UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

January 19, 2023

Shelly Lemon, Chief
Surface Water Quality Bureau
New Mexico Environment Department
1190 Saint Francis Drive, Suite N4050
Santa Fe, New Mexico 87505

RE: New Mexico's 2020 Triennial Revisions to 20.6.4 NMAC

Dear Ms. Lemon:

I am writing in response to your letter of May 2, 2022, requesting review and action on new and revised provisions in New Mexico's *Standards for Interstate and Intrastate Surface Waters* 20.6.4 New Mexico Administrative Code (NMAC). These revisions were submitted to the U.S. Environmental Protection Agency (EPA) as required under federal regulations at 40 CFR § 131.5. The revised water quality standards were certified by Mr. John Verheul, Special Assistant Attorney General of the State of New Mexico, as having been adopted by the Commission pursuant to the laws of the state of New Mexico and became effective as state law on April 23, 2022. The EPA received your submission letter as the New Mexico Environment Department (NMED) Cabinet Secretary delegated signatory authority on May 2, 2022.

I am pleased to inform you that in today's action, the EPA is approving the majority of the new and/or revised provisions, including non-substantive provisions within its discretionary authority, pursuant to CWA § 303(c) and its implementing regulations at 40 CFR Part 131, as detailed in **Section II** of the enclosed Technical Support Document (TSD). There are provisions described in **Section III** that the EPA determined it could not act on. Please note that the provisions the EPA has not acted on are not effective for CWA purposes as specified at 40 CFR §131.21(c). The EPA is not approving the New Mexico water quality standards for those waters or portions of waters located in Indian Country, as defined in 18 U.S.C. § 1151.

The EPA's approval of new and revised WQS is subject to the consultation requirements of Section 7(a)(2) of the Endangered Species Act (ESA), 16 U.S.C. §1536. Under Section 7(a)(2) of the ESA The EPA has the obligation to ensure that its approval of revisions to New Mexico's *Standards for Interstate and Intrastate Surface Waters* 20.6.4 NMAC will not jeopardize the continued existence of threatened and endangered species and critical habitat in New Mexico. The EPA is reserving action on specific aquatic life criteria described in **Section V** of the TSD pending completion of ESA consultation with the Service.

I would like to thank the Commission, the New Mexico Environment Department and its Surface Water Quality Bureau for their commitment and hard work in reviewing and revising the state's water quality standards. We appreciate your patience with the delay in action by the EPA resulting from the extensive ESA consultation detailed in **Section III** of the TSD. If you have any questions or concerns, please contact me at (214) 665-7101, or have your staff contact Russell Nelson at (214) 665-6646 or Jasmin Diaz-Lopez at (214) 665-2733.

Sincerely,

Troy C. Hill
Acting Director
Water Division

Enclosure

cc: James C. Kenney, Cabinet Secretary
Stephanie Stringer, Chair, WQCC (Stephanie.Stringer@state.nm.us)
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INTERIM TECHNICAL SUPPORT DOCUMENT

EPA Action on the
New Mexico Water Quality Standards for
Interstate and Intrastate Surface Waters
20.6.4 NMAC

2020 Triennial Revisions

U.S. EPA REGION 6

WATER QUALITY PROTECTION DIVISION

January 17, 2023

Contents

I. Introduction

Regulatory Requirements and Purpose

As described in § 303(c) of the Clean Water Act[1] (CWA) and in the standards regulation within the Code of Federal Regulations[2] (CFR) at 40 CFR § 131, specifically § 131.20(a), states and authorized tribes have primary responsibility for developing and adopting water quality standards to protect their waters. In addition, CWA § 303(c)(1) and 40 CFR § 131.20(a) require states to hold public hearings at least once every three years to review and, as appropriate, modify and adopt standards. As required by 40 CFR § 131.21, the Environmental Protection Agency (EPA) is obligated to review new and revised surface water quality standards that have been adopted by states and authorized tribes. Authority to approve or disapprove new and/or revised standards submitted to the EPA for review has been delegated to the Water Division Director at Region 6. Tribal or state water quality standards are not effective under the CWA until approved by the EPA.

The purpose of this Technical Support Document (TSD) is to provide the basis for the Environmental Protection Agency's (EPA) action on the New Mexico Water Quality Control Commission's (Commission) revisions to the *New Mexico Standards for Interstate and Intrastate Waters*[3] (20.6.4 NMAC).

Chronology of Events

The New Mexico Environment Department (NMED) initiated the state's current Triennial Review process through outreach to tribes and identified stakeholders in January 2020. The NMED's Surface Water Quality Bureau (SWQB) developed and subsequently published initial revisions to the New Mexico water quality standards at 20.6.4. NMAC and hosted two virtual informational meetings via WebEx online meeting platform to present and discuss initial proposed revisions to the New Mexico standards at 20.6.4 NMAC with interested parties and the public. The SWQB took public comment over a 30-day public comment period from November 2, 2020, to December 2, 2020, later extending that comment period to January 6, 2021. The EPA provided comments and recommendations to the SWQB on December 22, 2020, regarding significant issues that may need to be addressed in these revisions and subsequent revisions of the state's water quality standards and associated implementation.

The NMED submitted a petition for hearing before the New Mexico Water Quality Control Commission (Commission) on August 19, 2020. The Commission held a public hearing on July 13th – 16th and 21st, 2021, during which the NMED presented technical testimony in support of its proposed amendments and in response to amendments proposed by other entities. The Commission held its deliberative hearing on March 1st and 2nd 2022, adopting revisions to 20.6.4.

[1] Clean Water Act. 33 USC §§ 1251-1387.
[2] Water Quality Standards Regulation, 33 U.S.C. 1251et seq.
[3] New Mexico Administrative Code (NMAC). 2022. *State of New Mexico Standards for Interstate and Intrastate Surface Waters*. 20.6.4. New Mexico Water Quality Control Commission. As amended through April 23, 2022. (20.6.4 NMAC).

NMAC. The New Mexico Attorney General's Office certified the new/revised water quality standards became effective as state law as of April 23, 2022. The revised *New Mexico Standards for Interstate and Intrastate Waters* (20.6.4 NMAC) were submitted to EPA for review and action on May 2, 2022.

Summary of Proposed Revisions

The NMED submitted revisions adopted by the Commission for the *New Mexico Standards for Interstate and Intrastate Waters* (20.6.4 NMAC) to the EPA for review and action. These revisions reflect several new and revised provisions which include, but are not limited to the following:

- Updating definitions (20.6.4.7 NMAC)
- Clarification of language under Review of Standards (20.6.4.10 NMAC)
- Clarification of language under Use Attainability Analysis (20.6.4.15 NMAC)
- Designated use revisions
    - Existing Use Analysis for nonperennial waters within Los Alamos National Laboratory currently classified under 20.6.4.128 NMAC
    - Existing Use Analysis for perennial classified waters with a secondary contact recreational use
- Updates to the numeric aquatic life and human health criteria (20.6.4.900 NMAC)
- Updates to the numeric ammonia criteria (20.6.4.900 NMAC)

Provisions that EPA is approving are discussed in **Section II** of this TSD. Those provisions the EPA has determined that it lacks adequate information to act on at this time are identified and discussed in detail in **Section III**.

Review of New/Revised Provisions

The new/revised provisions in the *New Mexico Standards for Interstate and Intrastate Waters* (20.6.4 NMAC) are presented in an underline/strikeout format to provide context to the reader. The EPA's responses to the new/revised provision may include an explanation of how the EPA interprets that particular provision in the context of (a) specific applicable federal regulation(s), policy or guidance as well as state provisions as appropriate.

The EPA has determined that some revisions adopted by the Commission did not substantively modify New Mexico's WQS at 20.6.4 NMAC. EPA considers nonsubstantive edits to existing WQS to constitute new or revised WQS that it has the authority to approve or disapprove under Section 303(c)(3). While these revisions do not substantively change the meaning or intent of the existing WQS, treating such revisions in this manner ensures public transparency as to which provisions are effective for CWA purposes. EPA notes that the scope of its review and action on nonsubstantive edits or editorial changes extends only to the edits or changes themselves. EPA is not re-opening, reconsidering, or taking any action on the underlying, previously approved WQS that are the subject of the nonsubstantive edits or editorial changes.

II. New or Revised Provisions the EPA is Approving

In today's action, the EPA is approving the following new or revised provisions in the *New Mexico Standards for Interstate and Intrastate Waters* (20.6.4 NMAC) that were adopted by the Commission on March 2, 2022, and became effective as state law on April 23, 2022, pursuant to §303(c) of the CWA. The new and revised water quality standards will apply throughout the State of New Mexico, excluding areas of Indian country as defined in 18 U.S.C. §1151

20.6.4.6 Objective

D. These surface water quality standards serve to respond to the inherent threats of climate change and provide resiliency for the continued protection and enhancement of water quality.
[20.6.4.6 NMAC - Rp 20 NMAC 6.1.1006, 10/12/2000; A, 5/23/2005; A, 4/23/2022]

***EPA Determination*:** *The amended language in this provision has been described as an effort to reflect the objective of the New Mexico WQS more accurately as they pertain to the threats from climate change consistent with the statewide climate strategy outlined in the Governor's Executive Order referenced in this provision. The EPA supports the NMED's commitment to provide resiliency in addressing threats to the state's waters posed by climate change. This provision is approved pursuant to CWA § 303(c) and is effective for CWA purposes.*

20.6.4.7. Definitions

Definitions are generally considered to be WQS in that they can affect the meaning and interpretation of a WQS provisions. The exception to this convention is when the use of a definition is limited to those provisions that are not WQS, e.g., implementation language. The EPA's decision on revisions to definitions depend on the effect the definition has on the viability of other WQS provisions in the New Mexico Standards for Interstate and Intrastate Waters (20.6.4 NMAC).

The Commission has made the following changes to 20.6.4.7 NMAC. In most instances, a change to a current definition such as structural changes e.g., renumbering of subparagraphs, etc. are considered nonsubstantive changes and are not described in detail unless relevant to understanding, interpretation or application of other provisions.

20.6.4.7 DEFINITIONS: Terms defined in the New Mexico Water Quality Act, but not defined in this part will have the meaning given in the Water Quality Act.

A. Terms beginning with numerals or the letter "A," and abbreviations for units.

[~~(7)~~](8) "Attainable Use**"** means a use that is achievable by the imposition of effluent limits required under sections 301(b) and 306 of the federal Clean Water Act and implementation of cost-effective and reasonable best management practices for nonpoint source control. An attainable use may or may not have criteria as stringent as the designated use.

***EPA Determination*:** *The revisions to this definition remain generally consistent with Chapter 2 of the EPA's Water Quality Standards Handbook.*[4] *This definition is approved pursuant to CWA § 303(c) and is effective for CWA purposes.*

C. Terms beginning with the letter "C".

(4) "Climate change" refers to any significant change in the measures of climate lasting for an extended period of time, typically decades or longer, and includes major changes in temperature, precipitation, wind patterns or other weather-related effects.

***EPA Determination*:** *The EPA considers this definition to be consistent with the CWA and Water Quality Standards regulation. This definition is approved pursuant to CWA § 303(c) and is effective for CWA purposes.*

(2) "Emerging contaminants" refer to water contaminants that may cause significant ecological or health effects at low concentrations. Emerging contaminants are generally chemical compounds recognized as having deleterious effects at environmental concentrations whose negative impacts have not been fully quantified and may not have regulatory numeric criteria.

***EPA Determination*:** *The EPA considers this definition to be consistent with the CWA and Water Quality Standards regulation. This definition is approved pursuant to CWA § 303(c) and is effective for CWA purposes.*

H. Terms beginning with the letter "H".

(1) "Hardness" means the measure of calcium and magnesium salts in water expressed as dissolved calcium carbonate (CaCO3) unless otherwise noted.

