



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8

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SEP 16 2016

Ref: 8EPR-EP

Ms. Lauren Evans, Chair  
Water Quality Control Commission  
4300 Cherry Creek Drive South  
Denver, Colorado 80222-1530

Re: EPA's Action on Revisions to Regulation #33 and #37

Dear Ms. Evans:

The U.S. Environmental Protection Agency Region 8 has completed its review of certain revisions to water quality standards (WQS) adopted by Colorado's Water Quality Control Commission (Commission). The revisions addressed in today's action were adopted August 11, 2014, with an effective date of December 31, 2014. The submission letter included an Opinion of the Attorney General certifying that the standards were duly adopted pursuant to State law. Receipt of the revised standards on August 28, 2014 initiated the EPA's review pursuant to Clean Water Act (CWA) § 303(c). The EPA has completed its review, and this letter is to notify you of our action.

The revisions include changes to the water quality standards for the Upper Colorado River Basin (Regulation #33) and the Lower Colorado River Basin (Regulation #37).

### **Clean Water Act Review Requirements**

The CWA § 303(c)(2), requires States and authorized Indian Tribes<sup>1</sup> to submit new or revised WQS to the EPA for review. The EPA is required to review and approve, or disapprove, the submitted standards. Pursuant to CWA § 303(c)(3), if the EPA determines that any standard is not consistent with the applicable requirements of the Act, the Agency shall, not later than the ninetieth day after the date of submission, notify the State or authorized Tribe and specify the changes to meet the requirements. If such changes are not adopted by the State or authorized Tribe within ninety days after the date of notification, the EPA is to propose and promulgate such standard pursuant to CWA § 303(c)(4). The Region's goal has been, and will continue to be, to work closely with States and authorized Tribes throughout the standards revision process so that submitted revisions can be approved by the EPA. Pursuant to the EPA's Alaska Rule (40 CFR § 131.21(c)), new or revised state standards submitted to the EPA after May 30, 2000, are not effective for CWA purposes until approved by the EPA.

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<sup>1</sup> CWA § 518(e) specifically authorizes EPA to treat eligible Indian tribes in the same manner as states for purposes of CWA § 303. See also 40 CFR § 131.8.

## **Today's Action**

We are pleased to inform you that today, with the exception of certain revisions where EPA is taking no action, the Region is approving the changes to Regulation #33 and #37 adopted on August 11, 2014. The EPA is not acting on the revisions to the Grand Lake clarity standard, the total phosphorus (TP) standards assigned to rivers/streams, and the TP standards assigned to lakes/reservoirs that have a warm water aquatic life use classification. The rationale for the EPA's approval action is discussed in detail in the enclosure.

## **Endangered Species Act Requirements**

The EPA's approval of Colorado's WQS is considered a federal action which may be subject to the Section 7(a)(2) consultation requirements of the Endangered Species Act (ESA). Section 7(a)(2) of the ESA states that "each federal agency ... shall ...insure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined to be critical..." The EPA initiated consultation under ESA Section 7(a)(2) with the U.S. Fish and Wildlife Service (Service) regarding our approval of the new or revised WQS. The EPA also has a CWA obligation, as a separate matter, to complete its WQS action. Therefore, in acting on the state's WQS today, EPA is completing its CWA § 303(c) responsibilities. However, because ESA consultation on the EPA's approval of these standards is ongoing, the EPA's approval is made subject to the outcome of the ESA consultation process. Should the consultation process with the Service identify information regarding impacts on listed species or designated critical habitat that supports amending the EPA's approval, the EPA will, as appropriate, revisit and amend its approval decision for those new or revised WQS.

## **Indian Country**

The WQS approvals in today's letter apply only to water bodies in the state of Colorado, and do not apply to waters that are within Indian country, as defined in 18 U.S.C. § 1151. Today's letter is not intended as an action to approve or disapprove water quality standards applying to waters within Indian country. The EPA, or authorized Indian tribes, as appropriate, will retain responsibilities for water quality standards for waters within Indian country.

