

*Presented below are water quality standards that are in effect for Clean Water Act purposes.*

*EPA is posting these standards as a convenience to users and has made a reasonable effort to assure their accuracy. Additionally, EPA has made a reasonable effort to identify parts of the standards that are not approved, disapproved, or are otherwise not in effect for Clean Water Act purposes.*

## **C. Changes to Chapter 2, “Beneficial Uses”:**

Page 2-5, last paragraph. Revise fourth sentence to read:

“For example, SPWN has been added to Hot Creek in the Owens River watershed.”

Page 2-5, second full paragraph: Change second sentence to read:

“This designation has been added for ~~at~~ many surface waters in the Region.”

Page 2-5, Add the following new paragraph after the second full paragraph on the NAV use:

Recreation uses (both Water Contact Recreation, or REC-1, and Non-contact Water Recreation, or REC-2) have been designated for all surface waters of the Lahontan Region. The REC-1 designation meets the intent of the “swimmable” goal of the federal Clean Water Act. Because of the possibility of ingestion, the USEPA expects states to set bacteriological criteria sufficient to support primary contact recreation. The Lahontan Regional Board’s regionwide water quality objective for coliform bacteria, which provides that “waters shall not contain concentrations of coliform organisms attributable to anthropogenic sources including human and livestock wastes”, is more stringent than the USEPA’s current (1986) bacteria criteria for recreational waters, which allow specific minimum concentrations of *Escherichia coli* and enterococci (criteria cited in USEPA, 1998). The USEPA’s water quality standards guidance (USEPA, 1993 and 40 CFR 131.10) recognizes that recreation in and on the water may not always be attainable in certain waters, such as wetlands, that do not have sufficient water, at least seasonally, and that “In certain instances, people will use whatever water bodies are available for recreation, regardless of the physical conditions.” Although some of the alkaline lakes and geothermal springs of the Lahontan Region may have chemical quality unfit for ingestion, they are generally located within public lands. It would be difficult to show that no public access to a specific water body for water contact recreation has occurred since the adoption of the USEPA water quality standards regulation in 1975, as required for removal of the REC-1 use. The REC-2 use depends to some extent on land uses around surface water bodies, but water quality objectives, including nondegradation, which are designed to protect natural water quality, will help to protect this use. The “aesthetic enjoyment” component of the REC-2 use is an important consideration in efforts to preserve the clarity and deep blue color of Lake Tahoe, and to prevent eutrophication of other oligotrophic waters.

Page 2-6, under “Hydrologic Unit/Subunit/Drainage/Feature”, add at the end of the paragraph:

“Hydrologic Units in Table 2-1 are listed in order from north to south. HU numbers, which were originally assigned by the California Department of Water Resources, do not reflect this north to south order. For example, the East Walker River HU (#630.00) is just north of the Mono HU (601.00).”

Page 2-6. Add at end of right column:

**Tributary rule.** Table 2-1 does not specifically name all surface waters of the Lahontan Region. Waters not mentioned by name are included in the categories “Minor Surface Waters” and “Minor Wetlands” within each Hydrologic Unit or Hydrologic Area. Beneficial uses are designated for these categories. However, additional beneficial uses may apply to waters within these categories under the “tributary rule”, which provides that water quality standards for specific waterbodies apply upstream to tributaries for which no site-specific standards have been adopted.

Correct typographical errors in Table 2-1 "Beneficial Uses of Surface Waters of the Lahontan Region, as shown in the following recommendations for pages 2-13 through 2-43.

Page 2-13, HU No. 637.20, Susan River HA (continued), Wendel Hot Springs. Add "Xs" in the "WARM" and "COLD" use columns, to give these springs the same aquatic habitat uses as "Minor Surface Waters" of their HA.

Page 2-14, HU No. 637.40, Snowstorm Mountain HA, Snowstorm Creek. Remove "X" from "PRO" column.

Page 2-17, HU No. 633.20, Upper West Fork Carson River Hydrologic Area, Valley Slopes Wetlands. Add an "X" in the "COLD" use column, to give these wetlands the same aquatic habitat designation as "Minor Wetlands" of their HA.

Page 2-18, HU No. 632.10, Markleeville HA (continued), Wetland/Big Springs to Hwy. 89. Remove "X" from "PRO" column.

