#### PROPOSED REGULATION OF THE

#### STATE ENVIRONMENTAL COMMISSION

#### LCB File No. R147-24

July 25, 2024

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

AUTHORITY: §§ 1-15, NRS 445A.425 and 445A.520.

A REGULATION relating to water quality; establishing water quality standards for certain bodies of water in the Carson Region; revising the designated beneficial uses for certain bodies of water in the Carson Region; revising provisions relating to standards for water quality; and providing other matters properly relating thereto.

#### **Legislative Counsel's Digest:**

Existing law requires the State Environmental Commission within the State Department of Conservation and Natural Resources to adopt regulations relating to water pollution control, including water quality standards and limitations on the discharge of waste to protect the designated beneficial uses of the waters of this State. (NRS 445A.425, 445A.520) Existing regulations establish water quality standards for certain bodies of water in this State. (NAC 445A.11704-445A.2234) Sections 2-6 of this regulation establish water quality standards for certain bodies of water in the Carson Region and designate aquatic life species of concern for those bodies of water. Section 8 of this regulation makes conforming changes to indicate the placement of sections 2-6 with the bodies of water in the Carson Region. Sections 7 and 9-15 of this regulation revise the designation of certain aquatic life species of concern as native coldwater species or native warm-water species for certain bodies of water in the Carson Region. Sections 10-15 of this regulation revise certain water quality standards relating to temperature for certain bodies of water in the Carson Region.

Existing regulations designate the beneficial uses for certain bodies of water within the Carson Region. (NAC 445A.1792) **Section 7** makes conforming changes to: (1) indicate the designated beneficial uses for certain bodies of water; and (2) revise the aquatic life species of concern for certain bodies of water in the Carson Region.

**Section 1.** Chapter 445A of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 6, inclusive, of this regulation.

Sec. 2. The limits of this table apply to the body of water known as the West Fork of the Carson River from the California-Nevada state line to the Brockliss Slough Diversion. This segment of the West Fork of the Carson River is located in Douglas County.

# STANDARDS OF WATER QUALITY

# Carson River, West Fork at the Brockliss Slough Diversion

|                                   |   |  |             |            |         | В                | enef       | icial            | Us               | esa      |           |         |       |
|-----------------------------------|---|--|-------------|------------|---------|------------------|------------|------------------|------------------|----------|-----------|---------|-------|
| PARAMETER                         | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY     | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES                  | X Livestock | Irrigation | Aquatic | Contact          | Noncontact | Municipal        | Industrial       | Wildlife | Aesthetic | Enhance | Marsh |
| Beneficial Uses                   |   |  |             | X          | X       | $\boldsymbol{X}$ | X          | $\boldsymbol{X}$ | $\boldsymbol{X}$ | X        |           |         |       |
| Aquatic Life Species of Co.       | ncern   |  | Nat         | ive (      | cold    | -wai             | ter s      | peci             | es               |          |           |         |       |
| Temperature - °C                  |   | S.V. Nov-May ≤ 13<br>S.V. Jun ≤ 17<br>S.V. Jul ≤ 21<br>S.V. Aug-Oct ≤ 22 |             |            | *       |                  |            |                  |                  |          |           |         |       |
| <b>∆</b> T <sup>b</sup> - ℃       | $\Delta T = 0$<br>S.V. 7.4 - 8.4                              | <u>∆</u> T≤2   |             |            |         |                  |            |                  |                  |          |           |         |       |
| pH - SU                           | S.V. 7.4 - 8.4  | S.V. 6.5 - 9.0<br>\(\Delta pH \pm 0.5\)                                  |             |            | *       |                  |            |                  |                  |          |           |         |       |
| Dissolved Oxygen - mg/L           |   | S.V. Nov-May ≥ 6.0<br>S.V. Jun-Oct ≥ 5.0                                 |             |            | *       |                  |            |                  |                  |          |           |         |       |
| Total Phosphorus (as P) - mg/L    | $A$ - $A$ v $g$ . $\leq 0.016$<br>$S$ . $V$ . $\leq 0.033$    | $A\text{-}Avg. \leq 0.10$  |             |            | *       | *                |            |                  |                  |          |           |         |       |
| Total Nitrogen<br>(as N) - mg/L   | $A-Avg. \le 0.4$ $S.V. \le 0.5$                               |  |             |            | *       | *                |            |                  |                  |          |           |         |       |
| Nitrate (as N) - mg/L             |   | S.V. ≤ 10  |             |            |         |                  |            | *                |                  |          |           |         |       |
| Nitrite (as N) - mg/L             |   | S.V. ≤ 0.06  |             |            | *       |                  |            |                  |                  |          |           |         |       |
| Total Ammonia<br>(as N) - mg/L    |   | c  |             |            | *       |                  |            |                  |                  |          |           |         |       |
| Total Suspended Solids -<br>mg/L  | <i>A-Avg.</i> ≤ 15  | S.V. ≤ 25  |             |            | *       |                  |            |                  |                  |          |           |         |       |
| Turbidity - NTU                   | $A-Avg. \le 3$ $S.V. \le 5$                                   | S.V. ≤ 10  |             |            | *       |                  |            |                  |                  |          |           |         |       |
| Color - PCU                       | d   | <i>S.V.</i> ≤ 75   |             |            |         |                  |            | *                |                  |          |           |         |       |
| Total Dissolved<br>Solids - mg/L  | $A-Avg. \le 70$ $S. V. \le 95$                                | <i>A-Avg.</i> ≤ 500  |             |            |         |                  |            | *                |                  |          |           |         |       |
| Chloride - mg/L                   | $ \begin{array}{c} A-Avg. \leq 3 \\ S.V. \leq 5 \end{array} $ | S.V. ≤ 250   |             |            |         |                  |            | *                |                  |          |           |         |       |
| Sulfate - mg/L                    | <i>S.V.</i> ≤ <i>4</i>  | S.V. ≤ 250   |             |            |         |                  |            | *                |                  |          |           |         |       |
| Sodium - SAR                      | <i>A-Avg.</i> ≤ <i>1</i>                                      | $A$ - $A$ $v$ $g$ . $\leq 8$   |             | *          |         |                  |            |                  |                  |          |           |         |       |
| Alkalinity<br>(as CaCO3) - mg/L   |   | S. V. ≥ 20   |             |            | *       |                  |            |                  |                  |          |           |         |       |
| E. coli - cfu/100 mL <sup>e</sup> |   | G.M. ≤ 126<br>S.V. ≤ 410   |             |            |         | *                |            |                  |                  |          |           |         |       |
| Fecal Coliform - No./100<br>mL    | <i>A.G.M.</i> ≤ 105   | S.V. ≤ 1,000   |             | *          |         |                  |            |                  |                  |          |           |         |       |
| Toxic Materials                   |   | f  |             |            |         |                  |            |                  |                  |          |           |         |       |

\* = The most restrictive beneficial use.

X = Beneficial use.

Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

- 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 water quality criteria for ammonia are specified in NAC 445A.118.

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

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

# The limits of this table apply to the body of water known as Corsser Creek from its origin to Brockliss Slough. Corsser Creek is located in Douglas County.