## Conclusion

We thank the Commission for its efforts to improve the water quality standards that protect the waters of Colorado. If you have any questions, please call David Moon of my staff at (303) 312-6833.

Sincerely,

A handwritten signature in black ink that reads "Martin Hestmark". The signature is written in a cursive style with a large, sweeping flourish at the end.

Martin Hestmark  
Assistant Regional Administrator  
Office of Ecosystems Protection  
and Remediation

Enclosures (2)

**Enclosure 1**  
**Rationale for EPA’s Action on the Revisions to Regulation #33**  
**Adopted August 11, 2014**

With the exception of certain revisions where the EPA is taking no action, the Region is approving all changes to Regulation #33 adopted on August 11, 2014. This enclosure addresses only the changes to Classifications and Numeric Standards for the Upper Colorado River Basin, Regulation #33 (5 CCR 1002-33). The discussion below summarizes the revisions adopted by the Water Quality Control Commission (Commission) and the rationale for the EPA’s action.

Revisions were adopted as a result of the triennial review of the use classifications and numeric standards assigned to individual segments. The review process included incorporating revisions to the *Basic Standards and Methodologies for Surface Water* (Regulation #31) that were adopted by the Commission in 2010. For example, the Commission adopted revisions to:

- antidegradation designations,
- recreation-based numeric standards,
- water supply classifications and health-based standards,
- temporary modifications (water supply-based standards),
- agriculture classifications and standards,
- aquatic life classifications,
- aquatic life-based numeric standards, and
- temporary modifications (aquatic life-based standards).

In reviewing the changes to Colorado’s water quality standards, the EPA read and carefully considered all documents and information submitted to the Commission during the State’s rulemaking process, including but not limited to proponent’s pre-hearing statements and exhibits, responsive pre-hearing statements and exhibits, rebuttal statements and exhibits, sur-rebuttal statements and exhibits, and public comments.

**STANDARDS APPROVED WITHOUT CONDITION**

All water quality standards revisions in this category are approved without condition. The basis for the EPA’s approval action is that the revisions are consistent with the requirements of the Clean Water Act and the EPA’s implementing regulation.

Revisions to Antidegradation Designations

An Outstanding Waters designation was adopted for Roaring Fork segments 3d and 10b, based on the evidence provided by WildEarth Guardians (segment 3d) and Trout Unlimited (segment 10b). The evidence shows that the water quality-based eligibility test at 31.8(2)(a) is met for both segments. In addition, both segments support populations of native Colorado River cutthroat trout, which has been

designated as a species of special concern by Colorado Parks and Wildlife. The addition of an Outstanding Waters designation results in more protective water quality requirements. The Colorado antidegradation rule at 31.8(1)(a) requires that Outstanding Waters are to be maintained and protected at their existing quality. The revisions are consistent with the Colorado antidegradation rule and the EPA’s regulation at 40 CFR § 131.12(a)(3).

#### Revisions to Recreation-Based Numeric Standards

In this rulemaking the Commission did not adopt any revisions to recreation classifications. However, there were several changes to the numeric standards for the protection of recreation uses. For Upper Arkansas segment 6a, the numeric standard for E. coli was corrected to match the assigned use classification. Recreation-based chlorophyll-a standards equal to the table value standard (150 mg/m<sup>2</sup>) were adopted for Upper Colorado segments 1, 2, 3, 4, 6a, 7b, 8, 9, and 10a, Blue River segments 1, 2a, 4a, 4b, 5, 6a, 6b, 8, 9, 10, 11, 12, 13, 14, 15, 16, and 18, Eagle River segments 1, 2, 3, 4, 6, 7a, 7b, 8, 10a, 10b, 11, and 12, Roaring Fork segments 1, 2, 3a, 3c, 3d, 4, 5, 6, 7, 8, 9, 10a, and 10b, North Platte segments 1, 2, 3, 4a, 4b, and 5a, and Yampa River segments 1, 2a, 3, 5, 6, 7, 8, 13a, 13b, 13c, 13d, 13f, 13g, 13h, 14, 15, 18, 19, and 20a. The revisions to recreation-based numeric standards are consistent with the EPA’s water quality standards regulation at 40 CFR § 131.11.