***EPA Determination*:** *The inclusion of this simple definition of "hardness" is intended to clarify the term and provide consistency when implementing New Mexico's hardness-based metals criteria for the protection of aquatic life at 20.6.4.900(I) NMAC. This definition is approved pursuant to CWA § 303(c) and is effective for CWA purposes.*

(2) "Harmonic mean flow" is the number of daily flow measurements divided by the sum of the reciprocals of the flows; that is, it is the reciprocal of the arithmetic mean of reciprocal daily flow measurements consistent with the equations in Paragraph (1) of Subsection B of 20.6.4.11 NMAC.

***EPA Determination*:** *The definition was moved from 20.6.4.11.B with minor, nonsubstantive edits. This definition is approved as a nonsubstantive revision pursuant to CWA § 303(c) and is effective for CWA purposes.*

L. Terms beginning with the letter "L".

(2) "**Limited aquatic life**" as a designated use, means the surface water is capable of supporting only a limited community of aquatic life. This subcategory includes surface waters that support aquatic species selectively adapted to take advantage of naturally occurring rapid environmental changes, [~~ephemeral or intermittent water,~~]low flow, high turbidity, fluctuating temperature, low dissolved oxygen content or unique chemical characteristics.

[4] U.S. EPA, Office of Water. (1994). Water Quality Standards Handbook. EPA-823-B-17-001 (2017). Retrieved from https://www.epa.gov/wqs-tech/water-quality-standards-handbook

EPA Determination: *Although ephemeral or intermittent waters may experience the limitations described, striking the reference to these waters, deleting the specific reference and referring to low flow broadens the application of the limited aquatic life use designation to waters that may have the limitations described although they may be intermittent or perennial. These revisions do not fundamentally alter the meaning of the revised definition. Redivisions to this definition are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

M. Terms beginning with the letter "M".

(1) "Marginal coldwater" in reference to an aquatic life use means that natural [~~intermittent or low flows, or other natural habitat~~] conditions severely limit maintenance of a coldwater aquatic life population during at least some portion of the year or historical data indicate that the temperature [~~in~~] of the surface water of the state may exceed that which could continually support aquatic life adapted to coldwater[~~25°C (77°F)~~].

EPA Determination: *Although the intent appears to be distinguishing the marginal coldwater aquatic life use designation from the coldwater aquatic life use, striking the reference to flow and natural habitat leaves this definition less specific. The reference to naturally variable conditions may be limited during the attainment of the coldwater aquatic life use "at least some portion of the year" indicates that the marginal coldwater aquatic life us can be applied as a seasonal use. While the EPA recognizes natural variability, it is important to note that establishing a seasonal or year-round marginal coldwater aquatic life use must be based on natural and not anthropogenic conditions. Striking the use-specific water temperature limitations is appropriate given temperature criteria are held in the description of the marginal coldwater aquatic life use in 20.6.4.900 NMAC. Revisions to this definition are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

P. Terms beginning with the letter "P".

(3) "Persistent toxic pollutants" means pollutants, generally organic, that are resistant to environmental degradation through chemical, biological and photolytic processes and can bioaccumulate in organisms, causing adverse impacts on human health and aquatic life.

EPA Determination: *The EPA considers this definition to be consistent with the CWA and Water Quality Standards regulationThis definition is approved pursuant to CWA § 303(c) and is effective for CWA purposes.*

S. Terms beginning with the letter "S"

(5) "Surface water(s) of the state"

(a) means all surface waters situated wholly or partly within or bordering upon the state, including the following:

(i) lakes[,];
(ii) rivers[,];
(iii) streams (including intermittent and ephemeral streams) [,];
(iv) mudflats[~~,~~];
(v) sandflats[~~,~~];
(vi) wetlands[~~,~~];
(vii) sloughs[~~,~~];
(viii) prairie potholes [~~,~~];
(ix) wet meadows[~~,~~];
(x) playa lakes[~~,~~];
(xi) reservoirs[~~,~~]; [~~or~~]and

(xii) natural ponds.

(b) [~~Surface waters of the state~~] also means all tributaries of such waters, including adjacent wetlands, any manmade bodies of water that were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state, and any "waters of the United States" as defined under the Clean Water Act that are not included in the preceding description.

(c) [~~Surface waters of the state~~] does not include private waters that do not combine with other surface or subsurface water or any water under tribal regulatory jurisdiction pursuant to Section 518 of the Clean Water Act. Waste treatment systems, including treatment ponds or lagoons designed and actively used to meet requirements of the Clean Water Act (other than cooling ponds as defined in 40 CFR Part 423.11(m) that also meet the criteria of this definition), are not surface waters of the state, unless they were originally created in surface waters of the state or resulted in the impoundment of surface waters of the state.

EPA Determination: *The inclusion of the term "ephemeral" in this definition clarifies that New Mexico's WQS apply to ephemeral waters. Other formatting changes, including striking the repetition of the term "Surface waters of the state" in sections (ii) and (iii) are nonsubstantive. Revisions to this definition are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

U. Terms beginning with the letter "U". ~~[RESERVED]~~

(1) **"Unclassified waters of the state"** means those surface waters of the state not identified in 20.6.4.101 through 20.6.4.899 NMAC.

EPA Determination: *The language in this definition has been drawn from 20.6.4.11(H) NMAC, which is integral to providing protection to unclassified waters in New Mexico. This new definition is approved as a nonsubstantive change to WQS pursuant to CWA § 303(c) and is effective for CWA purposes.*

(2) **"Use attainability analysis"** means a scientific study conducted for the purpose of assessing the factors affecting the attainment of a use.

EPA Determination: *This language for this definition appears to have been drawn from the provision at 20.6.4.15 NMAC. The new definition is approved as a nonsubstantive revision to WQS pursuant to CWA § 303(c) and is effective for CWA purposes.*

20.6.4.8 Antidegradation Policy and Implementation Plan

A. Antidegradation Policy: This antidegradation policy applies to all surface waters of the state.

(1) Existing [~~instream water~~] uses, as defined in Paragraph (4) of Subsection E of 20.6.4.7 NMAC, and the level of water quality necessary to protect the existing uses shall be maintained and protected in all surface waters of the state.

EPA Determination: *The reference to the definition of "existing uses" and subsequent corrections of the acronym "ONRW" are nonsubstantive. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.9 Outstanding National Resource Waters

A. Procedures for nominating an ONRW: Any person may nominate a surface water of for designation as an ONRW by filing a petition with the commission pursuant to [~~the guidelines for water quality control commission regulation hearings~~]20.1.6 NMAC, Rulemaking Procedures - Water Quality Control Commission. A petition to designate a surface water of the state as an ONRW shall include:

EPA Determination: *The inclusion of the reference to the Commission's regulatory authority and procedures provides important clarity regarding the process for nominating waters as Outstanding National Resource Waters (ONRW). The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.10. Review of Standards; Need for Additional Studies

A. Section 303(c)(1) of the federal Clean Water Act requires that the state hold public hearings at least once every three years for the purpose of reviewing water quality standards and proposing, as appropriate, necessary revisions to water quality standards.

B. In accordance with 40 CFR 131.10(j) when an existing use is defined in 20.6.4.7 NMAC, is more stringent than the designated use and supporting evidence demonstrates the presence of that use, the designated use shall be amended to be no less stringent than the existing use.

[~~B.~~] C. It is recognized that, in some cases, numeric criteria [~~have been adopted that reflect use designations rather than existing conditions of surface waters of the state.~~]for a particular designated use may not adequately reflect the local conditions or the aquatic communities adapted to those localized conditions. In these cases, a water quality criterion may be modified to reflect the natural condition of a specific waterbody. The modification of the criterion does not change the designated use; the modification only changes the criterion for that specific waterbody. [~~Narrative criteria are required for many constituents because accurate data on background levels are lacking. More intensive water quality monitoring may identify surface waters of the state where existing quality is considerably better than the established criteria.~~]When justified by sufficient data and information, a numeric [~~the~~] water quality [~~criteria~~]criterion [~~will~~]may be adopted or modified in accordance with 20.6.4.10(F) and 20.6.4.10(G) NMAC, to protect the attainable uses of the waterbody.

D. The removal or amendment of a designated use to a designated use with less stringent criteria can only be done through a use attainability analysis in accordance with 20.6.4.15 NMAC.

The addition of the new provisions at 20.6.4.10 (B) NMAC clarifies that the existing uses may represent higher water quality than is being protected by the current designated use and associated criteria. These revisions require that the more stringent designated use be revised consistent with the requirements found in 40 CFR 131.10(i) as specified.

The revisions to 20.6.4.10 (C) NMAC also clarify the process that will use to determine conditions where a site-specific criteria analysis is warranted to supporting the designation of use that reflects the natural conditions of a waterbody. This approach is not the development of a subcategory of use as referred to in 40 CFR 131.10(k)(2) and is generally consistent with both 40 CFR §§ 131.10 and 131.11. It is worth noting that although 20.6.4.7 NMAC contains a definition for "natural causes," defining natural conditions can be very difficult to impossible without substantial historical data on habitat and water quality conditions. It is important to understand that the EPA would require extensive supporting information to support revisions based on natural causes prior to acting on such revisions.

EPA Determination: *The new provisions at 20.6.4.10(D) NMAC is a subdivision of 20.6.4.10(C) NMAC that specifies that the removal or amendment of a designated use with less stringent*

criteria can only be done through a use attainability analysis (UAA). The new provision is consistent with 40 CFR 131.10(j)(2). Subsequent revisions updating the lettering of subsequent paragraphs in this provision are not substantive. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.

20.6.4.11. Applicability of Water Quality Standards

A. [RESERVED]

B. Critical low flow: The critical low flow of a stream at a particular site shall be used in developing point source discharge permit requirements to meet numeric criteria set in 20.6.4.97 through 20.6.4.900 NMAC and Subsection F of 20.6.4.13 NMAC.

(1) For human health-organism only criteria, the critical low flow is the harmonic mean flow [~~; "harmonic mean flow" is the number of daily flow measurements divided by the sum of the reciprocals of the flows; that is, it is the reciprocal of the mean of reciprocals~~]. For ephemeral waters the calculation shall be based upon the nonzero flow intervals and modified by including a factor to adjust for the proportion of intervals with zero flow. The equations are as follows:

***EPA Determination*:** *The deletion of this reference to harmonic mean flow is nonsubstantive given that the term is now defined in 20.6.4.7 NMAC. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

H. Unclassified waters of the state: [~~Unclassified waters of the state are those surface waters of the state not identified in 20.6.4.101 through 20.6.4.899 NMAC.~~] An unclassified surface water of the state is presumed to support the uses specified in Section 101(a)(2) of the federal Clean Water Act. As such, it is subject to 20.6.4.98 NMAC if nonperennial or subject to 20.6.4.99 NMAC if perennial. The commission may include an ephemeral unclassified surface water of the state under 20.6.4.97 NMAC only if a use attainability analysis demonstrates pursuant to 20.6.4.15 NMAC that attainment of Section 101(a)(2) uses is not feasible.

EPA Determination: *Striking the first sentence of this provision referring to unclassified waters of the state that are "not identified in 20.6.4.101 through 20.6.4.899 NMAC" that has been moved to 20.6.7.7U(1) NMAC and is thus a nonsubstantive revision. This provision is approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.12. Compliance with Water Quality Standards

F. For compliance with hardness-dependent numeric criteria, [~~dissolved~~] hardness (as mg $CaCO_3$/L) shall be determined from a sample taken at the same time that the sample for the contaminant is taken.

***EPA Determination*:** *The NMED proposed, and the Commission adopted a definition of the term "hardness" to clarify the term and provide consistency when implementing New Mexico's hardness-based metals criteria for the protection of aquatic life at 20.6.4.900(I) NMAC. As described in the Commission's Statement of Reasons (SOR), the San Juan Water Commission recommended removing the word "dissolved" before "hardness" in 20.6.4.12(F) NMAC and 20.6.4.900(I) NMAC, so that it aligned with the new definition of "hardness," and to eliminate redundancy and clarify the term. The Commission agreed and approved striking the word "dissolved" in in 20.6.4.12(F) NMAC. The deletion of the word "dissolved" in this*

provision is approved as a nonsubstantive revision pursuant to CWA § 303(c) and is effective for CWA purposes.