#### STANDARDS OF WATER QUALITY

#### Corsser Creek

|  |   |   |           |            |         | Be      | nef        | icial     | Us         | es <sup>a</sup> |           |         |       |
|--|---|---|-----------|------------|---------|---------|------------|-----------|------------|-----------------|-----------|---------|-------|
| PARAMETER                                | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife        | Aesthetic | Enhance | Marsh |
| Beneficial Uses                          |   |   | X         | X          | X       | X       | X          | X         |            | X               |           |         |       |
| Aquatic Life Species of Co.              | ncern   |   | Nat       | ive o      | cold    | -wat    | ter s      | peci      | es         |                 |           |         |       |
| Temperature - °C<br>△T <sup>b</sup> - °C |   | $S.V. \le 20$ $\Delta T = 0$                            |           |            | *       |         |            |           |            |                 |           |         |       |
| pH - SU                                  |   | S.V. 6.5 - 9.0  |           |            | *       |         |            |           |            |                 |           |         |       |
| Dissolved Oxygen - mg/L                  |   | S.V. ≥ 6.0  |           |            | *       |         |            |           |            |                 |           |         |       |
| Total Phosphorus<br>(as P) - mg/L        |   | S.V. ≤ 0.10   |           |            | *       | *       |            |           |            |                 |           |         |       |
| Total Ammonia<br>(as N) - mg/L           |   | c   |           |            | *       |         |            |           |            |                 |           |         |       |
| Total Dissolved<br>Solids - mg/L         |   | S.V. ≤ 500  |           |            |         |         |            | *         |            |                 |           |         |       |
| E. coli - cfu/100 mL <sup>d</sup>        |   | $G.M. \le 126$ $S.V. \le 410$                           |           |            |         | *       |            |           |            |                 |           |         |       |
| Fecal Coliform - No./100<br>mL           |   | <i>S.V.</i> ≤ 1,000                                     |           | *          |         |         |            |           |            |                 |           |         |       |
| Toxic Materials                          |   | e   |           |            |         |         |            |           |            |                 |           |         |       |

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

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 water quality criteria for ammonia are specified in NAC 445A.118.

- The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

  The water quality criteria for toxic materials are specified in NAC 445A.1236.

#### Sec. 4. The limits of this table apply to the body of water known as Monument Creek

from its origin to Brockliss Slough. Monument Creek is located in Douglas County.

#### STANDARDS OF WATER QUALITY

#### **Monument Creek**

|  |   |   |           |            |         | Be      | enef       | icial     | Us         | es <sup>a</sup> |           |         |       |
|--|---|---|-----------|------------|---------|---------|------------|-----------|------------|-----------------|-----------|---------|-------|
| PARAMETER                                | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife        | Aesthetic | Enhance | Marsh |
| Beneficial Uses                          |   |   | X         | X          | X       | X       | X          | X         |            | X               |           |         |       |
| Aquatic Life Species of Co.              | ncern   |   | Nat       | ive (      | cold-   | -wa     | ter s      | peci      | es         |                 |           |         |       |
| Temperature - °C<br>△T <sup>b</sup> - °C |   | $S.V. \le 20$ $\Delta T = 0$                            |           |            | *       |         |            |           |            |                 |           |         |       |
| pH - SU                                  |   | S.V. 6.5 - 9.0  |           |            | *       |         |            |           |            |                 |           |         |       |
| Dissolved Oxygen - mg/L                  |   | S.V. ≥ 6.0  |           |            | *       |         |            |           |            |                 |           |         |       |
| Total Phosphorus<br>(as P) - mg/L        |   | S.V. ≤ 0.10   |           |            | *       | *       |            |           |            |                 |           |         |       |
| Total Ammonia<br>(as N) - mg/L           |   | c   |           |            | *       |         |            |           |            |                 |           |         |       |
| Total Dissolved<br>Solids - mg/L         |   | S.V. ≤ 500  |           |            |         |         |            | *         |            |                 |           |         |       |
| E. coli - cfu/100 mL <sup>d</sup>        |   | G.M. ≤ 126<br>S.V. ≤ 410                                |           |            |         | *       |            |           |            |                 |           |         |       |
| Fecal Coliform - No./100<br>mL           |   | S.V. ≤ 1,000  |           | *          |         |         |            |           |            |                 |           |         |       |
| Toxic Materials                          |   | e   |           |            |         |         |            |           |            |                 |           |         |       |

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

Sec. 5. The limits of this table apply to the body of water known as Mott Creek from its origin to Brockliss Slough. Mott Creek is located in Douglas County.

STANDARDS OF WATER QUALITY

Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

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 water quality criteria for ammonia are specified in NAC 445A.118.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

#### Mott Creek

|  |   |   |           |            |         | Be      | enef       | icial     | Us         | es <sup>a</sup> |           |         |       |
|--|---|---|-----------|------------|---------|---------|------------|-----------|------------|-----------------|-----------|---------|-------|
| PARAMETER  | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife        | Aesthetic | Enhance | Marsh |
| Beneficial Uses  |   |   | X         | X          | X       | X       | X          | X         |            | X               |           |         |       |
| Aquatic Life Species of Co.                              | ncern   |   | Nat       | ive o      | cold    | -wai    | ter s      | peci      | es         |                 |           |         |       |
| Temperature - $\mathcal{C}$ $\Delta T^b$ - $\mathcal{C}$ |   | $S.V. \le 20$ $\Delta T = 0$                            |           |            | *       |         |            |           |            |                 |           |         |       |
| pH - SU  |   | S.V. 6.5 - 9.0  |           |            | *       |         |            |           |            |                 |           |         |       |
| Dissolved Oxygen - mg/L                                  |   | S.V. ≥ 6.0  |           |            | *       |         |            |           |            |                 |           |         |       |
| Total Phosphorus<br>(as P) - mg/L                        |   | S.V. ≤ 0.10   |           |            | *       | *       |            |           |            |                 |           |         |       |
| Total Ammonia<br>(as N) - mg/L                           |   | c   |           |            | *       |         |            |           |            |                 |           |         |       |
| Total Dissolved<br>Solids - mg/L                         |   | S.V. ≤ 500  |           |            |         |         |            | *         |            |                 |           |         |       |
| E. coli - cfu/100 mL <sup>d</sup>                        |   | G.M. ≤ 126<br>S.V. ≤ 410                                |           |            |         | *       |            |           |            |                 |           |         |       |
| Fecal Coliform - No./100<br>mL                           |   | S.V. ≤ 1,000  |           | *          |         |         |            |           |            |                 |           |         |       |
| Toxic Materials  |   | e   |           |            |         |         |            |           |            |                 |           |         |       |

<sup>\* =</sup> The most restrictive beneficial use.

Sec. 6. The limits of this table apply to the body of water known as Sheridan Creek from

its origin to Brockliss Slough. Sheridan Creek is located in Douglas County.

STANDARDS OF WATER QUALITY

Sheridan Creek

X = Beneficial use.

Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

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 water quality criteria for ammonia are specified in NAC 445A.118.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

|  |   |   |           |            |         | Be      | enef       | icial     | Us         | es <sup>a</sup> |           |         |       |
|--|---|---|-----------|------------|---------|---------|------------|-----------|------------|-----------------|-----------|---------|-------|
| PARAMETER                                | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife        | Aesthetic | Enhance | Marsh |
| Beneficial Uses                          |   |   | X         | X          | X       | X       | X          | X         |            | X               |           |         |       |
| Aquatic Life Species of Co.              | ncern   |   | Nat       | ive o      | cold-   | -wai    | ter s      | peci      | es         |                 |           |         |       |
| Temperature - °C<br>△T <sup>b</sup> - °C |   | $S.V. \le 20$ $\Delta T = 0$                            |           |            | *       |         |            |           |            |                 |           |         |       |
| pH - SU                                  |   | S.V. 6.5 - 9.0  |           |            | *       |         |            |           |            |                 |           |         |       |
| Dissolved Oxygen - mg/L                  |   | S. V. ≥ 6.0   |           |            | *       |         |            |           |            |                 |           |         |       |
| Total Phosphorus<br>(as P) - mg/L        |   | S.V. ≤ 0.10   |           |            | *       | *       |            |           |            |                 |           |         |       |
| Total Ammonia<br>(as N) - mg/L           |   | c   |           |            | *       |         |            |           |            |                 |           |         |       |
| Total Dissolved<br>Solids - mg/L         |   | <i>S.V.</i> ≤ <i>500</i>                                |           |            |         |         |            | *         |            |                 |           |         |       |
| E. coli - cfu/100 mL <sup>d</sup>        |   | $G.M. \le 126$ $S.V. \le 410$                           |           |            |         | *       |            |           |            |                 |           |         |       |
| Fecal Coliform - No./100<br>mL           |   | <i>S.V.</i> ≤ 1,000                                     |           | *          |         |         |            |           |            |                 |           |         |       |
| Toxic Materials                          |   | e   |           |            |         |         |            |           |            |                 |           |         |       |

<sup>\* =</sup> The most restrictive beneficial use.