#### Revisions to Water Supply Use Classifications and Health-Based Standards

Changes to water supply use classifications and the associated numeric standards were adopted for several segments, including the addition of a water supply use classification and numeric standards to Roaring Fork segment 4, North Platte segment 6, and Yampa segment 7. A Direct Use Water Supply (DUWS) classification, but not the associated numeric standard for chlorophyll-a, was added to Upper Colorado segments 12 and 13, Blue River segment 22, Roaring Fork segment 12, and Yampa segment 22. The new water supply standards will enhance source water protection efforts in these watersheds. Updates were adopted to the basic standards for uranium in 33.5(3). Water supply-based numeric standards for molybdenum were applied to Blue River segments 14 and 15. The Commission adopted a narrative standard for Blue River segment 13 (a segment where a water supply classification has not been applied) to protect water supply uses in downstream waters. The revisions are consistent with the EPA’s water quality standards regulation at 40 CFR §§ 131.10 and 131.11.

#### Revisions to Temporary Modifications (Water Supply Parameters)

New water supply-based temporary modifications were adopted for Upper Colorado segment 10c (arsenic), Blue River segment 14 (molybdenum), Roaring Fork segment 4 (arsenic), and Yampa segment 7 (arsenic). The revisions are consistent with Colorado’s temporary modification general policy in *Basic Standards and Methodologies for Surface Waters* (Regulation #31, Section 31.7(3)). The EPA’s regulation at 40 CFR § 131.13 provides that such general policies may be adopted at State discretion, and are subject to the EPA’s review and approval. Colorado’s general policy has been approved by the EPA on multiple occasions, and most recently on August 4, 2011.

### Revisions to Agriculture Use Classifications and Standards

Agriculture-based numeric standards for molybdenum (160 µg/L Mo) were applied to most segments with an agriculture use classification. A site-specific agriculture-based molybdenum standard (190 µg/L Mo) was assigned to Upper Colorado segment 8, based on site data including the expected water intake rate for lactating cows (67.8 L/day). For segments where use classifications include aquatic life and agriculture, but not water supply, chronic agriculture-based chromium III numeric standards (100 µg/L total recoverable) were assigned. The revisions are consistent with the EPA’s water quality standards regulation at 40 CFR §§ 131.10 and 131.11.

### **STANDARDS APPROVED SUBJECT TO ESA CONSULTATION**

All water quality standards revisions in this category are approved, subject to ESA consultation. The basis for the EPA’s approval action is that the revisions are consistent with the requirements of the Clean Water Act and the EPA’s implementing regulation.

### Revisions to Aquatic Life Classifications

A use attainability analysis supported adoption of less-stringent aquatic life use classifications for Yampa River segments 23 (Cold 1 to Warm 1) and 13b (Cold 1 to Warm 1). The UAA for Yampa River segment 23 (Elkhead Reservoir) was prepared jointly by Colorado Parks and Wildlife and the Colorado River Water Conservation District, and showed that because of physical habitat limitations, only warm water species are expected to occur, a cold water aquatic community is precluded, and a change from Cold 1 to Warm 1 is justified. The UAA for Yampa River segment 13b (all or a portion of several small Yampa River tributary streams) was submitted by Seneca Coal Company and additional information was submitted with the Company’s rebuttal statement. Seneca’s evidence showed that because of physical habitat limitations, only warm water species are expected to be present, a cold water aquatic community is precluded, and a change from Cold 1 to Warm 1 is justified. The revisions are consistent with the EPA’s water quality standards regulation at 40 CFR § 131.10.

