <1°	Aquatic life <del>†</del> <del>water contact recreation</del> <del>†</del> and <i>recreation involving contact with the water.</i>
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply <del>†</del> <del>water contact recreation</del> <del>†</del> and <i>recreation involving contact with the water.</i>
Total Phosphorus (as P) in mg/l	--	<0.1	Aquatic life, <del>†</del> <del>water contact recreation</del> <del>†</del> <i>recreation involving contact with the water,</i> municipal and domestic supply, <del>†</del> <del>noncontact recreation</del> <del>†</del> and <i>recreation not involving contact with the water.</i>
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06 <del>†</del> <del>Ammonia S.V. &lt;0.02 (un-ionized)</del> <del>†</del>	Municipal and domestic supply, aquatic life, <del>†</del> <del>water contact recreation</del> <del>†</del> <del>noncontact recreation</del> <del>†</del> <i>recreation involving contact with the water and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>d</i>	<i>Aquatic life.</i>

Dissolved Oxygen in mg/l	--	>6.0	Aquatic life, <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal and domestic supply, <del>noncontact recreation,</del> <i>and recreation not involving contact with the water.</i>
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 <del>stock watering,</del> <i>and watering of livestock.</i>
Chlorides - mg/l	S.V. <8.0	S.V. <250	Municipal and domestic supply, <del>wildlife propagation, irrigation, stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Alkalinity (as CO <sub>3</sub> ) - mg/l	--	<25% change from natural conditions	Aquatic life <del>wildlife propagation,</del> <i>and propagation of wildlife.</i>
Fecal Coliform - No./100 ml	-- S.V. <125	<200/400 <sup>b</sup>	<del>Water contact recreation, noncontact recreation,</del> <i>Recreation involving contact with the water, recreation not involving contact with the water,</i> municipal and domestic supply, irrigation <del>wildlife propagation,</del> <i>and propagation of</i>

			<i>wildlife.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	
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.

PARAMETER	REQUIREMENTS TO MAINTAIN EXISTING HIGHER QUALITY	WATER QUALITY STANDARDS FOR BENEFICIAL USES	BENEFICIAL USES
Temperature °C Maximum (a) ΔT°C	ΔT = 0°	May-Oct <21° Nov-Apr <13° ΔT <1°	Aquatic life <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
pH Units	ΔpH ±0.5	6.5 - 9.0	Aquatic life, municipal and domestic supply <del>†, water contact recreation.†</del> and <i>recreation involving contact with the water.</i>
Total Phosphorus (as P) in mg/l	--	<0.1	Aquatic life, <del>†water contact recreation.†</del> <i>recreation involving contact with the water,</i> municipal and domestic supply, <del>†noncontact recreation.†</del> and <i>recreation not involving contact with the water.</i>
Nitrogen Species (as N) in mg/l	Nitrate S.V. <1.0	Nitrate S.V. <10 Nitrite S.V. <0.06 <del>†Ammonia S.V. &lt;0.02 (un-ionized)†</del>	Municipal and domestic supply, aquatic life, <del>†water contact recreation, noncontact recreation.†</del> <i>recreation involving contact with the water and recreation not involving contact with the water.</i>
<i>Total Ammonia (as N) - mg/l</i>	--	<i>d</i>	<i>Aquatic life.</i>

Dissolved Oxygen in mg/l	--	>6.0	Aquatic life, <del>water contact recreation, wildlife propagation, stock watering,</del> <i>recreation involving contact with the water, propagation of wildlife, watering of livestock</i> , municipal and domestic supply, <del>noncontact recreation,</del> <i>and recreation not involving contact with the water.</i>
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. <280	S.V. <500	Municipal and domestic supply, irrigation <del>stock watering,</del> <i>and watering of livestock.</i>
Chlorides - mg/l	S.V. <15.0	S.V. <250	Municipal and domestic supply, <del>wildlife propagation, irrigation, stock watering,</del> <i>propagation of wildlife, irrigation and watering of livestock.</i>
Alkalinity (as CO <sub>3</sub> ) - mg/l	--	<25% change from natural conditions	Aquatic life <del>wildlife propagation,</del> <i>and propagation of wildlife.</i>
Fecal Coliform - No./100 ml	--	<200/400 <sup>b</sup>	<del>Water contact recreation, noncontact recreation,</del> <i>Recreation involving contact with the water, recreation not involving contact with the water,</i> municipal and domestic supply, irrigation <del>wildlife propagation,</del> <i>and propagation of</i>

			<i>wildlife.</i>
<i>E. Coli</i> <i>(No./100 ml)</i> <i>Annual Geometric Mean</i>	--	$\leq 126$	<i>Recreation involving contact with the water<sup>b</sup> and recreation not involving contact with the water.</i>
<i>Single Value</i>	--	$\leq 410$	
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.*

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