# **Sec. 7.** NAC 445A.1792 is hereby amended to read as follows:

#### 445A.1792 The designated beneficial uses for select bodies of water within the Carson

# Region are prescribed in this section:

|   |   |           |            |         | В       | enef       | icia      | Us         | es       |           |         |       |  |  |
|---|---|-----------|------------|---------|---------|------------|-----------|------------|----------|-----------|---------|-------|--|--|
| Water Body Name                                 | Segment Description   | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh | Aquatic Life<br>Species of<br>Concern                    | Water Quality<br>Standard NAC<br>Reference |
| Carson River,<br>West Fork at the<br>state line | At the California-Nevada state line.  | X         | X          | X       |         |            |           | X          | X        |           |         |       | Rainbow trout and brown trout Native cold- water species | NAC 445A.1796                              |
| the state line                                  | From the California-Nevada state line to its confluence with the East Fork of the Carson River. | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | Rainbow trout and brown trout                            | NAC 445A.1798                              |

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the increase must not cause a violation of the single value standard.

The water quality criteria for ammonia are specified in NAC 445A.118.

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

|   |   |           |            |         | В       | ene        | ficia     | l Us       | ses      |           |         |       |  |  |
|---|---|-----------|------------|---------|---------|------------|-----------|------------|----------|-----------|---------|-------|--|--|
| Water Body Name   |   | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh | Aquatic Life<br>Species of<br>Concern  | Water Quality<br>Standard NAC<br>Reference |
| Carson River, East<br>Fork at the state<br>line                               | At the California-Nevada state line.  | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | Rainbow trout and brown trout  | NAC 445A.1802                              |
| Carson River, East<br>Fork at U.S.<br>Highway 395<br>south of<br>Gardnerville | From the California-Nevada state line to the Riverview Mobile Home Park at U.S. Highway 395 south of Gardnerville, except for the length of the river within the exterior borders of the Washoe Indian Reservation.   | X         | X          | X       | X       | Х          | X         | Х          | X        |           |         |       | Rainbow trout<br>and brown trout <br>Native warm-<br>water species                       | NAC 445A.1804                              |
| Carson River, East<br>Fork at Muller<br>Lane                                  | From the Riverview Mobile<br>Home Park at U.S. Highway<br>395 to Muller Lane, except<br>for the length of the river<br>within the exterior borders of<br>the Washoe Indian<br>Reservation.  | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | [Rainbow trout<br>and brown trout]<br>Native warm-<br>water species                      | NAC 445A.1806                              |
| Carson River,<br>West Fork at the<br>Brockliss Slough<br>Diversion            | From the California-Nevada state line to the Brockliss Slough Diversion.  | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | Native cold-<br>water species  | Section 2 of this regulation               |
| Carson River at<br>Genoa Lane   | The East Fork of the Carson River from Muller Lane to the West Fork, the West Fork of the Carson River from the California Nevada state line Brockliss Slough Diversion to the East Fork, and the main stem of the Carson River from the confluence of the East and West Forks to Genoa Lane. | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | [Catfish,<br>rainbow trout<br>and brown trout]<br>Native warm-<br>water species          | NAC 445A.1808                              |
| Carson River at<br>Cradlebaugh<br>Bridge                                      | From Genoa Lane to U.S.<br>Highway 395 at Cradlebaugh<br>Bridge, except for the length<br>of the river within the exterior<br>borders of the Washoe Indian<br>Reservation.  | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | Native warm-<br>water species  | NAC 445A.1812                              |
| Carson River at<br>the Mexican Ditch<br>Gage                                  | From U.S. Highway 395 at<br>Cradlebaugh Bridge to the<br>Mexican Ditch Gage.  | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | water species  | NAC 445A.1814                              |
| Carson River near<br>New Empire   | From the Mexican Ditch<br>Gage to New Empire.   | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | Smallmouth<br>bass, rainbow<br>trout and brown<br>trout  Native<br>warm-water<br>species | NAC 445A.1816                              |
| Carson River at<br>Dayton Bridge  | From New Empire to the Dayton Bridge.   | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | Walleye,<br>channel catfish<br>and white bass  | NAC 445A.1818                              |
| Carson River at<br>Lahontan<br>Reservoir                                      | From the Dayton Bridge to Lahontan Reservoir.   | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | and white bass   | NAC 445A.1822                              |
| Lahontan<br>Reservoir   | The entire reservoir.   | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       | Walleye,<br>channel catfish<br>and white bass  | NAC 445A.1824                              |

|                                    |  |           |            |         | В       | ene        | ficia     | l Us       | es       |           |         |       |                                       |  |
|------------------------------------|--|-----------|------------|---------|---------|------------|-----------|------------|----------|-----------|---------|-------|---------------------------------------|--|
| Water Body Name                    | Segment Description  | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh | Aquatic Life<br>Species of<br>Concern | Water Quality<br>Standard NAC<br>Reference |
| Lower Carson<br>River              | From Lahontan Reservoir to the Carson Sink (the natural channel).  | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       |                                       | NAC 445A.1826                              |
| Daggett Creek                      | From its origin to the Carson River.   | X         | X          | X       | X       | X          | X         |            | X        |           |         |       |                                       | NAC 445A.1828                              |
| Genoa Creek                        | of section 9, T. 13 N., R. 19<br>E., M.D.B. & M.   | X         | X          | X       | Х       | X          | X         |            | X        |           |         |       |                                       | NAC 445A.1832                              |
| Sierra Canyon<br>Creek             | From its origin to the first diversion structure at the mouth of the canyon, near the east line of section 4, T. 13 N., R. 19 E., M.D.B. & M.  | X         | X          | X       | X       | X          | X         |            | X        |           |         |       |                                       | NAC 445A.1834                              |
| Clear Creek at the gaging station  | From its origin to gaging station number 10-3105, located in the NE 1/4 of the NW 1/4 of section 1, T. 14 N., R. 19 E., M.D.B. & M., except for the length of the creek within the exterior borders of the Washoe Indian Reservation.        | X         | X          | X       | X       | X          | X         |            | X        |           |         |       |                                       | NAC 445A.1836                              |
| Clear Creek at the<br>Carson River | From gaging station number 10-3105, located in the NE 1/4 of the NW 1/4 of section 1, T. 14 N., R. 19 E., M.D.B. & M., to the Carson River, except for the length of the creek within the exterior borders of the Washoe Indian Reservation. | X         | X          | X       | Х       | X          | X         | Х          | X        |           |         |       | Trout                                 | NAC 445A.1838                              |
| Kings Canyon                       | From its origin to the point of diversion of the Carson City Water Department, near the east line of section 23, T. 15 N., R. 19 E., M.D.B. & M.   | X         | X          | X       | X       | X          | X         |            | X        |           |         |       |                                       | NAC 445A.1842                              |
| Ash Canyon                         | From its origin to the first<br>point of diversion of the<br>Carson City Water<br>Department, near the west<br>line of section 12, T. 15 N., R.<br>19 E., M.D.B. & M.  | Х         | X          | X       | Х       | X          | X         |            | X        |           |         |       |                                       | NAC 445A.1844                              |
| V-Line Canal                       | From the Carson diversion dam to its division into the S and L Canals.   | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       |                                       | NAC 445A.1846                              |
| Rattlesnake<br>Reservoir           | The entire reservoir; also known as S-Line Reservoir.  | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       |                                       | NAC 445A.1848                              |
| Indian Lakes                       | All the lakes, including Upper<br>Lake, Likes Lake, Papoose<br>Lake, Big Indian Lake, Little<br>Cottonwood Lake, Big<br>Cottonwood Lake and East<br>Lake.  |           | X          | X       | X       | X          | X         | X          | X        |           |         |       |                                       | NAC 445A.1852                              |
| Diagonal Drain                     | The entire length.   | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       |                                       | NAC 445A.1854                              |
| South Carson Lake                  | The entire lake; also known as Government Pasture and the Greenhead Gun Club.  | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       |                                       | NAC 445A.1856                              |