G. Compliance schedules: [~~It shall be the policy of the commission to allow on a case-by-case basis~~ t]The commission may allow the inclusion of a schedule of compliance in a NPDES permit issued to an existing facility on a case-by-case basis. Such schedule of compliance will be for the purpose of providing a permittee with adequate time to make treatment facility modifications necessary to comply with water quality-based permit limitations determined to be necessary to implement new or revised water quality standards or wasteload allocation. Compliance schedules may be included in NPDES permits at the time of permit renewal or modification and shall be written to require compliance at the earliest practicable time. Compliance schedules shall also specify milestone dates so as to measure progress towards final project completion (e.g., design completion, construction start, construction completion, date of compliance).

EPA Determination: *The Commission previously adopted this compliance schedule authorizing provision consistent with 40 CFR 131.15. The nonsubstantive rephrasing here improves the clarity of the provisions and the intent to allow compliance schedules on a case-by-case basis. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.13. General Criteria

F. Toxic pollutants:

(1) Except as provided in 20.6.4.16 NMAC, surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, duration, concentrations or combinations that affect the propagation of fish or that are toxic to humans, livestock or other animals, fish or other aquatic organisms, wildlife using aquatic environments for habitation or aquatic organisms for food, or that will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels that will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.

EPA Determination: *The inclusion of the term "duration" adds some clarity to this provision since the term refers to the averaging period, and a maximum allowable frequency of exceedance of the acute and chronic criteria. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.14 Sampling and Analysis

F. Emerging Contaminants Monitoring: The department may require monitoring, analysis and reporting of emerging contaminants as a condition of a federal permit under Section 401 of the federal Clean Water Act.

EPA Determination: *This new subsection refers to existing authority held by the NMED to require sampling and monitoring of contaminants in NPDES permits consistent with its CWA § 401 authority. This is not a WQS that EPA has authority under CWA § 303(c) to review.*

20.6.4.15. Use Attainability Analysis

A. **Regulatory requirements for a use attainability analysis**. [~~A use attainability analysis is a scientific study conducted for the purpose of assessing the factors affecting the attainment of a use.~~] Whenever a use attainability analysis is conducted, it shall be subject to the requirements and limitations set forth in 40 CFR Part 131, Water Quality Standards; specifically, Subsections 131.3(g), 131.10(g), 131.10(h) and 131.10(j) shall be applicable. In accordance with 40 CFR 131.10(i), and 20.6.4.10 NMAC, the amendment of a designated use, based on an existing use with more stringent criteria, does not require a use attainability analysis.

(1) The commission may remove a designated use, that is not an existing use, specified in Section 101(a)(2) of the federal Clean Water Act or adopt subcategories of a use in Section 101(a)(2) of the federal Clean Water Act [~~use~~] requiring less stringent criteria only if a use attainability analysis demonstrates that attaining the use is not feasible because of a factor listed in 40 CFR 131.10(g). Uses in Section 101(a)(2) of the federal Clean Water Act [~~uses~~], which refer to the protection and propagation of fish, shellfish and wildlife and recreation in and on the water, are also specified in Subsection B of 20.6.4.6 NMAC.

(2) A designated use cannot be removed if it is an existing use unless a use requiring more stringent criteria is designated.

B. The mechanism to remove a designated use. A use attainability analysis shall assess the physical, chemical, biological, economic, or other factors affecting the attainment of a use. The analysis shall rely on scientifically defensible methods such as the methods described in the following documents:

(1) Technical Support Manual: Waterbody Surveys And Assessments For Conducting Use Attainability Analyses, volume I (November 1983) and volume III (November 1984) or latest editions, United States environmental protection agency, office of water, regulations and standards, Washington, D.C., for the evaluation of aquatic life or wildlife uses;

(2) the department's *Hydrology Protocol*, latest edition, approved by the commission, for identifying ephemeral, [~~and~~] intermittent, and perennial waters; or

(3) *Interim Economic Guidance For Water Quality Standards - Workbook*, March 1995, United States environmental protection agency, office of water, Washington, D.C. for evaluating economic impacts.

C. **Determining the highest attainable use**. If the use attainability analysis determines that the designated use is not attainable based on one of the factors in 40 CFR 131.10(g), the use attainability analysis shall then determine the highest attainable use for the protection and propagation of fish, shellfish and wildlife and recreation in and on the water based on methods described in Subsection B of this section.

D. Process to remove a designated use and establish the highest attainable use.

(1) The process for developing a use attainability analysis and petitioning the commission for removing a designated use and establishing the highest attainable use shall be done in accordance with the State's current *Water Quality Management Plan/Continuing Planning Process*.

[~~C.~~](2) If the findings of a use attainability analysis, conducted by the department, [~~based on~~] in accordance with the department's *Hydrology Protocol* (latest edition)[~~, approved by the commission,~~] demonstrates [~~to the satisfaction of the department~~]that federal Clean Water Act Section 101(a)(2) uses, that are not existing uses, are not feasible in an ephemeral water body due to the factor in 40 CFR 131.10(g)(2), the department may consider proceeding with the expedited use attainability analysis process in accordance with the State's current *Water Quality Management Plan/Continuing Planning Process*. The following elements must be met for the expedited use attainability analysis process to be authorized and implemented:

(a) The department is the primary investigator of the use attainability analysis;

(b) The use attainability analysis determined, through the application of the *Hydrology Protocol*, that the water being investigated is ephemeral and has no effluent discharges of sufficient volume that could compensate for the low-flow;

(c) The use attainability analysis determined that the criteria associated with the existing uses of the water being investigated are not more stringent than those in 20.6.4.97 NMAC;

(d) The designated uses in 20.6.4.97 NMAC have been determined to be the highest attainable uses for the water being analyzed;

(e) The department [~~shall~~]posted the use attainability analysis on its water quality standards website and [~~notify~~] notified its interested parties list of a 30-day public comment period. ;

(f) [~~After reviewing~~]The department reviewed and responded to any comments received during the 30-day public comment period, and

(g) The department [~~may proceed by submitting~~]submitted the use attainability analysis and response to comments to region 6 EPA for technical approval. If EPA approves the revision under section 303(c) of the Clean Water Act [~~technical approval is granted~~], the water shall be subject to 20.6.4.97 NMAC for federal Clean Water Act purposes. The use attainability analysis, the technical support document,[~~approval,~~] and the applicability of 20.6.4.97 NMAC to the water shall be posted on the department's water quality standards website. The department shall periodically petition the commission to list ephemeral waters under Subsection C of 20.6.4.97 NMAC and to incorporate changes to classified segments as appropriate.

~~[D.]~~E. Use attainability analysis conducted by an entity other than the department. Any person may submit notice to the department stating their intent to conduct a use attainability analysis.

(1) The proponent shall provide such notice along with [~~develop~~]a work plan supporting [~~to conduct~~]the development of a use attainability analysis[~~. and shall submit the work plan]~~ to the department and region 6 EPA for review and comment.

(2) Upon approval of the work plan by the department, the proponent shall conduct the use attainability analysis in accordance with the applicable portions of Subsections A through D of this Section and implement public noticing in accordance with the approved work plan.

(3) Work plan elements. The work plan shall identify, at a minimum:

(a) the waterbody of concern and the reasoning for conducting a use attainability analysis.

(b) the [~~scope~~]source and validity of data [~~currently available and the scope of data to be gathered~~]to be used to demonstrate whether the current designated use is not attainable;[~~,~~]

(c) the factors in 40 CFR 131.10(g) affecting [~~use~~]the attainment of that use;

(d) [that will be analyzed] a description of the data being proposed to be used to demonstrate the highest attainable use;

(e) [~~and~~]the provisions for consultation with appropriate state and federal agencies;

(f) a description of how stakeholders and potentially affected tribes will be identified and engaged;

(g) a description of the public notice mechanisms to be employed; and [~~consultation with appropriate state and federal agencies~~]

(h) the expected timelines outlining the administrative actions to be taken for a rulemaking petition, pending the outcome of the use attainability analysis.

(4) [~~Upon approval of the work plan by the department, the proponent shall conduct the use attainability analysis in accordance with the approved work plan. The cost of such analysis shall be the responsibility of the proponent.~~] Upon completion of the use attainability analysis, the proponent shall submit the data, findings and conclusions to the department, and provide public notice of the use attainability analysis in accordance with the approved work plan.

(5) Pending the conclusions of the use attainability analysis and as described in the approved work plan, [~~T~~]the department or the proponent may petition the commission to modify the designated use [~~if the conclusions of the analysis support such action~~]. The cost of such use attainability analysis shall be the responsibility of the proponent. Subsequent costs associated with the administrative rulemaking process shall be the responsibility of the petitioner.

EPA Determination: *The majority of the revisions to 20.6.4.15 NMAC provide consistency with both designated use requirements in the CWA and its implementing regulations at 40 CFR 131.10 for amending a designated uses with less protective criteria. The revisions will ensure effective implementation of the UAA process as outlined in federal regulation and consistency with New Mexico's Water Quality Management Plan/Continuing Planning Process[5] (WQMP/CPP) document.*

[5] New Mexico Environment Department (2020), The NMED Statewide Water Quality Management Plan and Continuing Planning Process (WQMP/CPP). WQCC No. 20-34

The EPA recommends that in its next triennial revision, the NMED amend 20.6.4.15(D)(2)(g) NMAC to clarify that the revisions must be adopted into NMAC before EPA can approve them under section 303(c) of the Clean Water Act. The provision at 20.6.4.15(D)(2)(g) NMAC does not supersede the CWA requirement that water quality standards be adopted by the state before they can be approved by the EPA as effective for CWA purposes. Any decisions on the effectiveness of new and revised water quality standards for CWA purposes will be made by the EPA following adoption by the Commission and submission by the NMED pursuant to §303(c) and 40 CFR 131. As detailed in initial comments on draft revisions to this provision, the EPA stated that it will not provide "technical approval" for any UAA to ensure that associated comments or recommendations are not misconstrued as a final decision or finding by the EPA under CWA §303(c). Although the EPA appreciates the NMED/SWQB effort to provide an opportunity for review of draft UAAs when resources allow, this subparagraph continues to state that the NMED will submit a UAA and response to comments to the EPA for technical approval.

The EPA is approving the revisions to 20.6.15 NMAC pursuant to CWA § 303(c) because they are otherwise consistent with the CWA and WQS regulations, with the caveat that the EPA will not provide "technical approval" of a UAA prior to approval by the Commission. The deletion of the first sentence defining a use attainability analysis is a nonsubstantive revision since the definition was moved to 20.6.4.7.U.(2) NMAC. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.

20.6.4.97. Ephemeral Waters

20.6.4.97 EPHEMERAL WATERS: Ephemeral surface waters of the state as identified below and additional ephemeral waters as identified on the department's water quality standards website pursuant to Paragraph (2) of Subsection [~~C~~]D of 20.6.4.15 NMAC are subject to the designated uses and criteria as specified in this section. Ephemeral waters classified in 20.6.4.101-899 NMAC are subject to the designated uses and criteria as specified in those sections.

(g) the south fork of Cañon del Piojo from [~~Canon~~]Cañon del Piojo upstream 1.2 miles to an unnamed tributary.

EPA Determination: *The language in 20.6.4.97 NMAC was revised for consistency with 20.6.4.15 NMAC and is nonsubstantive. The grammatical correction in 20.6.4.97(C)(1)(g) is nonsubstantive. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4. Rio Grande Basin

20.6.4.103 RIO GRANDE BASIN: [~~The main stem of the Rio Grande from the headwaters of Caballo reservoir upstream to Elephant Butte dam and perennial~~] Perennial reaches of tributaries to the Rio Grande in Sierra and Socorro counties not specifically identified under other sections of 20.6.4 NMAC, excluding waters on tribal lands.