### Revisions to Numeric Standards for the Protection of Aquatic Life Classifications

Changes to aquatic life-based numeric standards were adopted for multiple segments, including revisions associated with the use classification changes discussed above. In addition, revisions were adopted to achieve consistency with the changes to Regulation #31 table value standards adopted by the Commission in 2010 and approved by the EPA (August 4, 2011 action letter), including updates to the table values for aluminum, temperature, and zinc.

Other segment-specific updates to aquatic life-based numeric standards included:

- Chronic zinc numeric standards based on protection of mottled sculpin (more stringent than the chronic table value) were assigned to segments where sculpin are expected to occur, including Blue River segments 13 and 18, Eagle River segment 3, Roaring Fork River segment 7, and Yampa River segment 1.

- Aquatic life-based chromium III chronic standards (expressed as a function of hardness) were added to various segments to enhance protection of aquatic life uses.
- Adjustments to temperature standards were adopted for Upper Colorado segment 12 (Shadow Mountain Reservoir and Lake Granby), 13 (Wolford Mountain and Williams Fork Reservoirs), Eagle River segments 8, 9a and 9b, Roaring Fork segment 12 (Ruedi Reservoir), North Platte segment 9 (Lake John, North Delaney Lake, South Delaney Lake) and Yampa River segment 22 (Pearl Lake, Stagecoach and Steamboat Reservoirs). Table 1.

<b>Table 1</b>	
<b>Regulation 33 – Adjustments to Temperature Standards</b>	
<b>Segment</b>	<b>Description</b>
Upper Colorado 12	For Shadow Mountain Reservoir, where a site-specific summer chronic temperature standard was previously adopted (19.3°C), a footnote was added to explain how the adequate refuge requirement is to be implemented.
	For Lake Granby, the site-specific summer chronic standard was revised from 19.42°C to 19.6°C and a footnote was added to explain how the adequate refuge requirement is to be implemented.
Upper Colorado 13	For Wolford Mountain Reservoir, the site-specific summer chronic standard was revised from 19.73°C to 21.3°C and a footnote was added to explain how the adequate refuge requirement is to be implemented.
	For Williams Fork Reservoir, the site-specific summer chronic standard was revised from 21.55°C to 21.6°C and a footnote was added to explain how the adequate refuge requirement is to be implemented.
Eagle River 8 and 9a	For these segments of the Eagle River mainstem, where CS-I temperature standards have been applied, site-specific modifications that apply during the spring and fall shoulder seasons were adopted.
Eagle River 9b	For this segment of the Eagle River mainstem, where CS-II temperature standards have been applied, site-specific modifications that apply during the spring and fall shoulder seasons were adopted.
Roaring Fork 12	For Ruedi Reservoir, the site-specific summer chronic standard was revised from 20.33°C to 20.3°C, and a footnote was added to explain how the adequate refuge requirement is to be implemented.
North Platte 9	For Lake John, the site-specific summer chronic standard was revised from 20.77°C to 21.2°C.
	For North Delaney Lake, the site-specific summer chronic standard was revised from 20.14°C to 20.1°C.
	For South Delaney Lake, a site-specific summer chronic standard of 18.8°C was adopted.
Yampa 22	For Pearl Lake, a site-specific summer chronic standard of 19.6°C was adopted, and a footnote was added to explain how the adequate refuge requirement is to be implemented.
	For Stagecoach Reservoir, a site-specific summer chronic standard of 21.7°C was adopted, and a footnote was added to explain how the adequate refuge requirement is to be implemented.
	For Steamboat Lake, a site-specific summer chronic standard of 21.6°C was adopted, and a footnote was added to explain how the adequate refuge requirement is to be implemented.