|  |   |           |            |         | В         | ene        | ficia     | l Us            | es       |           |         |       |                                       |  |
|--|---|-----------|------------|---------|-----------|------------|-----------|-----------------|----------|-----------|---------|-------|---------------------------------------|--|
| Water Body Name                              | Segment Description   | Livestock | Irrigation | Aquatic | X Contact | Noncontact | Municipal | X<br>Industrial | Wildlife | Aesthetic | Enhance | Marsh | Aquatic Life<br>Species of<br>Concern | Water Quality<br>Standard NAC<br>Reference |
| Harmon Reservoir                             | The entire reservoir.   | X         | X          | X       | X         | X          | X         | X               | X        |           |         |       |                                       | NAC 445A.1858                              |
| Stillwater Marsh<br>east of Westside<br>Road | East of Westside Road and north of the community of Stillwater. | X         | X          |         |           |            |           |                 | X        |           |         |       |                                       | NAC 445A.1862                              |
| Stillwater Marsh<br>west of Westside<br>Road | West of Westside Road and south of the community of Stillwater. | X         | X          | X       |           | X          |           | X               | X        |           |         |       |                                       | NAC 445A.1864                              |
| Corsser Creek                                | From its origin to Brockliss Slough.                            | X         | X          | X       | X         | X          | X         |                 | X        |           |         |       | Native cold-<br>water species         | Section 3 of this regulation               |
| Monument Creek                               | From its origin to Brockliss Slough.                            | X         | X          | X       | X         | X          | X         |                 | X        |           |         |       | Native cold-<br>water species         | Section 4 of this regulation               |
| Mott Creek                                   | From its origin to Brockliss Slough.                            | X         | X          | X       | X         | X          | X         |                 | X        |           |         |       | Native cold-<br>water species         | Section 5 of this regulation               |
| Sheridan Creek                               | From its origin to Brockliss Slough.                            | X         | X          | X       | X         | X          | X         |                 | X        |           |         |       | Native cold-<br>water species         | Section 6 of this regulation               |
| Irrigation                                   | Irrigation  |           |            |         |           |            |           |                 |          |           |         |       |                                       |  |
| Livestock                                    | Watering of livestock   |           |            |         |           |            |           |                 |          |           |         |       |                                       |  |
| Contact                                      | Recreation involving contact                                    | with      | tha        | wot     | )r        |            |           |                 |          |           |         |       |                                       |  |
| Noncontact                                   | Recreation not involving cont                                   |           |            |         |           |            |           |                 |          |           |         |       |                                       |  |
| Industrial                                   | Industrial supply   | act v     | VIIII      | the     | watt      | 1          |           |                 |          |           |         |       |                                       |  |
| Municipal                                    | Municipal or domestic supply                                    | ori       | hoth       |         |           |            |           |                 |          |           |         |       |                                       |  |
| Wildlife                                     | Propagation of wildlife   | , 01 1    | oou        |         |           |            |           |                 |          |           |         |       |                                       |  |
|  | Propagation of aquatic life                                     |           |            |         |           |            |           |                 |          |           |         |       |                                       |  |
| Aquatic Aesthetic                            |   | hati      | 2 or       | room    | anti-     | mo1        | 1/01      | 10              |          |           |         |       |                                       |  |
| Enhance                                      | Extraordinary ecological, aest                                  |           | U Of       | ICCI    | tail(     | mal        | vait      | ic              |          |           |         |       |                                       |  |
|  | Enhancement of water quality                                    |           | 1.         |         |           |            |           |                 |          |           |         |       |                                       |  |
| Marsh  | Maintenance of a freshwater r                                   | nars      | n          |         |           |            |           |                 |          |           |         |       |                                       |  |

# **Sec. 8.** NAC 445A.1794 is hereby amended to read as follows:

445A.1794 The standards for water quality for select bodies of water within the Carson Region are prescribed in NAC 445A.1794 to 445A.1864, inclusive [...], and sections 2 to 6, inclusive, of this regulation.

# **Sec. 9.** NAC 445A.1796 is hereby amended to read as follows:

445A.1796 The limits of this table apply to the body of water known as the West Fork of the Carson River at the California-Nevada state line. This segment of the West Fork of the Carson River is located in Douglas County.

# STANDARDS OF WATER QUALITY

# Carson River, West Fork at the state line

|  |   |  |                        |                         | 1                        | Ве          | enef       | icial     | Use             | esa      | 1         |         |       |
|--|---|--|------------------------|-------------------------|--------------------------|-------------|------------|-----------|-----------------|----------|-----------|---------|-------|
| PARAMETER                                    | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES                  | X Livestock            | X Irrigation            | Aquatic                  | Contact     | Noncontact | Municipal | X Industrial    | Wildlife | Aesthetic | Enhance | Marsh |
| Beneficial Uses                              |   |  |                        |                         |                          | X           | X          | X         |                 |          |           |         |       |
| Aquatic Life Species of Cor                  | ncern   |  | <del>[Ra</del><br>cola | <del>inbo</del><br>l-wa | <del>w tr</del><br>ter s | out<br>spec | and<br>ies | bro       | <del>wn t</del> | rout     | .] N      | ative   | 2     |
| Temperature - °C                             |   | S.V. Nov-May ≤ 13<br>S.V. Jun ≤ 17<br>S.V. Jul ≤ 21<br>S.V. Aug-Oct ≤ 22 |                        |                         | *                        |             |            |           |                 |          |           |         |       |
| ΔT <sup>b</sup> - °C                         | $\Delta T = 0$<br>S.V. 7.4 - 8.4                          | $\Delta T \le 2$<br>S.V. 6.5 - 9.0                                       |                        |                         | *                        |             |            |           |                 |          |           |         |       |
| pH - SU                                      |   | ΔpH ±0.5   |                        |                         | •                        |             |            |           |                 |          |           |         |       |
| Dissolved Oxygen - mg/L                      |   | S.V. Nov-May ≥ 6.0<br>S.V. Jun-Oct ≥ 5.0                                 |                        |                         | *                        |             |            |           |                 |          |           |         |       |
| Total Phosphorus<br>(as P) - mg/L            | $A-Avg. \le 0.016$<br>$S.V. \le 0.033$                    | A-Avg. ≤ 0.10  |                        |                         | *                        | *           |            |           |                 |          |           |         |       |
| Total Nitrogen<br>(as N) - mg/L              | A-Avg. ≤ 0.4<br>S.V. ≤ 0.5                                |  |                        |                         | *                        | *           |            |           |                 |          |           |         |       |
| Nitrate (as N) - mg/L                        |   | S.V. ≤ 10  |                        |                         |                          |             |            | *         |                 |          |           |         |       |
| Nitrite (as N) - mg/L                        |   | S.V. ≤ 0.06  |                        |                         | *                        |             |            |           |                 |          |           |         |       |
| Total Ammonia<br>(as N) - mg/L               |   | c  |                        |                         | *                        |             |            |           |                 |          |           |         |       |
| Total Suspended Solids - mg/L                | A-Avg. ≤ 15   | S.V. ≤ 25  |                        |                         | *                        |             |            |           |                 |          |           |         |       |
| Turbidity - NTU                              | A-Avg. ≤ 3<br>S.V. ≤ 5                                    | S.V. ≤ 10  |                        |                         | *                        |             |            |           |                 |          |           |         |       |
| Color - PCU                                  | d   | S.V. ≤ 75  |                        |                         |                          |             |            | *         |                 |          |           |         |       |
| Total Dissolved<br>Solids - mg/L             | A-Avg. ≤ 70<br>S.V. ≤ 95                                  | A-Avg. ≤ 500   |                        |                         |                          |             |            | *         |                 |          |           |         |       |
| Chloride - mg/L                              | A-Avg. ≤ 3<br>S.V. ≤ 5                                    | S.V. ≤ 250   |                        |                         |                          |             |            | *         |                 |          |           |         |       |
| Sulfate - mg/L                               | S.V. ≤ 4  | S.V. ≤ 250   |                        |                         |                          |             |            | *         |                 |          |           |         |       |
| Sodium - SAR                                 | A-Avg.≤1  | A-Avg. ≤ 8   |                        | *                       |                          |             |            |           |                 |          |           |         |       |
| Alkalinity<br>(as CaCO <sub>3</sub> ) - mg/L |   | S.V.≥ 20   |                        |                         | *                        |             |            |           |                 |          |           |         |       |
| E. coli - cfu/100 mLe                        |   | G.M. ≤ 126<br>S.V. ≤ 410   |                        |                         |                          | *           |            |           |                 |          |           |         |       |
| Fecal Coliform - No./100<br>mL               | A.G.M. ≤ 105  | S.V.≤1,000   |                        | *                       |                          |             |            |           |                 |          |           |         |       |
| Toxic Materials                              |   | f  |                        |                         |                          |             |            |           |                 |          |           |         |       |

<sup>\* =</sup> The most restrictive beneficial use.