A. Designated uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, secondary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[~~**C.** Remarks: flow in this reach of the Rio Grande main stem is dependent upon release from Elephant Butte dam.~~]

[20.6.4.103 NMAC - Rp 20 NMAC 6.1.2103, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 4/23/2022]
[**NOTE:** This segment was divided effective 4/23/2022. The standards for the main stem of the Rio Grande from the headwaters of Caballo reservoir upstream to Elephant Butte dam, perennial reaches of Palomas creek, perennial reaches of Rio Salado, perennial reaches of Percha creek, perennial reaches of Alamosa creek, Las Animas creek, and perennial reaches of Abo arroyo are under 20.6.4.112 NMAC.]

The NMED expends significant effort as part of an ongoing process to ensure that appropriate designated uses are in place for all waters in New Mexico consistent with the CWA and the federal water quality standards regulation. As part of proposed triennial revisions in 2005, the NMED recommended and the Commission adopted designated use provisions for unclassified, waters based on hydrology through the creation of 20.6.4.97, 20.6.4.98 and 20.6.4.99 NMAC. Consistent with the CWA, 20.6.4.98 NMAC specifies that unclassified nonperennial surface waters of the state are presumed to support the uses specified in CWA § 101(a)(2). As part of these amendments, most unnamed nonperennial waters in regulatory segments 20.6.4.101 through 899 NMAC were revised to unclassified waters by adding the phrase "perennial reaches of tributaries to…" to classified regulatory segments 20.6.4.101 through 899 NMAC.

During its 2014 triennial review process, the NMED re-examined specific waters defined in 20.6.4.101-20.6.4.899 NMAC and found that some regulatory segments had not been amended consistent with the Commission's 2005 revisions and still contained language that applied perennial uses to nonperennial waters. During the Commission's 2015 hearing to review and revise the state's water quality standards, the NMED presented assessment information based on field data supporting its determination that the specified waters are capable of supporting primary contact recreation. However, the Commission did not adopt the recommended primary contact recreation use for these waters in its final 2017 order.

As part of the recent 2020 triennial revision process, in its review of classified waters within 20.6.4.101-899 NMAC the NMED again identified some regulatory segments that were not consistent with the Commission's 2005 revisions, leaving some segments with language that applied perennial designated uses to nonperennial waters. To address this, the NMED developed an Existing Use Analysis of Recreational Use for Classified Waters 20.6.4.101-20.6.4.899 NMAC (2021), focusing on classified waters in 20.6.4.103, 20.6.4.116, 20.6.4.204, 20.6.4.206, and 20.6.4.207 NMAC that retained the secondary contact recreational use. The Existing Use Analysis (EUA) was intended to allow a determination of whether there is evidence that primary contact recreation is attainable or the existing use in these waters.

The EUA explains that although the SWQB does not directly monitor or gather specific information on the actual occurrence of recreational uses. The determination of whether the primary contact use is existing or attainable was based on archived and current datasets for parameters specific to the primary contact use. Waters within these classified segments were assessed and parsed based on archived and data collected since 2010 through the NMED's Surface water Quality Information Database (SQUID). Archived and SQUID Escherichia coli (E. coli) and pH data is specifically associated with the primary contact use. To be considered for primary contact use designation, any waters must have pH data values ranging from 6.6 to 9.0 and E. coli data that fell at or below 410 cfu/100 mL in more than one sample event. Taking a conservative approach, the NMED excluded any waters that did not contain both E. coli and pH data from the analysis. The NMED determined that there was adequate

information and data to move forward with the analysis of five regulatory segments, including 20.6.4.103, 20.6.4.116, 20.6.4.204, 20.6.4.206 and 20.6.4.207 NMAC.

The EUA did not identify any available data to indicate whether the primary contact recreation use can be supported within the assessment unit (AU) specific to 20.6.4.103 NMAC that includes the perennial reaches of tributaries to the Rio Grande in Sierra & Socorro County. Thus, there is no basis to support a primary contact use designation in this AU. However, there were data available specific to other AUs within this regulatory segment for the perennial reaches of Percha creek, perennial reaches of Alamosa creek, Las Animas creek, and perennial reaches of Abo arroyo. The data indicate that these waters are capable of attaining a primary contact recreational use. Based on this data, the NMED recommended, and the Commission subdivided 20.6.4.103 NMAC, moving these perennial waters to the previously reserved regulatory segment 20.6.4.112 NMAC.

EPA Determination: *The EPA has determined that there are no data available to support designating the primary contact use for regulatory segment 20.6.4.103 NMAC. However, there are data that indicate that the primary contact recreation use is supported in the perennial reaches of Percha creek, perennial reaches of Alamosa creek, Las Animas creek, and perennial reaches of Abo arroyo in a separate regulatory segment. See the discussion specific to 20.6.4.112 NMAC below. The EPA is approving the revisions to 20.6.4.103 NMAC related to the redefinition of specific waters by subdividing regulatory segment 20.6.4.103 NMAC to ensure the appropriate designated uses are applied is consistent with the CWA and federal regulations. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.108 RIO GRANDE BASIN: Perennial reaches of the Jemez river upstream of Soda dam near the town of Jemez Springs and [~~all its~~]perennial reaches of tributaries to the Jemez river except those not specifically identified under other sections of 20.6.4 NMAC [~~above Soda dam near the town of Jemez Springs, except San Gregorio lake and Sulphur creek above its confluence with Redondo creek~~], and perennial reaches of the Guadalupe river and perennial reaches of [~~all its~~] tributaries to the Guadalupe river, and Calaveras canyon.

A. Designated uses: domestic water supply, fish culture, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm or less (800 µS/cm or less on Sulphur creek); the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less; and pH within the range of 2.0 to 8.8 on Sulphur creek.
[20.6.4.108 NMAC - Rp 20 NMAC 6.1.2106, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012; A, 4/23/2022]

The previous discussion for 20.6.4.103 NMAC referred to the rebuttable presumption that CWA § 101(a)(2) uses are attainable and must be assigned unless there is an affirmative demonstration that such uses are not attainable. It also referred to the NMED's efforts to meet specific requirements pursuant to 40 CFR § 131.20(a) and 40 CFR § 131.10(i).

The prior discussion for 20.6.4.103 NMAC also referred to both the NMED's recommendations and the revisions adopted by the Commission in its 2005 and 2017 rulemakings and their influence on the current 2020 triennial revisions related to nonperennial waters in classified regulatory segments in 20.6.4.101 through 899 NMAC. The NMED developed a UAA entitled

Use Attainability Analysis for Select Nonperennial Reaches in Classified Waters 20.6.4.101-20.6.4.899 NMAC (2021) to evaluate classified waters defined in regulatory segments 20.6.4.108, 20.6.4.115, 20.6.4.206, 20.6.4.208, 20.6.4.209, 20.6.4.215, 20.6.4.220, 20.6.4.307 and 20.6.4.309 NMAC. The UAA evaluated attainment of the aquatic life, fish culture and water supply, domestic water supply, and irrigation uses in regulatory segments that were not amended in prior Commission revisions. The UAA did not consider the primary contact recreation use with the exception of the nonperennial tributaries to the Rio Hondo downstream of Bonney Canyon,

The NMED's UAA utilized the National Hydrology Dataset (NHD) to determine if there are nonperennial tributaries included in the regulatory segments referred to above. The NHD data confirmed the presence of intermittent waters within the regulatory segments identified. Based on the NHD data, the NMED determined that the nonperennial tributaries to the Jemez River above Soda dam and nonperennial tributaries to the Guadalupe River currently defined in 20.6.4.108 NMAC are not capable of supporting the designated high quality coldwater fishery and fish culture uses apply to the named waters. The data indicate that the highest attainable uses is the marginal warmwater aquatic life, retaining the primary contact recreation use.

***EPA Determination*:** *The revisions to this regulatory segment are consistent with the federal regulation at 40 CFR § 131.10(g)(2). The EPA has determined that the data in the NMED's UAA supports the conclusion that natural intermittent conditions prevent attainment of the designated aquatic life uses that currently apply to nonperennial tributaries to the Rio Vallecitos currently defined in 20.6.4.108 NMAC. Given the supporting data and the lack of evidence that the currently defined uses are attainable or existing uses in the nonperennial tributaries the Jemez River above Soda dam and nonperennial tributaries to the Guadalupe River, the revisions redefining intermittent waters currently in 20.6.4.108 NMAC to 20.6.4.98 NMAC are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.112 ~~[RESERVED]~~ **RIO GRANDE BASIN**: - The main stem of the Rio Grande from the headwaters of Caballo reservoir upstream to Elephant Butte dam, perennial reaches of Palomas Creek, perennial reaches of Rio Salado, perennial reaches of Percha Creek, perennial reaches of Alamosa Creek, Las Animas Creek, and perennial reaches of Abo Arroyo.

A. Designated uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, primary contact and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

C. Remarks: flow in this reach of the Rio Grande main stem is dependent upon release from Elephant Butte dam.

[20.6.4.112 NMAC - Rp 20 NMAC 6.1.2109, 10/12/2000; A, 5/23/2005; Repealed, 12/1/2010; A, 4/23/2022]

As indicated in the discussion for regulatory segment 20.6.4.103 NMAC, the NMED reviewed classified waters within 20.6.4.101 through 899 NMAC and found that some regulatory segments were not amended consistent with the Commission's prior revisions, leaving some with language that applied perennial designated uses to nonperennial waters.

To address this, as part of the recent 2020 triennial review, the NMED developed the previously referenced EUA which provides supporting data indicating that there are waters currently

defined within regulatory segment within 20.6.4.103 NMAC that are capable of supporting the primary contact recreation use. Based on this data, the NMED proposed, and the Commission adopted the division of segment 20.6.4.103 NMAC to remove the waterbodies where the primary contact recreation use is attainable, incorporating those waters into previously reserved section 20.6.4.112 NMAC.

The revisions proposed by the NMED and subsequently adopted by the Commission subdivide regulatory segment 20.6.4.103 NMAC, retaining waters defined within the AU for tributaries to the Rio Grande in Sierra & Socorro County where inadequate or no data were available to support a designated recreational use change. Those AUs within this regulatory segment 20.6.4.103 NMAC where data indicate that the primary contact recreation use is attainable include the perennial reaches of Percha creek, perennial reaches of Alamosa creek, Las Animas creek, and perennial reaches of Abo arroyo now defined in the previously reserved 20.6.4.112 NMAC.

***EPA Determination*:** *The EPA has determined that the data in the NMED's EUA supports the conclusion that primary contact recreation is attainable in the perennial reaches of Percha creek, perennial reaches of Alamosa creek, Las Animas creek, and perennial reaches of Abo arroyo. Thus, the revisions to 20.6.4.112 NMAC related to the redefinition of specific waters and the designation of the primary contact recreation use is consistent with the CWA and federal regulations. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.115 RIO GRANDE BASIN: The perennial reaches of Rio Vallecitos and [~~its~~]perennial reaches of tributaries to Rio Vallecitos except Hopewell lake, and perennial reaches of Rio del Oso and perennial reaches of El Rito creek above the town of El Rito.

A. Designated uses: domestic water supply, irrigation, high quality coldwater aquatic life, livestock watering, wildlife habitat and primary contact; public water supply on the Rio Vallecitos and El Rito creek.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.115 NMAC - Rp 20 NMAC 6.1.2112, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012; A, 4/23/2022]
[**NOTE:** The standards for Hopewell lake are in 20.6.4.134 NMAC, effective 7/10/2012]

As initially discussed in detail regarding the revisions to 20.6.4.108 NMAC, the same CWA and federal regulatory requirements are applicable here. The history of the NMED's prior recommendations and the revisions adopted by the Commission in its 2005 and 2017 rulemakings are also pertinent to the current 2020 triennial revisions for the nonperennial waters currently defined in classified regulatory segment 20.6.4.115 NMAC.