- For Yampa River segments 13b and 13g, cold stream tier II temperature standards were replaced by warm stream tier II standards, based on the expected fish species, temperature data, and other evidence.
- For protection of lakes and reservoirs with a cold water aquatic life use classification, numeric standards for chlorophyll-a (8 µg/L chl-a) were applied to Upper Colorado segments 11 and 13, Blue River segments 21, 22, and 23, Eagle River segments 13 and 14, Roaring Fork segments 11 and 12, North Platte segments 8 and 9, and Yampa segments 21, 22, and 23.
- Total phosphorus (25 µg/L TP) numeric standards were assigned to these same segments, and also to Upper Colorado segment 12.
- An adjustment to the ambient-based standard for total recoverable iron was adopted for Yampa River segment 13b (Middle Creek) based on additional data that have become available.

Generally, the new and revised numeric standards for protection of aquatic life uses are consistent with the EPA’s water quality standards regulation at 40 CFR § 131.11.

Revisions to Temporary Modifications (Aquatic Life Parameters)

The revisions to temporary modifications are summarized in Table 2. The revisions are consistent with Colorado’s temporary modification general policy in *Basic Standards and Methodologies for Surface Waters* (Regulation #31, Section 31.7(3)). The EPA’s regulation at 40 CFR § 131.13 provides that such general policies may be adopted at State discretion, and are subject to the EPA’s review and approval. Colorado’s general policy has been approved by the EPA on multiple occasions, and most recently on August 4, 2011.

Table 2 Revisions to Temporary Modifications		
Reg	Deleted	New/Extended
33	Yampa 13e (iron), 13h (iron, selenium)	Yampa 13b (selenium), 13d (iron, selenium), 13e (selenium), 13g (selenium), 13j (iron, selenium)

**REVISIONS WHERE THE EPA IS TAKING NO ACTION**

- Revisions to the Grand lake clarity standard adopted as a result of this rulemaking (note that EPA also has not acted on the initial 2008 adoption of clarity standards for Grand Lake).
- All segment-specific total phosphorus (TP) numeric standards based on the interim value for river/stream segments with a cold water aquatic life classification (110 µg/L TP) or a warm water aquatic life classification (170 µg/L TP); and
- All segment-specific TP numeric standards based on the interim value for lake/reservoir segments with a warm water aquatic life classification (83 µg/L TP).

**Enclosure 2**  
**Rationale for EPA’s Action on the Revisions to Regulation #37**  
**Adopted August 11, 2014**

With the exception of certain revisions where the EPA is taking no action, the Region is approving all changes to Regulation #37 adopted on August 11, 2014. This enclosure addresses only the changes to Classifications and Numeric Standards for the Lower Colorado River Basin, Regulation #37 (5 CCR 1002-33). The discussion below summarizes the revisions adopted by the Water Quality Control Commission (Commission) and the rationale for the EPA’s action.

Revisions were adopted as a result of the triennial review of the use classifications and numeric standards assigned to individual segments. The review process included incorporating revisions to the *Basic Standards and Methodologies for Surface Water* (Regulation #31) that were adopted by the Commission in 2010. For example, the Commission adopted revisions to:

- antidegradation designations,
- recreation classifications and numeric standards,
- water supply classifications and health-based standards,
- temporary modifications (water supply-based standards),
- agriculture classifications and standards,
- aquatic life classifications,
- aquatic life-based numeric standards, and
- temporary modifications (aquatic life-based standards).

In reviewing the changes to Colorado’s water quality standards, the EPA read and carefully considered all documents and information submitted to the Commission during the State’s rulemaking process, including but not limited to proponent’s pre-hearing statements and exhibits, responsive pre-hearing statements and exhibits, rebuttal statements and exhibits, sur-rebuttal statements and exhibits, and public comments.

**STANDARDS APPROVED WITHOUT CONDITION**

All water quality standards revisions in this category are approved without condition. The basis for the EPA’s approval action is that the revisions are consistent with the requirements of the Clean Water Act and the EPA’s implementing regulation.