X = Beneficial use.

<sup>=</sup> Beneficial use.

Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

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 water quality criteria for ammonia are specified in NAC 445A.118.

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

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

# **Sec. 10.** NAC 445A.1804 is hereby amended to read as follows:

445A.1804 The limits of this table apply to the body of water known as the East Fork of the Carson River from the California-Nevada state line to the Riverview Mobile Home Park at U.S. Highway 395 south of Gardnerville, except for the length of the river within the exterior borders of the Washoe Indian Reservation. This segment of the East Fork of the Carson River is located in Douglas County.

STANDARDS OF WATER QUALITY

Carson River, East Fork at U.S. Highway 395 south of Gardnerville

|                                   |  |  |           |                        |         | В       | enef       | icial     | Us              | esa      |           |         |       |
|-----------------------------------|--|--|-----------|------------------------|---------|---------|------------|-----------|-----------------|----------|-----------|---------|-------|
| PARAMETER                         | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY              | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES  | Livestock | Irrigation             | Aquatic | Contact | Noncontact | Municipal | Industrial      | Wildlife | Aesthetic | Enhance | Marsh |
| Beneficial Uses                   |  |  | X         | X                      | X       | X       | X          | X         | X               | X        |           |         |       |
| Aquatic Life Species of Co.       | ncern  |  |           | <del>inbo</del><br>m-ห |         |         |            |           | <del>wn t</del> | rout     | .] N      | ative   | ?     |
| Temperature - °C  ΔTb - °C        | ΔT = 0   | S.V. [Nov May] $\leq$ [13<br>S.V. Jun $\leq$ 17<br>S.V. Jul $\leq$ 21<br>S.V. Aug Oct $\leq$ 22] 28<br>$\Delta$ T $\leq$ 2 |           |                        | *       |         |            |           |                 |          |           |         |       |
| pH - SU                           | S.V. 7.5 - 8.6   | S.V. 6.5 - 9.0<br>ΔpH ± 0.5  |           |                        | *       |         |            |           |                 |          |           |         |       |
| Dissolved Oxygen - mg/L           |  | S.V. Nov-May ≥ 6.0<br>S.V. Jun-Oct ≥ 5.0   |           |                        | *       |         |            |           |                 |          |           |         |       |
| Total Phosphorus<br>(as P) - mg/L |  | A-Avg. ≤ 0.10  |           |                        | *       | *       |            |           |                 |          |           |         |       |
| Total Nitrogen<br>(as N) - mg/L   | $\begin{array}{c} A\text{-}Avg. \leq 0.4 \\ S.V. \leq 0.5 \end{array}$ |  |           |                        | *       | *       |            |           |                 |          |           |         |       |
| Nitrate (as N) - mg/L             |  | S.V. ≤ 10  |           |                        |         |         |            | *         |                 |          |           |         |       |
| Nitrite (as N) - mg/L             |  | S.V. ≤ 0.06  |           |                        | *       |         |            |           |                 |          |           |         |       |
| Total Ammonia<br>(as N) - mg/L    |  | С  |           |                        | *       |         |            |           |                 |          |           |         |       |
| Total Suspended Solids - mg/L     |  | S.V. ≤ 80  |           |                        | *       |         |            |           |                 |          |           |         |       |
| Turbidity - NTU                   |  | S.V. ≤ 10  |           |                        | *       |         |            |           |                 |          |           |         |       |
| Color - PCU                       | d  | S.V. ≤ 75  |           |                        |         |         |            | *         |                 |          |           |         |       |
| Total Dissolved Solids -<br>mg/L  | A-Avg. ≤ 120<br>S.V. ≤ 175   | A-Avg. ≤ 500   |           |                        |         |         |            | *         |                 |          |           |         |       |

|  |   |   |           |            |         | В       | enef       | icial     | Use        | esa      |           |         |       |
|--|---|---|-----------|------------|---------|---------|------------|-----------|------------|----------|-----------|---------|-------|
| PARAMETER                                    | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY           | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh |
| Chloride - mg/L                              | $\begin{array}{c} A\text{-}Avg. \leq 6 \\ S.V. \leq 10 \end{array}$ | S.V.≤250  |           |            |         |         |            | *         |            |          |           |         |       |
| Sulfate - mg/L                               |   | S.V. ≤ 250  |           |            |         |         |            | *         |            |          |           |         |       |
| Sodium - SAR                                 | A-Avg.≤2  | A-Avg. ≤ 8  |           | *          |         |         |            |           |            |          |           |         |       |
| Alkalinity<br>(as CaCO <sub>3</sub> ) - mg/L |   | S.V.≥ 20  |           |            | *       |         |            |           |            |          |           |         |       |
| E. coli - cfu/100 mLe                        |   | G.M. ≤ 126<br>S.V. ≤ 410                                |           |            |         | *       |            |           |            |          |           |         |       |
| Fecal Coliform - No./100<br>mL               | $\begin{array}{c} A.G.M. \leq 20 \\ S.V. \leq 85 \end{array}$       | S.V. ≤ 1,000  |           | *          |         |         |            |           |            |          |           |         |       |
| Toxic Materials                              |   | f   |           |            |         |         |            |           |            |          |           |         |       |

<sup>\* =</sup> The most restrictive beneficial use.

Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

#### **Sec. 11.** NAC 445A.1806 is hereby amended to read as follows:

The limits of this table apply to the body of water known as the East Fork of the Carson River from the Riverview Mobile Home Park at U.S. Highway 395 to Muller Lane, except for the length of the river within the exterior borders of the Washoe Indian Reservation. This segment of the East Fork of the Carson River is located in Douglas County.

#### STANDARDS OF WATER QUALITY

#### Carson River, East Fork at Muller Lane

|                 |   |   |           |            |         | В       | enef       | icial     | Use        | esa      |           |         |       |
|-----------------|---|---|-----------|------------|---------|---------|------------|-----------|------------|----------|-----------|---------|-------|
| PARAMETER       | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh |
| Beneficial Uses |   |   | X         | X          | X       | X       | X          | X         | X          | X        |           |         |       |

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 water quality criteria for ammonia are specified in NAC 445A.118.