As part its 2020 triennial review, the NMED identified nonperennial reaches of tributaries in classified perennial waters defined in regulatory segments that were not revised in prior Commission rulemakings. In the previously referenced UAA, the NMED evaluated attainment of the aquatic life, fish culture and water supply, domestic water supply, and irrigation uses in regulatory segments that were not amended in prior Commission revisions. The NMED utilized NHD data to determine the highest attainable use for nonperennial reaches of tributaries to

regulatory segments including 20.6.4.115 NMAC. The NHD evaluation confirmed the presence of intermittent waters where natural low-flow, intermittent or ephemeral conditions that prevent attainment of the high quality coldwater aquatic life use nonperennial tributaries to the Rio Vallecitos. The data indicates that the highest attainable use supported in these nonperennial waters include marginal warmwater aquatic life and primary contact recreation.

EPA Determination: *The EPA has determined that the data in the NMED's UAA supports the conclusion that natural intermittent conditions prevent attainment of the designated aquatic life uses that currently apply to nonperennial tributaries to the Rio Vallecitos currently defined in 20.6.4.115 NMAC. The revisions to this regulatory segment are consistent with the federal regulation at 40 CFR § 131.10(g)(2). Given the supporting data and the lack of evidence that the currently defined uses are attainable or existing uses in these nonperennial tributaries to the Rio Vallecitos, the revisions redefining intermittent waters currently in 20.6.4.115 NMAC to 20.6.4.98 NMAC are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.116 RIO GRANDE BASIN: The Rio Chama from its mouth on the Rio Grande upstream to Abiquiu reservoir, perennial reaches of the Rio Tusas, perennial reaches of the Rio Ojo Caliente, perennial reaches of Abiquiu creek and perennial reaches of El Rito creek downstream of the town of El Rito.

A. Designated uses: irrigation, livestock watering, wildlife habitat, coldwater aquatic life, warmwater aquatic life and [~~secondary~~]primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 31°C (87.8°F) or less.

[20.6.4.116 NMAC - Rp 20 NMAC 6.1.2113, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017; A, 4/23/2022]

As discussed regarding the revisions to 20.6.4.103 NMAC the NMED's recommendations and the Commission's subsequent revisions adopted in its 2005 and 2017 rulemakings have similar implications for the 2020 triennial revisions for the nonperennial waters currently defined in classified regulatory segment 20.6.4.116 NMAC.

As initially discussed in detail regarding the revisions to 20.6.4.103, in its 2020 triennial review process the NMED reviewed classified waters within 20.6.4.101-899 NMAC and identified regulatory segments that had not been amended consistent with the Commission's prior revisions, leaving some nonperennial waters in regulatory segments defined by perennial designated uses. As discussed previously, the NMED's EUA focuses on classified waters that were designated for secondary contact recreation to determine if there is evidence that primary contact recreation is attainable or the existing use in these waters. As described in the discussion of 20.6.4.103 NMAC, the NMED utilized archived and SQUID data specifically associated with the primary contact use to determine if there was adequate information to support the designation of primary contact recreation for waters defined in multiple regulatory segments including 20.6.4.116 NMAC.

EPA Determination: *Based on an analysis of the data in the supporting EUA, the EPA has determined that waters defined within 20.6.4.116 NMAC are capable of attaining the primary contact use. The EPA also considers the Commission's revisions to this provision to be*

consistent with the CWA and federal regulations and are approved pursuant to CWA § 303(c) and are effective for CWA purposes.

20.6.4.128 RIO GRANDE BASIN: Ephemeral and intermittent [~~watercourses~~] waters within lands managed by U.S. department of energy (DOE) within LANL[ ], including but not limited to: Mortandad canyon, Cañada del Buey, Ancho canyon, Chaquehui canyon, Indio canyon, Fence canyon, Potrillo canyon, and portions of Cañon de Valle, Los Alamos canyon, Sandia canyon, Pajarito canyon and Water canyon not [~~specifically~~] identified in 20.6.4.126 NMAC or 20.6.4.140 NMAC. (Surface waters within lands scheduled for transfer from DOE to tribal, state or local authorities are specifically excluded.)

A. Designated uses: livestock watering, wildlife habitat, limited aquatic life and secondary contact.

B. Criteria: the use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the acute total ammonia criteria set forth in Subsection [~~K~~] L of 20.6.4.900 NMAC ([~~salmonids~~] *Oncorhynchus spp.* absent).

[20.6.4.128 NMAC - N, 5/23/2005; A, 12/1/2010; A, 4/23/2022]

***EPA Determination*:** *The substantive revision to 20.6.4.128 NMAC is limited to the reference to a new regulatory segment, 20.6.4.140 NMAC. The refence to 20.6.4.140 NMAC does not have any impact the applicable designated uses or supporting criteria that apply to those waters that continue to be defined within 20.6.4.128 NMAC. The strikeout of the term "watercourses" and its replacement with the word "waters" and the strikeout of the term "salmonids" and its replacement with the more specific species reference of "Oncorhynchus ssp" are nonsubstantive. These revisions are approved pursuant to CWA § 303(c) and the revised language is effective for CWA purposes.*

20.6.4.140 RIO GRANDE BASIN: Effluent canyon from Mortandad canyon to its headwaters, intermittent portions of S-Site canyon from monitoring well MSC 16-06293 to Martin spring, and intermittent portions of Twomile canyon from its confluence with Pajarito canyon to Upper Twomile canyon. (Surface waters within lands scheduled for transfer from DOE to tribal, state or local authorities are specifically excluded.)

A. Designated uses: livestock watering, wildlife habitat, marginal warmwater aquatic life and secondary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.140 NMAC - N, 4/23/2022]

***EPA Determination*:** *The Commission's record for its 2015 triennial revisions included a document entitled Joint Stipulation Regarding Proposed Changes to 20.6.4.128 NMAC (WQCC 14-05(R)). This Joint Stipulation is significant because it was part of the effort to determine the appropriate designated uses for classified ephemeral and intermittent waters within regulatory segment 20.6.4.128 NMAC. The Joint Stipulation obligated the NMED, the Dept. of Energy/Los Alamos National Laboratory (DOE/LANL) and Amigos Bravos to meet, discuss and come to agreement on the appropriate level of protection for waters defined in 20.6.4.128 NMAC which lie within DOE/LANL's property. It is the EPA's understanding that if agreement was reached, the Joint Stipulation specifically obligated the NMED to petition the Commission proposing appropriate designated uses for waters defined within 20.6.4.128 NMAC no later than the next, now current (2020) triennial review. This effort is consistent with the requirements in 40 CFR 131.20(a), which requires states to re-examine any waterbody segment with standards that do not include the uses specified in CWA § 101(a)(2) every 3 years to determine if any new information has become available. If new information is available that indicate the uses specified*

in CWA § 101(a)(2) may be attainable, the State is required to revise its standards accordingly. The Joint Stipulation did not preclude Amigos Bravos and DOE/LANL from filing separate petitions to revise designated uses if there was no agreement.

Consistent with the Joint Stipulation, the NMED, in coordination with the DOE/LANL and to a lesser extent Amigos Bravos conducted a number of Hydrology Protocol[6] surveys on waters within regulatory segment 20.6.4.128 NMAC from November 2016 to October 2019 to document aquatic life and recreation uses supported based on the hydrology of these waters. The NMED/SWQB's Hydrology Protocol is the only hydrologic condition survey method for surface waters approved as a component of the New Mexico Water Quality Management Plan/Continuing Planning Process (WQMP/CPP). The New Mexico WQMP/CPP has been approved by both the Commission and the EPA. See the federal regulations at 40 CFR 130.5.

The Hydrology Protocol (HP) is used to determine the hydrologic regime of surface waters based on hydrological, geomorphic, and biological indicators related to the persistence of water. Extensive information gathered and evaluated as part of an HP survey. HP assessment information can then be used to provide technical support for a UAA but cannot be used in place of a UAA. Although the initial presumption was that the waters that were assessed within 20.6.5.128 NMAC would either be intermittent or ephemeral, after conducting HP surveys, on some but not all DOE/LANL waters, it was determined that several of these waters were actually perennial, not ephemeral or intermittent as previously believed.

In testimony during the Commission's 2021 hearing, the NMED described its efforts to determine the appropriate designated uses for classified ephemeral and intermittent waters within DOE/LANL consistent with the requirements in the Joint Stipulation. Based on subset of the HP surveys discussed above, the parties concurred that portions of three tributaries within DOE/LANL currently classified as nonperennial waters in 20.6.4.128 NMAC were in fact perennial. These waterbodies include Effluent Canyon from its confluence with Mortandad Canyon to its headwaters; the upper portion of S-site Canyon from alluvial monitoring well MSC 16-06293 to Martin Spring; and Twomile Canyon from Pajarito Canyon upstream to its confluence with upper Twomile Canyon.

The hydrologic data generated in the previously referenced HP surveys indicated that there was reasonable evidence to suggest that the existing uses in these waters may support a more sensitive uses than those currently designated uses under 20.6.4.128 NMAC. Given the unexpected finding that these waters may support aquatic life and potentially recreation uses that require more stringent criteria than the current designated use, the NMED stated in its testimony to the Commission that "although a UAA is not required under federal regulations, other factors must be considered for any designated use amendment." The NMED prepared what it referred to as an "Existing Use Analysis" (EUA) to document both state and federal regulatory requirements and supporting data. Based on the presumption that a UAA as defined in 40 CFR 131.3(g) is not required, the NMED relied on 40 CFR § 131.10(i) and state provisions at 20.6.4.10(B) NMAC that require states to amend uses to be at least as stringent as existing uses. The NMED developed a EUA entitled Existing Use Analysis for Effluent Canyon, Upper S-

[6] New Mexico Environment Department (2011). New Mexico WQMP/CPP Appendix C: Hydrology Protocol.

Site Canyon and Twomile Canyon from Water Canyon upstream to its confluence with Upper Twomile Canyon (2021)[7] to support its determinations.

At the time of this analysis, Effluent Canyon, S-Site Canyon and Twomile Canyon were designated for limited aquatic life and secondary contact recreational uses. This EUA evaluated available information for the waters described. The analysis of hydrologic conditions considered stream and alluvial well hydrographs, confirmed with climatological data to determine hydrologic condition under ambient, baseflow conditions and not the result of a direct and immediate result of precipitation. In addition to considering hydrologic condition, data utilized included conventional water quality parameters for maximum water temperature, pH range, dissolved oxygen and E. coli, primarily from the DOE/LANL Intellus[8] database. This EUA was intended to provide the supporting evidence to determine if a designated use change is warranted based on existing uses.

Based on the analysis of the available data, including the presence/absence of benthic macroinvertebrates extrapolated from the Level 1 and Level 2 HP surveys, the NMED determined that the more protective marginal warmwater aquatic life is the existing use in Effluent Canyon, the upper reaches of S-Site Canyon and Twomile Canyon from its confluence with Pajarito to Upper Twomile Canyon. In evaluating recreational uses for these waters, the SWQB determined that the available data was insufficient to demonstrate whether primary contact recreation is the existing use. With no available E. coli data, no further analysis of the existing recreational was carried out. Without data available, the NMED assumed that the existing recreational use to be at least secondary contact.

Based on the data in the NMED's EUA, the EPA considers the determination that the marginal warmwater aquatic life is the existing use in Effluent Canyon, the upper reaches of S-Site Canyon and Twomile Canyon from its confluence with Pajarito to Upper Twomile Canyon to be supported. However, the EUA indicates that the available data was insufficient to demonstrate that primary contact recreation is the existing use. As a result, the NMED did not make a determination but made an assumption based on data that the existing recreational use is assumed to be "at least" secondary contact, stating in its testimony before the Commission that the secondary contact recreational use is the current designated recreational use and requires no amendment at this time. The EPA has determined that since the secondary contact use is at least as protective as designated under 20.6.4.128 NMAC, a UAA to support this presumption is not required. These revisions are approved pursuant to CWA § 303(c) and the revised language is effective for CWA purposes.

20.6.4. Pecos River Basin

20.6.4.204 PECOS RIVER BASIN: The main stem of the Pecos river from the headwaters of Avalon reservoir upstream to Brantley dam.

A. Designated uses: irrigation, livestock watering, wildlife habitat, [~~secondary~~] primary contact and warmwater aquatic life.