Revisions to Antidegradation Designations

An Outstanding Waters designation was adopted for Lower Yampa/Green River segment 12c and White River segment 4b, based on the evidence provided by WildEarth Guardians. The evidence shows that the water quality-based eligibility test at 31.8(2)(a) is met for both segments. In addition, the waters are designated Critical Cutthroat Trout Habitat by the State of Colorado and support native Colorado River

cutthroat trout populations. The addition of an Outstanding Waters designation results in more protective water quality requirements. The Colorado antidegradation rule at 31.8(1)(a) requires that Outstanding Waters are to be maintained and protected at their existing quality.

Use Protected designations were removed from Lower Yampa/Green River segments 3g, 3i, and 6, despite the Aquatic Life Warm 2 use classification that has been assigned, based on evidence demonstrating good water quality conditions that satisfy the water quality-based eligibility test (for undesignated or reviewable waters) at 31.8(2)(b)(iii) of the *Basic Standards and Methodologies for Surface Waters*. Removal of a UP designation means that proposals to degrade water quality are subject to the antidegradation review requirements at 31.8(3) of the Basic Standards rule.

The revisions are consistent with the Colorado antidegradation rule and the EPA’s regulation at 40 CFR § 131.12.

#### Revisions to Recreation Classifications and Numeric Standards.

The Recreation N classification (not primary contact) was upgraded to Recreation P (potential for primary contact) for White River segments 13b, 13c, 17, 18b, and 20; and Lower Colorado segment 8.

Recreation-based chlorophyll-a standards equal to the table value standard (150 mg/m<sup>2</sup>) were adopted for Lower Yampa/Green River segments 3b, 3c, 3d, 3e, 3f, 3g, 3i, 4, 5, 6, 7, 8, 9, 10, 12a, 12b, 12c, 13a, 13b, 15, 16, 17a, 18, 19a, 19b, 20, 22c, and 22d; White River segments 1, 3, 4a, 4b, 6, 7, 8, 9c, 9d, 10b, 13b, 13c, 14a, 14b, 15, 18b, 19, 22, and 23; and Lower Colorado River segments 4b, 4c, 5, 6, 7a, 7b, 8, 9a, 9c, 10, 11h, 12b, 13a, 13b, 13d, 13e, 14a, 14b, 14c, 15a, 15b, 15c, 15d, 16, 17a, 17b, and 18.

The revisions to recreation classifications and numeric standards are consistent with the EPA’s water quality standards regulation at 40 CFR §§ 131.10 and 131.11.

#### Revisions to Water Supply Use Classifications and Health-Based Standards

Changes to water supply classifications and the associated numeric standards were adopted for several segments, including the addition of a water supply classification and numeric standards to Lower Yampa/Green River segments 3h, 5,6, 12a, 16, and 22d; White River segments 13b, 14a, 16a, 18b, and 20; and Lower Colorado River segments 11h and 13f. A full set of water supply numeric standards was assigned to Lower Colorado River segment 11e to protect the previously assigned water supply classification. A Direct Use Water Supply (DUWS) classification, but not the associated numeric standard for chlorophyll-a, was added to White River segment 11(Kenney Reservoir) and Lower Colorado River segment 21 (Jerry Creek Reservoirs and Palisade Cabin Reservoir). The new water supply standards will enhance source water protection efforts in these watersheds. Updates were adopted to the basic standards for uranium in 37.5(3). The revisions are consistent with the EPA’s water quality standards regulation at 40 CFR §§ 131.10 and 131.11.

Revisions to Temporary Modifications (Water Supply Parameters)

New water supply-based temporary modifications for arsenic were adopted for Lower Yampa/Green River segments 5 and 17a; and Lower Colorado River segments 4c, 11h, 15b, 15c, 15d, and 17b. The revisions are consistent with Colorado’s temporary modification general policy in *Basic Standards and Methodologies for Surface Waters* (Regulation #31, Section 31.7(3)). The EPA’s regulation at 40 CFR § 131.13 provides that such general policies may be adopted at State discretion, and are subject to the EPA’s review and approval. Colorado’s general policy has been approved by the EPA on multiple occasions, and most recently on August 4, 2011.