Page 2-19, HU No. 631.10, Antelope Valley HA, West Walker River (Below Walker). Remove "X" from "PRO" column.

Pages 2-25 and 2-26, Upper Owens HA (continued), Chalfant Valley Watershed. Add "Xs" in the "WARM" and "COLD" use columns for the following water bodies to give them the aquatic habitat uses of "Minor Wetlands" of their HA:

- Wetlands/Meadow left of Pine Creek Road
- Wetlands/Lower Birch Creek (HWY 168, Elev 5700')
- Wells Upper Meadow Wetlands
- Wetlands/Half Km NW of Warren Lake
- Wetlands/Half Km West of Warren Lake
- Wetlands/Well North of Klondike Lake
- Wetlands/East Side of Owens Valley, 0.5 Km N of HW
- Wetlands/E. Side of Owens Valley
- Uhlmeyer Springs

Pages 2-26 and 2-27, Lower Owens HA, Add "Xs" in the "WARM" and "COLD" use columns for the following water bodies to give them the aquatic habitat uses of "Minor Wetlands" of their HA:

- Wetlands/Alkali Flat East of Owens River, Dolomite
- Wetlands/Dolomite
- Spring N of Shepherd Creek
- Wetlands/East of Movie Flat
- Wetlands/Hwy 395
- Wetlands/Fault Scarp W of Mt Whit Cemtry Lone Pine
- Seep West of Horseshoe Meadow Road
- Wetlands/Pheasant Club East of Tuttle Creek Rd
- Seep North of Movie Flat
- Wetlands/Lone Pine Narrow Gorge Road
- Wetlands East of Stevens Canal
- Fort Independence Indian Reservation [Wetlands]
- Wetlands/Spr E of Shabbel Ln. N of Independence
- Springs S of Keeler
- Cerro Gordo Spring
- Dirty Socks Hot Spring
- Spring NE of Olancha

Page 2-27, HU No. 603.30, Lower Owens HA (continued), Springs S. of Keeler and Cerro Gordo Spring, Remove "Xs" from "PRO" column for both water bodies.

Page 2-37, Table 2-1, Trona Hydrologic Unit (HU No. 621.00), Searles Dry Lake Bed. Correct a typographical error by moving the "X" in the column for the AGR use to the column for the PRO use.

Page 2-42. HU No. 628.20, Upper Mojave Hydrologic Area. Arrowbear Lake. Remove the "X" in the PRO column.

Page 2-42, under Mojave Hydrologic Unit, HU # 628, Sugarloaf Spring entry, correct inaccurate spelling "Majave"

in Receiving Water column.

Page 2-43, HU No. 628.42, Opal Mtn. Springs. This water body is shown with no beneficial uses except for water quality enhancement (WQE). "X"s should be added in the columns for the MUN, AGR, GWR, REC-1, REC-2, WARM, COLD, WILD, RARE, and FLD uses, to give this water body the same uses as "Minor Wetlands " of its Hydrologic Area.

### **D. Changes to Chapter 3, “Water Quality Objectives”:**

Page 3-1, second paragraph. Change to read as follows:

“The water quality objectives in this Basin Plan supersede and replace those contained in :  
The 1975 *Water Quality Control Plan for the North Lahontan Basin*, as amended through 1990, and

The 1975 *Water Quality Control Plan for the South Lahontan Basin*, as amended through 1990-, and

The 1980 *Lake Tahoe Basin Water Quality Plan*, as amended through 1989.

~~Upon approval by the State Board and the California Office of Administrative Law (OAL), the proposed revisions in objectives for waters of the Lake Tahoe Basin will supersede and replace the corresponding objectives in the *Lake Tahoe Basin Water Quality Plan*, as amended through 1989. When considering approval of these, and any other provisions of the revised Lahontan Basin Plan affecting the Lake Tahoe Basin, the State Board may consider rescission of the separate Lake Tahoe Basin Plan.”~~

Page 3-2. Add this sentence at end of second full paragraph:

“Since 1997, scientific peer review has been required for changes in regulations, including water quality objectives, which require scientific justification.”

Page 3-2. Add new subsection after the existing subsection on “Establishment of Numerical Objectives for Specific Water Bodies”, as follows:

#### **Tributary Rule**

Site-specific narrative and numerical water quality objectives have not been designated for all waters of the Lahontan Region. Where objectives are not specifically designated, objectives for downstream surface waters, or downgradient groundwater aquifers, apply to upstream or upgradient tributaries.