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

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

|  |  |  | Beneficial Uses <sup>a</sup> |            |         |         |              |           |                 |          |           |         |       |  |  |  |
|--|--|--|------------------------------|------------|---------|---------|--------------|-----------|-----------------|----------|-----------|---------|-------|--|--|--|
| PARAMETER  | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY              | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES  | Livestock                    | Irrigation | Aquatic | Contact | Noncontact   | Municipal | Industrial      | Wildlife | Aesthetic | Enhance | Marsh |  |  |  |
| Aquatic Life Species of Co                               | ncern  |  |                              |            |         |         | and<br>ecies |           | <del>wn t</del> | rout     | ] N       | Native  |       |  |  |  |
| Temperature - $^{\circ}$ C $\Delta T^{b}$ - $^{\circ}$ C | ΔT = 0   | S.V. $\frac{\text{Nov-May}}{\text{S.V. Jun}} \le \frac{113^{\circ}\text{C}}{\text{S.V. Jun}} \le \frac{17^{\circ}\text{C}}{\text{S.V. Jul}} \le \frac{17^{\circ}\text{C}}{\text{S.V. Jul}} \le \frac{21^{\circ}\text{C}}{\text{S.V. Aug. Oct}} \le \frac{22^{\circ}\text{C}}{28}$ $\Delta T \le 2^{\circ}\text{C}$ |                              |            | *       |         |              |           |                 |          |           |         |       |  |  |  |
| pH - SU  | S.V. 7.4 - 8.7   | S.V. 6.5 - 9.0<br>ΔpH± 0.5   |                              |            | *       |         |              |           |                 |          |           |         |       |  |  |  |
| Dissolved<br>Oxygen - mg/L                               |  | S.V. Nov-May ≥ 6.0<br>S.V. Jun-Oct ≥ 5.0   |                              |            | *       |         |              |           |                 |          |           |         |       |  |  |  |
| Total Phosphorus (as P) - mg/L                           |  | A-Avg. ≤ 0.10  |                              |            | *       | *       |              |           |                 |          |           |         |       |  |  |  |
| Total Nitrogen (as N) - mg/L                             | $\begin{array}{c} A\text{-}Avg. \leq 0.5 \\ S.V. \leq 0.8 \end{array}$ |  |                              |            | *       | *       |              |           |                 |          |           |         |       |  |  |  |
| Nitrate (as N) - mg/L                                    |  | S.V.≤10  |                              |            |         |         |              | *         |                 |          |           |         |       |  |  |  |
| Nitrite (as N) - mg/L                                    |  | $S.V. \leq 0.06$   |                              |            | *       |         |              |           |                 |          |           |         |       |  |  |  |
| Total Ammonia<br>(as N) - mg/L                           |  | С  |                              |            | *       |         |              |           |                 |          |           |         |       |  |  |  |
| Total Suspended Solids - mg/L                            |  | S.V. ≤ 80  |                              |            | *       |         |              |           |                 |          |           |         |       |  |  |  |
| Turbidity - NTU  |  | S.V. ≤ 10  |                              |            | *       |         |              |           |                 |          |           |         |       |  |  |  |
| Color - PCU  | d  | S.V. ≤ 75  |                              |            |         |         |              | *         |                 |          |           |         |       |  |  |  |
| Total Dissolved Solids - mg/L                            | A-Avg. ≤ 180<br>S.V. ≤ 205   | A-Avg. ≤ 500   |                              |            |         |         |              | *         |                 |          |           |         |       |  |  |  |
| Chloride - mg/L  | A-Avg. ≤ 8<br>S.V. ≤ 10  | S.V. ≤ 250   |                              |            |         |         |              | *         |                 |          |           |         |       |  |  |  |
| Sulfate - mg/L   |  | S.V. ≤ 250   |                              |            |         |         |              | *         |                 |          |           |         |       |  |  |  |
| Sodium - SAR   | A-Avg. ≤ 2   | $A-Avg. \le 8$   |                              | *          |         |         |              |           |                 |          |           |         |       |  |  |  |
| Alkalinity<br>(as CaCO <sub>3</sub> ) - mg/L             |  | S.V.≥20  |                              |            | *       |         |              |           |                 |          |           |         |       |  |  |  |
| E. coli - cfu/100 mLe                                    |  | G.M. ≤ 126<br>S.V. ≤ 410   |                              |            |         | *       |              |           |                 |          |           |         |       |  |  |  |
| Fecal Coliform - No./100<br>mL                           | A.G.M. ≤ 50  | S.V. ≤ 1,000   |                              | *          |         |         |              |           |                 |          |           |         |       |  |  |  |
| Toxic Materials  |  | f  |                              |            |         |         |              |           |                 |          |           |         |       |  |  |  |

<sup>\* =</sup> The most restrictive beneficial use.

Sec. 12. NAC 445A.1808 is hereby amended to read as follows:

<sup>=</sup> Beneficial use.

Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

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 water quality criteria for ammonia are specified in NAC 445A.118.

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

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

445A.1808 The limits of this table apply to the bodies of water known as the Carson River, including the East Fork of the Carson River from Muller Lane to the West Fork, the West Fork of the Carson River from the [California-Nevada state line] Brockliss Slough Diversion to the East Fork, and the main stem of the Carson River from the confluence of the East and West Forks to Genoa Lane. These segments of the Carson River are located in Douglas County.

# STANDARDS OF WATER QUALITY

#### Carson River at Genoa Lane

|  |  |   | Beneficial Uses <sup>a</sup>   |            |         |         |              |             |            |          |           |         |              |
|--|--|---|--|------------|---------|---------|--------------|-------------|------------|----------|-----------|---------|--------------|
| PARAMETER                              | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY              | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES   | X Livestock  | Irrigation | Aquatic | Contact | X Noncontact | X Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh        |
| Beneficial Uses                        |  |   |  | X          | X       | X       |              |             |            | X        |           |         |              |
| Aquatic Life Species of Co             |  |   | Catfish, rainbow trout and brown trout     Native warm-water species |            |         |         |              |             |            |          |           |         | <del>}</del> |
| Temperature - °C  ΔT <sup>b</sup> - °C | $\Delta T = 0$   | $\begin{array}{l} \text{S.V.} \frac{\text{[Nov-Apr]}}{\text{S.V.} \text{ May Jun}} \leq \frac{113}{17} \\ \frac{\text{S.V.} \text{ Jul-Oct}}{\text{S.V.} \text{ Jul-Oct}} = \frac{23}{28} \\ \Delta T \leq 2 \end{array}$ |  |            | *       |         |              |             |            |          |           |         |              |
| pH - SU                                | S.V. 7.4 - 8.5   | S.V. 6.5 - 9.0<br>ΔpH± 0.5  |  |            | *       |         |              |             |            |          |           |         |              |
| Dissolved Oxygen - mg/L                |  | S.V. Nov-Apr ≥ 6.0<br>S.V. May-Oct ≥ 5.0  |  |            | *       |         |              |             |            |          |           |         |              |
| Total Phosphorus (as P) - mg/L         |  | A-Avg. ≤ 0.10   |  |            | *       | *       |              |             |            |          |           |         |              |
| Total Nitrogen (as N) - mg/L           | $\begin{array}{c} A\text{-}Avg. \leq 0.8 \\ S.V. \leq 1.3 \end{array}$ |   |  |            | *       | *       |              |             |            |          |           |         |              |
| Nitrate (as N) - mg/L                  |  | S.V. ≤ 10   |  |            |         |         |              | *           |            |          |           |         |              |
| Nitrite (as N) - mg/L                  |  | S.V. ≤ 0.06   |  |            | *       |         |              |             |            |          |           |         |              |
| Total Ammonia<br>(as N) - mg/L         |  | С   |  |            | *       |         |              |             |            |          |           |         |              |
| Total Suspended Solids - mg/L          |  | S.V. ≤ 80   |  |            | *       |         |              |             |            |          |           |         |              |
| Turbidity - NTU                        |  | S.V. ≤ 10   |  |            | *       |         |              |             |            |          |           |         |              |
| Color - PCU                            | d  | S.V. ≤ 75   |  |            |         |         |              | *           |            |          |           |         |              |
| Total Dissolved Solids -<br>mg/L       | A-Avg. ≤ 165<br>S.V. ≤ 220   | A-Avg. ≤ 500  |  |            |         |         |              | *           |            |          |           |         |              |
| Chloride - mg/L                        | $\begin{array}{c} A-Avg. \leq 8 \\ S.V. \leq 12 \end{array}$           | S.V.≤250  |  |            |         |         |              | *           |            |          |           |         |              |
| Sulfate - mg/L                         |  | S.V. ≤ 250  |  |            |         |         |              | *           |            |          |           |         |              |
| Sodium - SAR                           | $A-Avg. \le 2$   | A-Avg. ≤ 8  |  | *          |         |         |              |             |            |          |           |         |              |

|  |   |   |           |            |         | В       | enef       | icial     | Use        | esa      |           |         |       |
|--|---|---|-----------|------------|---------|---------|------------|-----------|------------|----------|-----------|---------|-------|
| PARAMETER                                    | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh |
| Alkalinity<br>(as CaCO <sub>3</sub> ) - mg/L |   | S.V. ≥ 20   |           |            | *       |         |            |           |            |          |           |         |       |
| E. coli - cfu/100 mLe                        |   | G.M. ≤ 126<br>S.V. ≤ 410                                |           |            |         | *       |            |           |            |          |           |         |       |
| Fecal Coliform - No./100<br>mL               | A.G.M. ≤ 180  | S.V. ≤ 1,000  |           | *          |         |         |            |           |            |          |           |         |       |
| Toxic Materials                              |   | f   |           |            |         |         |            |           |            |          |           |         |       |

<sup>\* =</sup> The most restrictive beneficial use.

Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

# **Sec. 13.** NAC 445A.1812 is hereby amended to read as follows:

445A.1812 The limits of this table apply to the body of water known as the Carson River from Genoa Lane to U.S. Highway 395 at Cradlebaugh Bridge, except for the length of the river within the exterior borders of the Washoe Indian Reservation. This segment of the Carson River is located in Douglas County.

#### STANDARDS OF WATER QUALITY

#### Carson River at Cradlebaugh Bridge

|                             |   |   |           |            |                         | В       | enef       | icial     | Use               | esa               |           |         |       |
|-----------------------------|---|---|-----------|------------|-------------------------|---------|------------|-----------|-------------------|-------------------|-----------|---------|-------|
| PARAMETER                   | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES | Livestock | Irrigation | Aquatic                 | Contact | Noncontact | Municipal | Industrial        | Wildlife          | Aesthetic | Enhance | Marsh |
| Beneficial Uses             |   |   | X         | X          | X                       | X       | X          | X         | X                 | X                 |           |         |       |
| Aquatic Life Species of Con | <del>[Ca</del><br>Nat                                     | tfisk<br>ive  | , rai     | 1100       | <del>w tr</del><br>ater | out     | arra       | OTO       | <del>vn t</del> i | <del>rout</del> . | 1         |         |       |

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 water quality criteria for ammonia are specified in NAC 445A.118.

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

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period. The water quality criteria for toxic materials are specified in NAC 445A.1236.

|  |   |  |           |            |         | В       | enefi      | icial     | Us         | esa      |           |         |       |
|--|---|--|-----------|------------|---------|---------|------------|-----------|------------|----------|-----------|---------|-------|
| PARAMETER                                    | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES  | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh |
| Temperature - °C                             |   | S.V. <del>[Nov-Apr]</del> ≤ <del>[13</del><br>S.V. May Jun ≤ 17<br>S.V. Jul-Oct ≤ 23 <b>]</b> 28 |           |            | *       |         |            |           |            |          |           |         |       |
| ΔT <sup>b</sup> - °C                         | $\Delta T = 0$  | $\Delta T \leq 2$  |           |            |         |         |            |           |            |          |           |         |       |
| pH - SU                                      | S.V. 7.5 - 8.4  | S.V. 6.5 - 9.0<br>ΔpH ± 0.5  |           |            | *       |         |            |           |            |          |           |         |       |
| Dissolved<br>Oxygen - mg/L                   |   | S.V. Nov-Apr ≥ 6.0<br>S.V. May-Oct ≥ 5.0   |           |            | *       |         |            |           |            |          |           |         |       |
| Total Phosphorus (as P) - mg/L               |   | A-Avg. ≤ 0.10  |           |            | *       | *       |            |           |            |          |           |         |       |
| Total Nitrogen (as N) - mg/L                 | A-Avg. ≤ 0.85<br>S.V. ≤ 1.2                               |  |           |            | *       | *       |            |           |            |          |           |         |       |
| Nitrate (as N) - mg/L                        |   | S.V. ≤ 10  |           |            |         |         |            | *         |            |          |           |         |       |
| Nitrite (as N) - mg/L                        |   | $S.V. \le 0.06$  |           |            | *       |         |            |           |            |          |           |         |       |
| Total Ammonia (as N) - mg/L                  |   | c  |           |            | *       |         |            |           |            |          |           |         |       |
| Total Suspended Solids - mg/L                |   | S.V. ≤ 80  |           |            | *       |         |            |           |            |          |           |         |       |
| Turbidity - NTU                              |   | S.V. ≤ 10  |           |            | *       |         |            |           |            |          |           |         |       |
| Color - PCU                                  | d   | S.V. ≤ 75  |           |            |         |         |            | *         |            |          |           |         |       |
| Total Dissolved Solids - mg/L                | A-Avg. ≤ 180<br>S.V. ≤ 230                                | A-Avg. ≤ 500   |           |            |         |         |            | *         |            |          |           |         |       |
| Chloride - mg/L                              | A-Avg. ≤ 8<br>S.V. ≤ 15                                   | S.V.≤250   |           |            |         |         |            | *         |            |          |           |         |       |
| Sulfate - mg/L                               |   | S.V. ≤ 250   |           |            |         |         |            | *         |            |          |           |         |       |
| Sodium - SAR                                 | $A$ -Avg. $\leq 2$  | $A-Avg. \le 8$   |           | *          |         |         |            |           |            |          |           |         |       |
| Alkalinity<br>(as CaCO <sub>3</sub> ) - mg/L |   | S.V.≥ 20   |           |            | *       |         |            |           |            |          |           |         |       |
| E. coli - cfu/100 mL <sup>e</sup>            |   | G.M. ≤ 126<br>S.V. ≤ 410   |           |            |         | *       |            |           |            |          |           |         |       |
| Fecal Coliform - No./100<br>mL               |   | S.V.≤1,000   |           | *          |         |         |            |           |            |          |           |         |       |
| Toxic Materials                              |   | f  |           |            |         |         |            |           |            |          |           |         |       |

<sup>\* =</sup> The most restrictive beneficial use.

**Sec. 14.** NAC 445A.1814 is hereby amended to read as follows:

<sup>\*=</sup> The most restrictive beneficial use.

X = Beneficial use.

Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

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 water quality criteria for ammonia are specified in NAC 445A.118.

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

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

445A.1814 The limits of this table apply to the body of water known as the Carson River from U.S. Highway 395 at Cradlebaugh Bridge to the Mexican Ditch Gage. This segment of the Carson River is located in Carson City and Douglas County.