Revisions to Agriculture Use Classifications and Standards

Agriculture-based numeric standards for molybdenum (160 µg/L Mo) were applied to segments with an agriculture use classification. For segments where use classifications include aquatic life and agriculture, but not water supply, chronic agriculture-based chromium III numeric standards (100 µg/L total recoverable) were assigned. The revisions to agriculture standards are consistent with the EPA’s water quality standards regulation at 40 CFR §§ 131.10 and 131.11.

**STANDARDS APPROVED SUBJECT TO ESA CONSULTATION**

All water quality standards revisions in this category are approved, subject to ESA consultation. The basis for the EPA’s approval action is that the revisions are consistent with the requirements of the Clean Water Act and the EPA’s implementing regulation.

Revisions to Aquatic Life Classifications

A use attainability analysis supported a downgrade from Cold 1 to Warm 1 for Lower Colorado River segment 16 (lower Plateau Creek). The UAA prepared by the Division (WQCD Exhibit 37-5) showed that because of the expected water temperatures in this portion of Plateau Creek, only warm water species are expected to occur, a cold water aquatic community is precluded, and a change from Cold 1 to Warm 1 is justified. The UAA concludes that “the aquatic community, elevations, terrain, and morphology of Lower Colorado segment 16 are consistent a with a warm water classification.”

The revisions included an upgrade from Warm 2 to Warm 1 for all or portions of Lower Yampa/Green River segments 3c (Wilson Creek), 22b, and 22c; and from Cold 2 to Cold 1 for White River segment 19 and Lower Colorado River segments 11b and 11h.

Finally, the aquatic life classification was changed from Warm 1 to Cold 1 for certain waters in Lower Colorado River segment 21 (lakes and reservoirs tributary to Plateau Creek within the Grand Mesa National Forest, where elevation ranges from 8,000 to 11,000 feet above sea level).

The revisions to aquatic life classifications are consistent with the EPA’s water quality standards regulation at 40 CFR § 131.10.

Revisions to Numeric Standards for the Protection of Aquatic Life Classifications

Changes to aquatic life-based numeric standards were adopted for multiple segments, including revisions associated with the use classification changes discussed above. In addition, revisions were adopted to achieve consistency with the changes to Regulation #31 table value standards adopted by the Commission in 2010 and approved by the EPA (August 4, 2011 action letter), including updates to the table values for aluminum, temperature, and zinc.

Other segment-specific updates to aquatic life-based numeric standards included:

- Chronic zinc numeric standards to protect aquatic life uses were added to Lower Yampa/Green River segments 4, 7, 10, 15, and 18; and Lower Colorado segments 1, 3, and 6.
- Sculpin-specific chronic zinc standards are appropriate for application in low hardness situations (hardness below 102 mg/L) because the chronic zinc table value is not protective of mottled sculpin at low hardness. Based on a review of site-specific evidence showing that hardness is consistently higher than 102 mg/L, sculpin-specific chronic zinc standards were removed from Lower Yampa/Green River segments 2, 12a, and 13b; and Lower Colorado River segments 7a and 15a. However, chronic zinc standards based on the chronic table value remain in effect for protection of aquatic life uses in these segments.
- Aquatic life-based chromium III chronic standards (expressed as a function of hardness) were added to various segments to enhance protection of aquatic life uses.
- Based on the evidence submitted by the Division, a full set of numeric standards to protect the assigned aquatic life use classification was added to Lower Yampa/Green River segments 3b, 3i, 6, and 17c; and Lower Colorado River segments 11b and 13a.
- The selenium goal qualifier was deleted from Lower Yampa/Green River segment 3b, based on data indicating that the acute and chronic table values are attained.
- Adjustments to temperature standards were adopted for White River segment 25 (Lake Avery), Lower Colorado segments 15c, 15d, and 16, and Lower Colorado segment 20 (Rifle Gap and Vega Reservoirs). Table 3.
- For Lower Colorado River segment 15b, CS-I temperature standards were replaced with CS-II temperature standards based on evidence submitted by the WQCD showing that cold stream tier I species are not expected to occur.
- Chlorophyll-a standards equal to the 8 µg/L (cold) or 20 µg/L (warm) interim values in Regulation #31 were adopted for Lower Yampa/Green River segments 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, and 33; White River segments 10a, 11, 13d, 24, 25, 26, and 27; and Lower Colorado River segments 9b, 13c, 19, 20, and 21.
- Total phosphorus (TP) standards equal to the 25 µg/L interim value in Regulation #31 were adopted for Lower Yampa/Green River segments 24, 25, 28, 29, 30, 31, and 33; White River segments 10a, 13d, 24, 25, and 26; and Lower Colorado River segments 9b, 20, and 21.
- Adjustments to previously-adopted ambient-based standards were made for three segments based on evidence submitted by the Division that the revisions better reflect naturally-occurring or irreversible human-induced water quality conditions (31.7(1)(1)(b)(ii)). Adjusted standards were