Page 3-13. Add the following narrative objective between objectives for “Chemical Constituents” and “Radioactivity”:

#### **“Pesticides**

For the purposes of this Basin Plan, pesticides are defined to include insecticides, herbicides, rodenticides, fungicides, piscicides, and all other economic poisons. An economic poison is any substance intended to prevent, repel, destroy, or mitigate the damage from insects, rodents, predatory animals, bacteria, fungi, or weeds capable of infesting or harming vegetation, humans, or animals (CA Agriculture Code Section 12753).

Pesticide concentrations, individually or collectively, shall not exceed the lowest detectable levels, using the most recent detection procedures available. There shall not be an increase in pesticide concentrations found in bottom sediment. There shall be no detectable increase in bioaccumulation of pesticides in aquatic life.

Waters designated as MUN shall not contain concentrations of pesticides or herbicides in excess of the limiting concentrations specified in Table 64444-A of Section 64444 (Organic Chemicals) of Title 22 of the California Code of Regulations which is incorporated by reference into this plan. This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.”

Page 3-16. Change subsection on “References to Means...” to read as follows:

**“References to “Means”(e.g., annual mean, log mean, mean of monthly means), “Medians”, and ”90th percentile values”:**

“**Mean**” is the arithmetic mean of all data. “**Annual mean**” is the arithmetic mean of all data collected in a one year period.” “**Mean of monthly means**” is the arithmetic mean of 30 day averages (arithmetic means). A logarithmic or “log mean” (used in determining compliance with bacteria objectives) is calculated by converting each data point into its log, then calculating the mean of these values, then taking the anti-log of this log-transformed average. The median is...”

Page 3-17. Add new section at end of current text:

**“Variances from Water Quality Objectives**

The USEPA allows states to grant variances from water quality standards under the narrow circumstances summarized below (USEPA Water Quality Standards Handbook, Second Edition, 1993, Chapter 5). Such variances must be “built into” the standards themselves, and thus variances cannot be granted in California without Basin Plan amendments.

According to the USEPA, variances from standards “are both discharger and pollutant specific, are time-limited, and do not forego the currently designated use”. The USEPA recommends use of variances instead of removal of beneficial uses when the State believes that standards can ultimately be attained. Variances can be used with NPDES permits to ensure reasonable progress toward attainment of standards without violation of Clean Water Act Section 402(a)(1), which requires NPDES permits to meet applicable water quality standards.

The USEPA “has approved State-adopted variances in the past and will continue to do so if:

- each individual variance is included as part of the water quality standard:
- the State Demonstrates that meeting the standard is unattainable based on one or more of the grounds outlined in 40 CFR 131.10 (g) for removing a designated use;
- the justification submitted by the state includes documentation that treatment more advanced than sections 303(c)(2) (A) and (B) has been carefully considered, and that alternative effluent control strategies have been evaluated;
- the more stringent State criterion is maintained and is binding upon all other dischargers on the stream or stream segment;
- the discharger who is given a variance for one particular constituent is required to meet the applicable criteria for other constituents;
- the variance is granted for a specific period of time and must be rejustified upon expiration but at least every 3 years (Note: the 3-year limit is derived from the triennial review requirements of section 303(c) of the Act.);
- the discharger either must meet the standard upon the expiration of this time period or must make a new demonstration of “unattainability”;
- reasonable progress is being made toward meeting the standards; and
- the variance was subjected to public notice, opportunity for comment, and public hearing. (See section 303(c)(1) and 40 CFR 131.20.) The public notice should contain a clear description of the impact of the variance upon achieving water quality standards in the affected stream segment.”

(The “section” references in the quoted language above are to the Clean Water Act. As used in this language, “criteria” and “criterion” are equivalent to California’s “water quality objective[s]”). “

Page 3-7, first paragraph, update citation of *Standard Methods for the Examination of Water and Wastewater* by changing publication year from 1992 to 1998.

Page 3-14- Change last two sentences of the next to last paragraph under “Part Three” heading to read:

“To date, the only California waters designated ~~an~~ as ONRWs ~~is~~ are Lake Tahoe and Mono Lake. However, other California waters would certainly qualify.”