[7] New Mexico Environment Department. 2021. Existing Use Analysis for Effluent Canyon, Upper S-Site Canyon and Twomile Canyon from Water Canyon upstream to its confluence with Upper Twomile Canyon.
[8] Los Alamos National Laboratory (LANL). Intellus New Mexico. https://www.intellusnm.com/

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.204 NMAC - Rp 20 NMAC 6.1.2204, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 4/23/2022]
[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for Avalon Reservoir are under 20.6.4.219 NMAC.]

As discussed regarding the revisions to 20.6.4.103 NMAC the NMED's recommendations and the Commission's subsequent revisions adopted in its 2005 and 2017 rulemakings have similar implications for the 2020 triennial revisions for the nonperennial waters currently defined in classified regulatory segment 20.6.4.204 NMAC.

As initially discussed in detail regarding the revisions to 20.6.4.103, in its 2020 triennial review process the NMED reviewed classified waters within 20.6.4.101-899 NMAC and identified regulatory segments that had not been amended consistent with the Commission's prior revisions, leaving some nonperennial waters in regulatory segments defined by perennial designated uses. As discussed previously, the NMED's EUA focuses on classified waters that were designated for secondary contact recreation to determine if there is evidence that primary contact recreation is attainable or the existing use in these waters. As described in the discussion of 20.6.4.103 NMAC, the NMED utilized archived and SQUID data specifically associated with the primary contact use to determine if there was adequate information to support the designation of primary contact recreation for waters defined in multiple regulatory segments including 20.6.4.204 NMAC.

EPA Determination: *Based on an analysis of the data in the supporting EUA, the EPA has determined that the waters defined in 20.6.4.204 NMAC are capable of attaining the primary contact use. The Commission's revisions designating the of primary contact recreation in 20.6.4.204 NMAC is consistent with the CWA and federal regulations. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.206 PECOS RIVER BASIN: [~~The main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, perennial reaches of the Rio Hondo and its~~] Perennial reaches of the Rio Felix and perennial reaches of tributaries to the Rio Hondo downstream of Bonney canyon, excluding North Spring river [~~and perennial reaches of the Rio Felix~~].

A. Designated uses: irrigation, livestock watering, wildlife habitat, secondary contact and warmwater aquatic life.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At all flows above 50 cfs: TDS 14,000 mg/L or less, sulfate 3,000 mg/L or less and chloride 6,000 mg/L or less.

[20.6.4.206 NMAC - Rp 20 NMAC 6.1.2206, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017; A, 4/23/2022]
[**NOTE:** This segment was divided effective 4/23/2022. The standards for the main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, and perennial reaches of the Rio Hondo are under 20.6.4.231 NMAC.]

As initially discussed in detail regarding the revisions to both 20.6.4.103 and 20.6.4.108 NMAC, the same CWA and federal regulatory requirements are applicable here. The history of the

NMED's prior recommendations and the revisions adopted by the Commission in its 2005 and 2017 rulemakings are also pertinent to the current 2020 triennial revisions related to both the hydrology and designated uses for waters currently defined in classified regulatory segment 20.6.4.206 NMAC.

As part its 2020 triennial review, the NMED identified regulatory segments that had not been amended consistent with the Commission's prior revisions, leaving some nonperennial waters in regulatory segments defined by perennial designated uses. In its UAA, the NMED considered both aquatic life and recreational uses as well as other uses specific to New Mexico. The NMED utilized NHD data to determine the highest attainable use for both perennial and nonperennial reaches of waters currently defined in regulatory segment 20.6.4.206 NMAC. The NHD evaluation confirmed that natural low-flow, intermittent or ephemeral conditions prevent attainment of the warmwater aquatic life use in nonperennial tributaries to the Rio Hondo downstream of Bonney Canyon as currently defined in 20.6.4.206 NMAC. The highest attainable use supported in these nonperennial waters include marginal warmwater aquatic life and primary contact recreation.

The NMED also relied on its EUA to determine if primary contact recreation is either an attainable or existing use in classified waters that are currently designated for secondary contact recreation. As discussed previously, this EUA utilized archived and SQUID data specifically associated with the primary contact use to determine if there was adequate information to support the designation of primary contact recreation for waters defined in multiple regulatory segments including 20.6.4.206 NMAC. There were insufficient or no data available to base a contact recreation use determination for the AU for the Rio Felix (Perennial reaches Pecos River to headwaters) or the perennial reaches of tributaries to the Rio Hondo downstream of Bonney canyon. However, there were data for the remainder of the AUs within 20.6.4.206 including the main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, and perennial reaches of the Rio Hondo. Based on this data, the NMED recommended, and the Commission subdivided 20.6.4.206 NMAC, establishing a new segment 20.6.4.231 NMAC.

EPA Determination: *The EPA has determined that the data in the NMED's UAA supports the conclusion that the primary contact recreation use is attainable in mainstem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, and perennial reaches of the Rio Hondo and with the redefinition of those waters into a new regulatory segment 20.6.4.231 NMAC. Further, the EPA has determined that the data in the UAA supports the conclusion that natural intermittent conditions prevent attainment of the designated aquatic life uses that currently apply to nonperennial tributaries currently defined in 20.6.4.206 NMAC, consistent with the federal regulation at 40 CFR § 131.10(g)(2). Given the supporting data and the lack of evidence that the currently defined uses are attainable or existing uses in these nonperennial tributaries, the revisions redefining intermittent waters currently in 20.6.4.206 NMAC to 20.6.4.98 NMAC are appropriate. These revisions are consistent with the CWA and federal regulations and are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.207 PECOS RIVER BASIN: The main stem of the Pecos river from Salt creek (near Acme) upstream to Sumner dam.

A. Designated uses: irrigation, marginal warmwater aquatic life, livestock watering, wildlife habitat and [~~secondary~~]primary contact.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At all flows above 50 cfs: TDS 8,000 mg/L or less, sulfate 2,500 mg/L or less and chloride 4,000 mg/L or less.

[20.6.4.207 NMAC - Rp 20 NMAC 6.1.2207, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 4/23/2022]

As discussed regarding the revisions to 20.6.4.103 NMAC the NMED's recommendations and the Commission's subsequent revisions adopted in its 2005 and 2017 rulemakings have similar implications for the 2020 triennial revisions for the nonperennial waters currently defined in classified regulatory segment 20.6.4.207 NMAC.

As initially discussed in detail regarding the revisions to 20.6.4.103, in its 2020 triennial review process the NMED reviewed classified waters within 20.6.4.101-899 NMAC and identified regulatory segments that had not been amended consistent with the Commission's prior revisions, leaving some nonperennial waters in regulatory segments defined by perennial designated uses. As discussed previously, the NMED's EUA focuses on classified waters that were designated for secondary contact recreation to determine if there is evidence that primary contact recreation is attainable or the existing use in these waters. As described in the discussion of 20.6.4.103 NMAC, the NMED utilized archived and SQUID data specifically associated with the primary contact use to determine if there was adequate information to support the designation of primary contact recreation for waters defined in multiple regulatory segments including 20.6.4.207 NMAC. There were sufficient data available to support a contact recreation use determination for all AUs for the Pecos River within 20.6.4.207 NMAC.

EPA Determination: *Based on an analysis of the data in the supporting EUA, the EPA has determined that the waters defined in 20.6.4.207 NMAC are capable of attaining the primary contact use. The Commission's revisions designating the of primary contact recreation in 20.6.4.207 NMAC is consistent with the CWA and federal regulations. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.208 PECOS RIVER BASIN: Perennial reaches of the Rio Peñasco above state highway 24 near Dunken, [~~and its~~] perennial reaches of tributaries to the Rio Peñasco above state highway 24 near Dunken, perennial reaches of Cox canyon, perennial reaches of the Rio Bonito downstream from state highway 48 (near Angus), the Rio Ruidoso downstream of the U.S. highway 70 bridge near Seeping Springs lakes, perennial reaches of the Rio Hondo upstream from Bonney canyon and perennial reaches of Agua Chiquita.

A. Designated uses: fish culture, irrigation, livestock watering, wildlife habitat, coldwater aquatic life and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: temperature 30°C (86°F) or less, and phosphorus (unfiltered sample) less than 0.1 mg/L.

[20.6.4.208 NMAC - Rp 20 NMAC 6.1.2208, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 4/23/2022]

As initially discussed in detail regarding the revisions to 20.6.4.108 NMAC, the same CWA and federal regulatory requirements are applicable here. The history of the NMED's prior recommendations and the revisions adopted by the Commission in its 2005 and 2017 rulemakings are also pertinent to the current 2020 triennial revisions for the nonperennial waters currently defined in classified regulatory segment 20.6.4.208 NMAC.

As part its 2020 triennial review, the NMED identified nonperennial reaches of tributaries in classified perennial waters defined in regulatory segments that were not revised in prior Commission rulemakings. In the previously referenced UAA, the NMED evaluated attainment of the aquatic life, fish culture and water supply, domestic water supply, and irrigation uses in regulatory segments that were not amended in prior Commission revisions. The NMED utilized NHD data to determine the highest attainable use for nonperennial reaches of tributaries to regulatory segments including 20.6.4.208 NMAC. The NHD evaluation confirmed the presence of intermittent waters where natural low-flow, intermittent or ephemeral conditions that prevent attainment of the coldwater aquatic life and fish culture uses in nonperennial tributaries to the Rio Peñasco above state highway 24 near Dunken, NM, as currently defined in 20.6.4.209 NMAC. The data indicates that the nonperennial tributaries in 20.6.4.208 NMAC are not capable of supporting the coldwater aquatic life and fish culture uses. The highest attainable use supported in these nonperennial waters include marginal warmwater aquatic life and primary contact recreation.

***EPA Determination*:** *The EPA has determined that the data in the NMED UAA supports the conclusion that natural intermittent conditions prevent attainment of the designated coldwater aquatic life uses that currently apply to tributaries currently defined in 20.6.4.208 NMAC. The revisions to this regulatory segment are consistent with the federal regulation at 40 CFR § 131.10(g)(2). Given the supporting data and the lack of evidence that the currently defined coldwater aquatic life uses are attainable or existing uses in these tributaries, the revisions redefining intermittent waters currently in 20.6.4.208 NMAC to 20.6.4.98 NMAC are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.209 PECOS RIVER BASIN: Perennial reaches of Eagle creek upstream of Alto dam to the Mescalero Apache boundary, perennial reaches of the Rio Bonito upstream of state highway 48 (near Angus) excluding Bonito lake, [~~and its~~] perennial reaches of tributaries to the Rio Bonito upstream of state highway 48 (near Angus)[-], [~~and~~] perennial reaches of the Rio Ruidoso upstream of the U.S. highway 70 bridge near Seeping Springs lakes [~~,~~] above and below the Mescalero Apache boundary and [~~its~~] perennial reaches of tributaries to the Rio Ruidoso upstream of the U.S. highway 70 bridge near Seeping Springs lakes [~~,~~] above and below the Mescalero Apache boundary.

A. Designated uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, public water supply and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 600 µS/cm or less in Eagle creek, 1,100 µS/cm or less in Bonito creek and 1,500 µS/cm or less in the Rio Ruidoso; phosphorus (unfiltered sample) less than 0.1 mg/L; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.209 NMAC - Rp 20 NMAC 6.1.2209, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012; A, 4/23/2022]

[**NOTE:** The standards for Bonito lake are in 20.6.4.223 NMAC, effective 7/10/2012]

As initially discussed in detail regarding the revisions to 20.6.4.108 NMAC, the same CWA and federal regulatory requirements are applicable here. The history of the NMED's prior recommendations and the revisions adopted by the Commission in its 2005 and 2017 rulemakings are also pertinent to the current 2020 triennial revisions for the nonperennial waters currently defined in classified regulatory segment 20.6.4.209 NMAC.