adopted for Lower Yampa/Green River segment 16 (iron) and White River segments 13b (selenium) and 13c (iron). In general, these revisions were supported by evidence demonstrating that existing conditions are a result of natural or irreversible man-induced water quality levels, but such levels are adequate to protect classified uses. The Region notes that the Commission recently adopted fine-tuning changes to the ambient-based standards authorizing provision in Regulation 31 (e.g., clarifications regarding supporting information and data that are to be submitted). EPA recommends revisiting ambient-based standards during each basinwide water quality standards review to consider any new information regarding the feasibility of reducing pollutant loadings, and will expect that future new/revised ambient-based standards will address the new requirements.

<b>Table 3</b>	
<b>Regulation 37 – Adjustments to Temperature Standards</b>	
<b>Segment</b>	<b>Description</b>
White River 25	For Lake Avery, where a site-specific summer chronic temperature standard was previously adopted (20.7°C), a footnote was added to explain how the adequate refuge requirement is to be implemented.
Lower Colorado 15c	For upper Plateau Creek, site-specific DM and MWAT standards were adopted for summer (April – September), the month of October, and winter (November – March).
Lower Colorado 15d	For lower Buzzard Creek, site-specific DM (25.1°C) and MWAT (18.9°C) standards were adopted for summer (April – October).
Lower Colorado 16	For lower Plateau Creek, a site-specific DM (31.0°C) standard was adopted for summer (March – November).
Lower Colorado 20	For Rifle Gap Reservoir (23.0°C) and Vega Reservoir (21.5°C), where site-specific summer chronic temperature standards were previously adopted, a footnote was added to explain how the adequate refuge requirement is to be implemented.

The new and revised numeric standards for protection of aquatic life uses are consistent with the EPA’s water quality standards regulation at 40 CFR § 131.11.

#### Revisions to Temporary Modifications

For Lower Colorado River segment 4e (Dry Creek), the expiration date for the previously-adopted copper temporary modification was modified (from December 31, 2015 to June 30, 2017) to provide additional time to resolve uncertainty about the appropriate numeric standard. In addition, the expiration date for the previously-adopted iron temporary modification was modified (from December 31, 2015 to June 30, 2015). The revisions are consistent with Colorado’s temporary modification general policy in *Basic Standards and Methodologies for Surface Waters* (Regulation #31, Section 31.7(3)). The EPA’s regulation at 40 CFR § 131.13 provides that such general policies may be adopted at State discretion, and are subject to the EPA’s review and approval. Colorado’s general policy has been approved by the EPA on multiple occasions, and most recently on August 4, 2011.

**REVISIONS WHERE THE EPA IS TAKING NO ACTION**

- All segment-specific total phosphorus (TP) numeric standards based on the interim value for river/stream segments with a cold water aquatic life classification (110 µg/L TP) or a warm water aquatic life classification (170 µg/L TP); and
- All segment-specific TP numeric standards based on the interim value for lake/reservoir segments with a warm water aquatic life classification (83 µg/L TP).