Page 3-16, right column, paragraph on bacterial analyses, update citation of *Standard Methods for the Examination of Water and Wastewater* by changing publication year from 1992 to 1998.

Page 3-38 Correct the spacing errors in footnotes b and c to table 3.13, which result in letters and words being run together.

Page 3-48. Replace Figure 3-10 with the corrected figure attached to this draft. Changes include addition of an Arrow #1 showing the location of the “Owens River (above East Portal) station, and relocation of Arrow #2 to show the correct location of the “Owens River (below East Portal)” station.

Page 3-52. Make the following changes to Table 3-20:

Change heading of second column to read:

“Surface Waters (Station 2)  
Ground Waters (Stations 1,3, 4, 5, &6)”

In first column, second row, change the superscript for Station 1 from “a” to “b”.

## **F. Changes to Chapter 5, Water Quality Standards and Control Measures for the Lake Tahoe Basin**

Page 5-1, right column, eighteenth line. Add new sentences at end of paragraph:

“The State Board rescinded the separate *Lake Tahoe Basin Water Quality Plan* in January 1996. The regulatory language from this plan which was incorporated into the Lahontan Basin Plan remains in effect.”

Page 5-4, second full paragraph. Change third sentence to read:

“Local governments ~~are preparing~~ have prepared “community plans” in cooperation with TRPA, the business community, and other community interest groups, for most of the urban areas in the Tahoe Basin.”

Page 5-4, last paragraph. Add the U.S. Natural Resources Conservation Service to the list of implementing agencies after the U.S. Army Corps of Engineers.

Page 5-5. right column Add a new sentence at the end of the first partial paragraph as follows:

“...planning process. The Truckee River watershed downstream of Lake Tahoe is also a priority watershed in the Regional Board’s Watershed Management Initiative (WMI).”

Page 5-5, right column, first paragraph under “Compliance Schedules”. Revise second sentence to read:

“The regional ~~Water Quality Assessment~~ Geospatial Waterbody System (GeoWBS) database (described in Chapter 7)...”.

Page 5-7. Add at end of last paragraph:

“Amendments requiring scientific justification must undergo scientific peer review.”

Page 5.1-9. Add the following objective after the "Suspended Materials" objective:

**"Suspended Sediment:** Suspended sediment concentrations in streams tributary to Lake Tahoe shall not exceed a 90th percentile value of 60 mg/L. (This objective is equivalent to the Tahoe Regional Planning Agency's regional "environmental threshold carrying capacity" standard for suspended sediment in tributaries.) *The Regional Board will consider revision of this objective in the future if it proves not to be protective of beneficial uses or if review of monitoring data indicates that other numbers would be more appropriate for some or all streams tributary to Lake Tahoe.*"

Page 5.1-9, "Toxicity" objective. Update citation of Standard Methods for the Examination of Water and Wastewater by changing publication date from 1992 to 1998.

Page 5.1-12. Add the following narrative objective between objectives for “Chemical Constituents” and “Radioactivity”.

Page 5.1-15, left column, section on bacterial analyses. *Update the citation of Standard Methods for the Examination of Water and Wastewater* by changing the publication date from 1992 to 1998.

#### **“Pesticides**

For the purposes of this Basin Plan, pesticides are defined to include insecticides, herbicides, rodenticides, fungicides, piscicides, and all other economic poisons. An economic poison is any substance intended to prevent, repel, destroy, or mitigate the damage from insects, rodents, predatory animals, bacteria, fungi, or weeds capable of infesting or harming vegetation, humans, or animals (CA Agriculture Code Section 12753).

Pesticide concentrations, individually or collectively, shall not exceed the lowest detectable levels, using the most recent detection procedures available. There shall not be an increase in pesticide concentrations found in bottom sediment. There shall be no detectable increase in bioaccumulation of pesticides in aquatic life.

Waters designated as MUN shall not contain concentrations of pesticides or herbicides in excess of the limiting concentrations specified in Table 64444-A of Section 64444 (Organic Chemicals) of Title 22 of the California Code of Regulations which is incorporated by reference into this plan. This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.”