# STANDARDS OF WATER QUALITY

# Carson River at the Mexican Ditch Gage

|  |  |  | Beneficial Uses <sup>a</sup> |            |         |              |            |           |                 |          |                 |         |       |
|--|--|--|------------------------------|------------|---------|--------------|------------|-----------|-----------------|----------|-----------------|---------|-------|
| PARAMETER                                    | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY              | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES  | Livestock                    | Irrigation | Aquatic | Contact      | Noncontact | Municipal | Industrial      | Wildlife | Aesthetic       | Enhance | Marsh |
| Beneficial Uses                              |  |  | X                            | X          | X       | X            | X          | X         | X               | X        |                 |         |       |
| Aquatic Life Species of Cor                  | ncern  |  |                              |            |         | out<br>r spe |            |           | <del>vn t</del> | rout     | <del>.]</del> N | ıtive   | 2     |
| Temperature - °C  ΔT <sup>b</sup> - °C       | ΔT = 0   | $\begin{array}{l} S.V. \   \overline{Nov} - Apr   \leq   13 \\ S.V. \ May \ Jun \leq 17 \\ S.V. \ Jul \ Oct \leq 23   \ 28 \\ \Delta T \leq 2 \end{array}$ |                              |            | *       |              |            |           |                 |          |                 |         |       |
| pH - SU                                      | S.V. 7.4 - 8.5   | S.V. 6.5 - 9.0<br>ΔpH ± 0.5  |                              |            | *       |              |            |           |                 |          |                 |         |       |
| Dissolved Oxygen - mg/L                      |  | S.V. Nov-Apr $\geq 6.0$<br>S.V. May-Oct $\geq 5.0$   |                              |            | *       |              |            |           |                 |          |                 |         |       |
| Total Phosphorus (as P) - mg/L               |  | A-Avg. ≤ 0.10  |                              |            | *       | *            |            |           |                 |          |                 |         |       |
| Total Nitrogen (as N) - mg/L                 | $\begin{array}{c} A\text{-}Avg. \leq 0.8 \\ S.V. \leq 1.3 \end{array}$ |  |                              |            | *       | *            |            |           |                 |          |                 |         |       |
| Nitrate (as N) - mg/L                        |  | S.V.≤10  |                              |            |         |              |            | *         |                 |          |                 |         |       |
| Nitrite (as N) - mg/L                        |  | $S.V. \le 0.06$  |                              |            | *       |              |            |           |                 |          |                 |         |       |
| Total Ammonia<br>(as N) - mg/L               |  | c  |                              |            | *       |              |            |           |                 |          |                 |         |       |
| Total Suspended Solids - mg/L                |  | S.V. ≤ 80  |                              |            | *       |              |            |           |                 |          |                 |         |       |
| Turbidity - NTU                              |  | S.V. ≤ 10  |                              |            | *       |              |            |           |                 |          |                 |         |       |
| Color - PCU                                  | d  | S.V. ≤ 75  |                              |            |         |              |            | *         |                 |          |                 |         |       |
| Total Dissolved Solids - mg/L                | $\begin{array}{c} A\text{-}Avg. \leq 285 \\ S.V. \leq 360 \end{array}$ | A-Avg. ≤ 500   |                              |            |         |              |            | *         |                 |          |                 |         |       |
| Chloride - mg/L                              | $\begin{array}{c} A\text{-}Avg. \leq 17 \\ S.V. \leq 23 \end{array}$   | S.V. ≤ 250   |                              |            |         |              |            | *         |                 |          |                 |         |       |
| Sulfate - mg/L                               | $\begin{array}{c} A\text{-}Avg. \leq 24 \\ S.V. \leq 100 \end{array}$  | S.V.≤250   |                              |            |         |              |            | *         |                 |          |                 |         |       |
| Sodium - SAR                                 | $A-Avg. \le 2$   | A-Avg.≤8   |                              | *          |         |              |            |           |                 |          |                 |         |       |
| Alkalinity<br>(as CaCO <sub>3</sub> ) - mg/L |  | S.V.≥ 20   |                              |            | *       |              |            |           |                 |          |                 |         |       |
| E. coli - cfu/100 mLe                        |  | G.M. ≤ 126<br>S.V. ≤ 410   |                              |            |         | *            |            |           |                 |          |                 |         |       |
| Fecal Coliform - No./100<br>mL               | A.G.M. ≤ 110<br>S.V. ≤ 295   | S.V. \le 1,000   |                              | *          |         |              |            |           |                 |          |                 |         |       |
| Toxic Materials                              |  | f  |                              |            |         |              |            |           |                 |          |                 |         |       |

\* = The most restrictive beneficial use.

- a Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

  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 water quality criteria for ammonia are specified in NAC 445A.118.

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

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.

# **Sec. 15.** NAC 445A.1816 is hereby amended to read as follows:

445A.1816 The limits of this table apply to the body of water known as the Carson River from the Mexican Ditch Gage to New Empire. This segment of the Carson River is located in Carson City.

#### STANDARDS OF WATER QUALITY

# Carson River near New Empire

|                                |  |   |           |                                    |         | В       | enef       | icial     | Use        | esa      |           |         |       |
|--------------------------------|--|---|-----------|------------------------------------|---------|---------|------------|-----------|------------|----------|-----------|---------|-------|
| PARAMETER                      | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY              | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES             | Livestock | Irrigation                         | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh |
| Beneficial Uses                |  |   | X         | X                                  | X       | X       | X          | X         | X          | X        |           |         |       |
| Aquatic Life Species of Co     | ncern  |   |           | <del>alln</del><br><del>wn t</del> |         |         |            |           |            |          |           |         | es    |
| Temperature - °C               |  | S.V. <del>[Nov-May]</del> ≤ <del>[18</del><br>S.V. Jun-Oct ≤ 23] 28 |           |                                    | *       |         |            |           |            |          |           |         |       |
| ΔT <sup>b</sup> - °C           | $\Delta T = 0$   | $\Delta T \leq 2$   |           |                                    |         |         |            |           |            |          |           |         |       |
| pH - SU                        | S.V. 7.4 - 8.4   | S.V. 6.5 - 9.0<br>ΔpH±0.5   |           |                                    | *       |         |            |           |            |          |           |         |       |
| Dissolved Oxygen - mg/L        |  | S.V. ≥ 5.0  |           |                                    | *       |         |            |           |            |          |           |         |       |
| Total Phosphorus (as P) - mg/L |  | A-Avg. ≤ 0.10   |           |                                    | *       | *       |            |           |            |          |           |         |       |
| Total Nitrogen (as N) - mg/L   | $\begin{array}{c} A\text{-}Avg. \leq 1.3 \\ S.V. \leq 1.7 \end{array}$ |   |           |                                    | *       | *       |            |           |            |          |           |         |       |
| Nitrate (as N) - mg/L          |  | S.V. ≤ 10   |           |                                    |         |         |            | *         |            |          |           |         |       |
| Nitrite (as N) - mg/L          |  | S.V. ≤ 0.06   |           |                                    | *       |         |            |           |            |          |           |         |       |
| Total Ammonia<br>(as N) - mg/L |  | С   |           |                                    | *       |         |            |           |            |          |           |         |       |
| Total Suspended Solids - mg/L  |  | S.V. ≤ 80   |           |                                    | *       |         |            |           |            |          |           |         |       |
| Turbidity - NTU                |  | S.V. ≤ 10   |           |                                    | *       |         |            |           |            |          |           |         |       |
| Color - PCU                    | d  | S.V. ≤ 75   |           |                                    |         |         |            | *         |            |          |           |         |       |
| Total Dissolved Solids - mg/L  | A-Avg. ≤ 260<br>S.V. ≤ 375   | A-Avg. ≤ 500  |           |                                    |         |         |            | *         |            |          |           |         |       |

|  |   |   |           |            |         | В       | enef       | icial     | Use        | esa      |           |         |       |
|--|---|---|-----------|------------|---------|---------|------------|-----------|------------|----------|-----------|---------|-------|
| PARAMETER                                    | REQUIREMENTS<br>TO MAINTAIN<br>EXISTING HIGHER<br>QUALITY | WATER QUALITY<br>CRITERIA TO PROTECT<br>BENEFICIAL USES | Livestock | Irrigation | Aquatic | Contact | Noncontact | Municipal | Industrial | Wildlife | Aesthetic | Enhance | Marsh |
| Chloride - mg/L                              | A-Avg. ≤ 13<br>S.V. ≤ 24                                  | S.V. ≤ 250  |           |            |         |         |            | *         |            |          |           |         |       |
| Sulfate - mg/L                               |   | S.V. ≤ 250  |           |            |         |         |            | *         |            |          |           |         |       |
| Sodium - SAR                                 | A-Avg. ≤ 2  | A-Avg. ≤ 8  |           | *          |         |         |            |           |            |          |           |         |       |
| Alkalinity<br>(as CaCO <sub>3</sub> ) - mg/L |   | S.V.≥ 20  |           |            | *       |         |            |           |            |          |           |         |       |
| E. coli - cfu/100 mL <sup>e</sup>            |   | G.M. ≤ 126<br>S.V. ≤ 410                                |           |            |         | *       |            |           |            |          |           |         |       |
| Fecal Coliform - No./100<br>mL               |   | S.V. ≤ 1,000  |           | *          |         |         |            |           |            |          |           |         |       |
| Toxic Materials                              |   | f   |           |            |         |         |            |           |            |          |           |         |       |

<sup>\* =</sup> The most restrictive beneficial use.

= Beneficial use.

Refer to NAC 445A.122 and 445A.1792 for beneficial use terminology.

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 water quality criteria for ammonia are specified in NAC 445A.118.

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

The geometric mean must not be exceeded in any 30-day period. The single value must not be exceeded in more than 10 percent of the samples collected within any 30-day period.

The water quality criteria for toxic materials are specified in NAC 445A.1236.