As part its 2020 triennial review, the NMED identified nonperennial reaches of tributaries in classified perennial waters defined in regulatory segments that were not revised in prior Commission rulemakings. In the previously referenced UAA, the NMED evaluated attainment of the aquatic life, fish culture and water supply, domestic water supply, and irrigation uses in regulatory segments that were not amended in prior Commission revisions. The NMED utilized NHD data to determine the highest attainable use for nonperennial reaches of tributaries to regulatory segments including 20.6.4.209 NMAC. The NHD evaluation confirmed the presence of intermittent waters where natural low-flow, intermittent or ephemeral conditions that prevent attainment of the high quality coldwater aquatic life and fish culture uses in nonperennial tributaries to the Rio Bonito and the Rio Ruidoso as currently defined in 20.6.4.209 NMAC. The NHD evaluation confirmed the presence of intermittent waters where natural low-flow, intermittent or ephemeral conditions that prevent attainment of the designated uses in classified waters currently defined in 20.6.4.209 NMAC. The nonperennial tributaries in 20.6.4.209 NMAC are not capable of supporting the coldwater aquatic life and fish culture uses. The highest attainable use supported in these nonperennial waters include marginal warmwater aquatic life and primary contact recreation.

EPA Determination: *The EPA has determined that the data in the NMED UAA supports the conclusion that natural intermittent conditions prevent attainment of the designated coldwater aquatic life uses that currently apply to the nonperennial tributaries to the Rio Bonito upstream of state highway 48 (near Angus, NM) and nonperennial tributaries to the Rio Ruidoso upstream of the U.S. highway 70 bridge near Seeping Springs lakes, above and below the Mescalero Apache boundary as currently defined in 20.6.4.209 NMAC. The revisions to this regulatory segment are consistent with the federal regulation at 40 CFR § 131.10(g)(2). Given the supporting data and the lack of evidence that establishes the currently defined coldwater use as an attainable or existing use in these nonperennial tributaries, the revisions redefining intermittent waters currently in 20.6.4.209 NMAC to 20.6.4.98 NMAC, which have the effect of changing the designation for the nonperennial tributaries for these waters from coldwater to marginal warmwater while maintaining the primary contact recreation use, are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.215 PECOS RIVER BASIN: Perennial reaches of the Gallinas river upstream of the diversion for the Las Vegas municipal reservoir, [~~and all its~~] perennial reaches of tributaries to the Gallinas river upstream of the diversion for the Las Vegas municipal reservoir, perennial reaches of Tecolote creek upstream of Blue creek[~~,~~] and all perennial reaches of tributaries [~~of~~]to Tecolote creek upstream of Blue creek.

A. Designated uses: domestic water supply, high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, industrial water supply and primary contact; and public water supply on the Gallinas river.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are

applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 300 µS/cm or less (450 µS/cm or less in Wright Canyon creek); the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.215 NMAC - Rp 20 NMAC 6.1.2212, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 2/13/2018; A, 4/23/2022]
[**NOTE:** This segment was divided effective 2/13/2018. The standards for Tecolote creek from I-25 to Blue creek are under 20.6.4.230 NMAC.]

As initially discussed in detail regarding the revisions to 20.6.4.108 NMAC, the same CWA and federal regulatory requirements are applicable here. The history of the NMED's prior recommendations and the revisions adopted by the Commission in its 2005 and 2017 rulemakings are also pertinent to the current 2020 triennial revisions for the nonperennial waters currently defined in classified regulatory segment 20.6.4.215 NMAC.

As part its 2020 triennial review, the NMED identified nonperennial reaches of tributaries in classified perennial waters defined in regulatory segments that were not revised in prior Commission rulemakings. In the previously referenced UAA, the NMED evaluated attainment of the aquatic life, fish culture and water supply, domestic water supply, and irrigation uses in regulatory segments that were not amended in prior Commission revisions. The NMED utilized NHD data to determine the highest attainable use for nonperennial reaches of tributaries to regulatory segments including 20.6.4.215 NMAC. The NHD evaluation confirmed the presence of intermittent waters where natural low-flow, intermittent or ephemeral conditions that prevent attainment of the high quality coldwater aquatic life and fish culture uses in nonperennial tributaries to the Gallinas River as currently defined in 20.6.4.215 NMAC. The NHD evaluation confirmed the presence of intermittent waters where natural low-flow, intermittent or ephemeral conditions that prevent attainment of the coldwater designated use in classified waters currently defined in 20.6.4.215 NMAC. The nonperennial tributaries in 20.6.4.215 NMAC are not capable of supporting the coldwater aquatic life and fish culture uses. The highest attainable use supported in these nonperennial waters include marginal warmwater aquatic life and primary contact recreation.

EPA Determination: *The EPA has determined that the data in the NMED's UAA supports the conclusion that natural intermittent conditions prevent attainment of the coldwater designated aquatic life use that currently applies to the nonperennial tributaries to the Gallinas River upstream of the diversion for the Las Vegas municipal reservoir as currently defined in 20.6.4.215 NMAC. The revisions to this regulatory segment are consistent with the federal regulation at 40 CFR § 131.10(g)(2). Given the supporting data and the lack of evidence that establishes the currently defined uses as attainable or existing uses in these nonperennial tributaries, the revisions redefining intermittent waters currently in 20.6.4.215 NMAC to 20.6.4.98 NMAC, which have the effect of downgrading the aquatic life use from coldwater to marginal warmwater while maintaining primary contact recreation, are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.220 PECOS RIVER BASIN: Perennial reaches of the Gallinas river and [~~its~~] perennial reaches of tributaries to the Gallinas river from its mouth upstream to the diversion for the Las Vegas municipal reservoir, except Pecos Arroyo.

A. Designated uses: irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life use and primary contact.

B. Criteria: the use-specific criteria set forth in 20.6.4.900 NMAC are applicable to the designated use, exept that the following segment specific criterion applies; temperature 30ºC (86ºF) or less.
[20.6.4.220 NMAC - N, 5/23/2005; A, 12/1/2010; A, 4/23/2022]

As initially discussed in detail regarding the revisions to 20.6.4.108 NMAC, the same CWA and federal regulatory requirements are applicable here. The history of the NMED's prior recommendations and the revisions adopted by the Commission in its 2005 and 2017 rulemakings are also pertinent to the current 2020 triennial revisions for the nonperennial waters currently defined in classified regulatory segment 20.6.4.220 NMAC.

As part its 2020 triennial review, the NMED identified nonperennial reaches of tributaries in classified perennial waters defined in regulatory segments that were not revised in prior Commission rulemakings. In the previously referenced UAA, the NMED evaluated attainment of the aquatic life, fish culture and water supply, domestic water supply, and irrigation uses in regulatory segments that were not amended in prior Commission revisions. The NMED utilized NHD data to determine the highest attainable use for nonperennial reaches of tributaries to regulatory segments including 20.6.4.220 NMAC. The NHD evaluation confirmed the presence of intermittent waters where natural low-flow, intermittent or ephemeral conditions that prevent attainment of the marginal coldwater aquatic life use in nonperennial tributaries to the Gallinas River as currently defined in 20.6.4.220 NMAC. The NHD evaluation confirmed the presence of intermittent waters where natural low-flow, intermittent or ephemeral conditions that prevent attainment of the designated uses in classified waters currently defined in 20.6.4.220 NMAC. The nonperennial tributaries in 20.6.4.220 NMAC are not capable of supporting the marginal coldwater aquatic life use. The highest attainable uses in these waters include marginal warmwater aquatic life and primary contact recreation.

EPA Determination: *The EPA has determined that the data in the NMED UAA supports the conclusion that natural intermittent conditions prevent attainment of the designated marginal coldwater aquatic life uses that currently apply to the nonperennial tributaries to the Gallinas River from its mouth upstream to the diversion for the Las Vegas municipal reservoir as currently defined in 20.6.4.220 NMAC. The revisions to this regulatory segment are consistent with the federal regulation at 40 CFR § 131.10(g)(2). Given the supporting data and the lack of evidence that establishes the currently defined uses as attainable or existing uses in these nonperennial tributaries, the revisions redefining intermittent waters currently in 20.6.4.220 NMAC to 20.6.4.98 NMAC, which have the effect of downgrading the aquatic life use from coldwater to marginal warmwater while maintaining primary contact recreation, are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.231 PECOS RIVER BASIN: The main stem of the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme), perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, perennial reaches of North Spring river and perennial reaches of the Rio Hondo downstream of Bonney canyon.

A. Designated uses: irrigation, livestock watering, wildlife habitat, primary contact and warmwater aquatic life.

B. Criteria:

(1) The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

(2) At all flows above 50 cfs: TDS 14,000 mg/L or less, sulfate 3,000 mg/L or

less and chloride 6,000 mg/L or less.
[20.6.4.231 NMAC - N, 4/23/2022]

As indicated in the discussion for regulatory segment 20.6.4.103 NMAC, the NMED's reviewed classified waters within 20.6.4.101 through 899 NMAC and found that some regulatory segments were not amended consistent with the Commission's prior revisions, leaving some with language that applied perennial designated uses to nonperennial waters.

To address this, as part of the recent 2020 triennial review, the NMED developed the previously referenced EUA that focuses on classified waters that are designated for secondary contact recreation to determine if there is evidence that primary contact recreation is attainable or the existing use in these waters. The data indicated that there are waters currently defined within regulatory segment within 20.6.4.206 NMAC that are capable of supporting the primary contact recreation use. The NMED recommended that a new regulatory segment be drawn from these waters contained in the AUs for the Pecos River (Rio Felix to Rio Hondo), Pecos River (Brantley Reservoir to Rio Penasco), Pecos River (Rio Penasco to Eagle Creek), Pecos River (Eagle Creek to Rio Felix), Rio Penasco (Perennial part Pecos River to HWY 24), Pecos River (Rio Hondo to Salt Creek), North Spring River (Rio Hondo to headwaters), Rio Hondo (Perennial prt North Spring River to Bonney Cyn), the Rio Hondo (Perennial part Pecos River to North Spring River) and the perennial reaches of tributaries to the Rio Hondo downstream of Bonney canyon,

EPA Determination: *The EPA has determined that the data in the NMED's EUA supports the conclusion that in the absence of specific data that primary contact recreation use is an attainable or existing use in Rio Felix (Perennial reaches Pecos River to headwaters) and perennial reaches of tributaries to the Rio Hondo downstream of Bonney canyon that these waters should retain the secondary contact recreation use and remain in 20.6.4.206 NMAC. The EPA has also determined that the supporting data indicate that primary contact recreation is an attainable or existing use in the Pecos river from the headwaters of Brantley reservoir upstream to Salt creek (near Acme. NM), the perennial reaches of the Rio Peñasco downstream from state highway 24 near Dunken, NM, the perennial reaches of North Spring River and perennial reaches of the Rio Hondo downstream of Bonney canyon.*

Establishing the new regulatory segment 20.6.4.231 NMAC and the designation of the primary contact recreation use for those waters defined in this regulatory segment is consistent with the CWA and federal regulations. The revisions to this provision are approved pursuant to CWA § 303(c) and are effective for CWA purposes.

20.6.4. Canadian River Basin

20.6.4.307 CANADIAN RIVER BASIN: Perennial reaches of the Mora river from the USGS gaging station near Shoemaker upstream to the state highway 434 bridge in Mora, all perennial reaches of tributaries to the Mora river downstream from the USGS gaging station at La Cueva in San Miguel and Mora counties except lakes identified in 20.6.4.313 NMAC, perennial reaches of Ocate creek downstream of Ocate, [~~and its~~] perennial reaches of tributaries to Ocate creek downstream of Ocate, and perennial reaches of Rayado creek downstream of Miami lake diversion in Colfax county.

A. Designated uses: marginal coldwater aquatic life, warmwater aquatic life, primary contact, irrigation, livestock watering and wildlife habitat.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC

are applicable to the designated uses.
[20.6.4.307 NMAC - Rp 20 NMAC 6.1.2305.3, 10/12/2000; A, 5/23/2005; A, 2/1/2010; 7/10/2012; A, 4/23/2022]

As initially discussed in detail regarding the revisions to 20.6.4.108 NMAC, the same CWA and federal regulatory requirements are applicable here. The history of the NMED's prior recommendations and the revisions adopted by the Commission in its 2005 and 2017 rulemakings are also pertinent to the current 2020 triennial revisions for the nonperennial waters currently defined in classified regulatory segment 20.6.4.220 NMAC.