Pages 5.1-14 and 5.1-15. Change subsection on “References to Means...” to read as follows:

***“References to “Means”(e.g., annual mean, log mean, mean of monthly means), “Medians”, and ”90th percentile values”:***

**“Mean”** is the arithmetic mean of all data. **“Annual mean”** is the arithmetic mean of all data collected in a one year period.” **“Mean of monthly means”** is the arithmetic mean of 30 day averages (arithmetic means). A logarithmic or “log mean” (used in determining compliance with bacteria objectives) is calculated by converting each data point into its log, then calculating the mean of these values, then taking the anti-log of this log-transformed average. The median is...

Page 5.1-16 Add new section at end of current text and before “Key to Table 5.1-1”, as follows.

#### **“Variances from Water Quality Objectives**

The USEPA allows states to grant variances from water quality standards under the narrow circumstances summarized below (USEPA Water Quality Standards Handbook, Second Edition, 1993, Chapter 5). Such variances must be “built into” the standards themselves, and thus variances cannot be granted in California without Basin Plan amendments.

According to the USEPA, variances from standards “are both discharger and pollutant specific, are time-limited, and do not forego the currently designated use”. The USEPA recommends use of variances instead of removal of beneficial uses when the State believes that standards can ultimately be attained. Variances can be used with NPDES permits to ensure reasonable progress toward attainment of standards without violation of Clean Water Act Section 402(a)(1), which requires NPDES permits to meet applicable water quality standards.

The USEPA “has approved State-adopted variances in the past and will continue to do so if:

- each individual variance is included as part of the water quality standard;
- the State demonstrates that meeting the standard is unattainable based on one or more of the grounds outlined in 40 CFR 131.10 (g) for removing a designated use;
- the justification submitted by the state includes documentation that treatment more advanced than sections 303(c)(2) (A) and (B) has been carefully considered, and that alternative effluent control strategies have been evaluated;
- the more stringent State criterion is maintained and is binding upon all other dischargers on the stream or stream segment;
- the discharger who is given a variance for one particular constituent is required to meet the applicable criteria for other constituents;
- the variance is granted for a specific period of time and must be rejustified upon expiration but at least every 3 years (Note: the 3-year limit is derived from the triennial review requirements of section 303(c) of the Act.);
- the discharger either must meet the standard upon the expiration of this time period or must make a new demonstration of “unattainability”;
- reasonable progress is being made toward meeting the standards; and
- the variance was subjected to public notice, opportunity for comment, and public hearing. (See section 303(c)(1) and 40 CFR 131.20.) The public notice should contain a clear description of the impact of the variance upon achieving water quality standards in the affected stream segment.”

(The “section” references in the quoted language above are to the Clean Water Act. As used in this language, “criteria” and “criterion” are equivalent to “water quality objective[s]”). “

Page 5.2-7. Correct typographical error in last sentence of third bullet, as follows:

"Exemptions for projects such as recreational facility parking ~~lost~~ lots..."

Page 5.4-5, fourth full paragraph. Add new sentence at end of ninth line as follows:

“... performance criteria for evaluation of the conditions. TRPA subsequently moved the IPES line in both Douglas and Washoe Counties, Nevada. No movement of the IPES line has yet been approved by TRPA in California.”

Page 5.7-6, right column, fifth line. Correct to read

“Flooding from seiches (abnormally large waves)...”



Page 5.8-1, last paragraph. Change to read as follows:

“The California discharge prohibitions related to discharges of earthen materials, which were adopted in the 1975 Water quality Control Plan for the North Lahontan Basin and the 1980 Lake Tahoe Basin Water Quality Plan, also effectively limit new development in the Lake Tahoe Basin. These prohibitions ~~will~~ remain in effect as part of this Basin Plan ~~even if the State Board chooses to rescind the 1980 Lake Tahoe Plan~~. Exemptions from the... .”

*(The 1980 Lake Tahoe Basin Water Quality Plan was rescinded in 1996.)*

Page 5.8-8, second paragraph under “Restrictions on Development”. Change first sentence as follows:

~~The Lake Tahoe Basin Water Quality Plan, as amended, defines~~ Development not offset by remedial programs is defined as “any new development for which mitigation work has not been performed or for which water quality mitigation fees have not been paid as required by the TRPA Code of Ordinances, Chapter 82.”

Page 5.13-3 Change header from “Timber Harvest Activities” to “Forest Management Activities”.