As part its 2020 triennial review, the NMED identified nonperennial reaches of tributaries in classified perennial waters defined in regulatory segments that were not revised in prior Commission rulemakings. In the previously referenced UAA, the NMED evaluated attainment of the aquatic life, fish culture and water supply, domestic water supply, and irrigation uses in regulatory segments that were not amended in prior Commission revisions. The NMED utilized NHD data to determine the highest attainable use for nonperennial reaches of tributaries to regulatory segments including 20.6.4.307 NMAC. The NHD evaluation confirmed the presence of intermittent waters where natural low-flow, intermittent or ephemeral conditions that prevent attainment of the marginal coldwater aquatic life use in the nonperennial tributaries to Ocate Creek downstream of Ocate as currently defined in 20.6.4.307 NMAC. The highest attainable use supported in these nonperennial waters include marginal warmwater aquatic life and primary contact recreation.

EPA Determination: *The EPA has determined that the data in the NMED's UAA supports the conclusion that natural intermittent conditions prevent attainment of the designated marginal coldwater aquatic life uses that currently apply to the nonperennial reaches of Ocate creek downstream of Ocate as currently defined in 20.6.4.307 NMAC. The revisions to this regulatory segment are consistent with the federal regulation at 40 CFR § 131.10(g)(2). Given the supporting data and the lack of evidence establishing the currently defined uses as attainable or existing uses in these nonperennial tributaries, the revisions redefining intermittent waters currently in 20.6.4.307 NMAC to 20.6.4.98 NMAC are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.309 CANADIAN RIVER BASIN: The Mora river and perennial reaches of its tributaries upstream from the state highway 434 bridge in Mora except lakes identified in 20.6.4.313 NMAC, all perennial reaches of tributaries to the Mora river upstream from the USGS gaging station at La Cueva, perennial reaches of Coyote creek, [~~and its~~] perennial reaches of tributaries to Coyote creek, the Cimarron river above state highway 21 in Cimarron, [~~and its~~] perennial reaches of tributaries to the Cimarron river above state highway 21 in Cimarron except Eagle Nest lake, all perennial reaches of tributaries to the Cimarron river north and northwest of highway 64 except north and south Shuree ponds, perennial reaches of Rayado creek above Miami lake diversion, [~~and its~~] perennial reaches of tributaries to Rayado creek above Miami lake diversion, Ocate creek and perennial reaches of its tributaries upstream of Ocate, perennial reaches of the Vermejo river upstream from Rail canyon and all other perennial reaches of tributaries to the Canadian river northwest and north of U.S. highway 64 in Colfax county unless included in other segments.

A. Designated uses: domestic water supply, irrigation, high quality coldwater aquatic life, livestock watering, wildlife habitat, and primary contact; and public water supply on the Cimarron river upstream from Cimarron, [~~and~~] on perennial reaches of Rayado creek and on perennial reaches of [~~its~~] tributaries to Rayado creek.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are

applicable to the designated uses, except that the following segment-specific criteria apply, specific conductance 500 µS/cm or less; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.
[20.6.4.309 NMAC - Rp 20 NMAC 6.1.2306, 10/12/2000; A, 7/19/2001; A, 5/23/2005; A, 12/1/2010; A, 7/10/2012; A, 4/23/2022]
[**NOTE:** The segment covered by this section was divided effective 5/23/2005. The standards for the additional segment are under 20.6.4.310 NMAC. The standards for Shuree ponds are in 20.6.4.314 NMAC and the standards for Eagle Nest lake are in 20.6.4.315 NMAC, effective 7/10/2012]

As initially discussed in detail regarding the revisions to 20.6.4.108 NMAC, the same CWA and federal regulation requirements are applicable here. The history of the NMED's prior recommendations and the revisions adopted by the Commission in its 2005 and 2017 rulemakings are also pertinent to the current 2020 triennial revisions for the nonperennial waters currently defined in classified regulatory segment 20.6.4.309 NMAC.

As part its 2020 triennial review, the NMED identified nonperennial reaches of tributaries in classified perennial waters defined in regulatory segments that were not revised in prior Commission rulemakings. In the previously referenced UAA, the NMED evaluated attainment of the aquatic life, fish culture and water supply, domestic water supply, and irrigation uses in regulatory segments that were not amended in prior Commission revisions. The NMED utilized NHD data to determine the highest attainable use for nonperennial reaches of tributaries to regulatory segments including 20.6.4.309 NMAC. The NHD evaluation confirmed the presence of intermittent waters where natural low-flow, intermittent or ephemeral conditions that prevent attainment of the marginal coldwater aquatic life use in the nonperennial tributaries to Coyote Creek and Rayado Creek above Miami lake diversion as currently defined in 20.6.4.309 NMAC. The highest attainable use supported in these nonperennial waters include marginal warmwater aquatic life and primary contact recreation.

***EPA Determination*:** *The EPA has determined that the data in the NMED's UAA supports the conclusion that natural intermittent conditions prevent attainment of the designated marginal coldwater aquatic life uses that currently apply to the nonperennial reaches of Ocate creek downstream of Ocate as currently defined in 20.6.4.309 NMAC. The revisions to this regulatory segment are consistent with the federal regulation at 40 CFR § 131.10(g)(2). Given the supporting data and the lack of evidence establishing the currently defined uses as attainable or existing uses in these nonperennial tributaries, the revisions redefining intermittent waters currently in 20.6.4.309 NMAC to 20.6.4.98 NMAC are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.311 **CANADIAN RIVER BASIN:** Lake Alice.
A. Designated uses: marginal coldwater aquatic life, irrigation, livestock watering, wildlife habitat, primary contact and public water supply.
B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.
[20.6.4.311 NMAC - N, 12/1/2010; A, 4/23/2022]

20.6.4.312 **CANADIAN RIVER BASIN: Lake Maloya.**
A. Designated uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat, primary contact and public water supply.
B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are

applicable to the designated uses.

[20.6.4.312 NMAC - N, 12/1/2010; A, 4/23/2022]

EPA Determination: *The revisions adding revision dates to both 20.6.4.311 and 312 NMAC are nonsubstantive and are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.318 CANADIAN RIVER BASIN: Doggett creek.

A. Designated uses: Warm water aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: The use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses, except that the following site specific criteria apply: the monthly geometric mean of E. coli bacteria 206 cfu/100 mL or less, single sample 940 cfu/100 mL or less.

C. Discharger-specific temporary standard:

(1) Discharger: City of Raton wastewater treatment plant

(2) NPDES permit number: NM0020273, Outfall 001

(3) Receiving waterbody: Doggett creek, 20.6.4.318 NMAC

(4) Discharge latitude/longitude: 36° 52' 13.91" N / 104° 25' 39.18" W

(5) Pollutant(s): nutrients; total nitrogen and total phosphorus

(6) Factor of issuance: substantial and widespread economic and social impacts (40 CFR 131.10(g)(6))

(7) Highest attainable condition: interim effluent condition of 8.0 mg/L total nitrogen and 1.6 mg/L total phosphorus as 30-day averages. The highest attainable condition shall be either the highest attainable condition identified at the time of the adoption, or any higher attainable condition later identified during any reevaluation, whichever is more stringent (40 CFR 131.14(b)(1)(iii)).

(8) Effective date of temporary standard: This temporary standard becomes effective for Clean Water Act purposes on the date of EPA approval.

(9) Expiration date of temporary standard: no later than 20 years from the effective date.

(10) Reevaluation period: at each succeeding review of water quality standards and at least once every five years from the effective date of the temporary standard (Paragraph (8) of Subsection H of 20.6.4.10[~~.F (8)~~] NMAC, 40 CFR 131.14(b)(1)(v)). If the discharger cannot demonstrate that sufficient progress has been made the commission may revoke approval of the temporary standard or provide additional conditions to the approval of the temporary standard. If the reevaluation is not completed at the frequency specified or the Department does not submit the reevaluation to EPA within 30 days of completion, the underlying designated use and criterion will be the applicable water quality standard for Clean Water Act purposes until the Department completes and submits the reevaluation to EPA. Public input on the reevaluation will be invited during NPDES permit renewals or triennial reviews, as applicable, in accordance with the State's most current approved water quality management plan and continuing planning process.

(11) Timeline for proposed actions. Tasks and target completion dates are listed in the most recent, WQCC-approved version of the New Mexico Environment Department, Surface Water Quality Bureau's "Nutrient Temporary Standards for City of Raton Wastewater Treatment Plant, NPDES No. NM0020273 to Doggett Creek."

[20.6.4.318 NMAC - N, 05/22/2020; A, 4/23/2022]

EPA Determination: *The revisions to 20.6.4.318 NMAC updating references in 20.6.4.10 NMAC to reflect the renumbering of subsections are nonsubstantive. These revisions are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4. San Juan River Basin

20.6.4.405 SAN JUAN RIVER BASIN: The main stem of the San Juan river from [~~Canyon~~] Cañon Largo upstream to the Navajo dam.

A. Designated uses: high quality coldwater aquatic life, irrigation, livestock watering, wildlife habitat, public water supply, industrial water supply and primary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: specific conductance 400 µS/cm or less; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

[20.6.4.405 NMAC - Rp 20 NMAC 6.1.2405, 10/12/2000; A, 5/23/2005; A, 12/1/2010; A, 4/23/2022]

20.6.4.408 SAN JUAN RIVER BASIN: The main stem of the San Juan river from its confluence with the Animas river upstream to its confluence with [~~Canyon~~] Cañon Largo.

A. Designated uses: public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, primary contact, marginal coldwater aquatic life and warmwater aquatic life.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criterion applies: temperature 32.2°C (90°F) or less.

[20.6.4.408 NMAC - N, 5/23/2005; A, 12/1/2010; A, 4/23/2022]

EPA Determination: *The revisions to both 20.6.4.405 and 408 NMAC are nonsubstantive. These revisions are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

20.6.4.900 Criteria Applicable to Existing or Attainable Uses

20.6.4.900 CRITERIA APPLICABLE TO EXISTING, DESIGNATED OR ATTAINABLE USES UNLESS OTHERWISE SPECIFIED IN 20.6.4.97 THROUGH 20.6.4.899 NMAC:

D. Primary contact: The monthly geometric mean of E. coli bacteria of 126 cfu/100 mL or MPN/100 ml, [~~and~~] a single sample of E. coli bacteria of 410 cfu/100 mL or MPN/100 mL, a single sample of total microcystins of 8 µg/L with no more than three exceedances within a 12-month period and a single sample of cylindrospermopsin of 15 µg/L with no more than three exceedances within a 12-month period, and pH within the range of 6.6 to 9.0 apply to this use. The results for *E. coli* may be reported as either colony forming units (CFU) or the most probable number (MPN) depending on the analytical method used.

EPA Determination: *The revisions to 20.6.4.900(D) includes clarifying language on the application of E. coli bacteria and the inclusion of criteria for microcystin and cylindropermopsin at a magnitude, duration and frequency consistent with EPA recommendations.*[9] *The revisions, including the addition of microcystin and cylindropermopsin criteria are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

H. Aquatic life:

6) Marginal warmwater: dissolved oxygen 5 mg/L or more, pH within the range of 6.6 to 9.0 and [~~maximum temperature~~] temperatures that may routinely exceed 32.2°C (90°F). Where a segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature.

[9] U.S. Environmental Protection Agency (2019). Recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin (EPA 822-R-19-001)

***EPA Determination*:** *The NMED proposed, and the Commission has adopted clarifying language specific to the marginal warmwater aquatic life designated use in 20.6.4.900(H)(6) NMAC to be consistent with the definition in 20.6.4.7(M)(2) NMAC. The revised language is intended to address the disparity between the marginal warmwater criteria represented as a maximum temperature of 32.2°C, and definition, which states that "…water temperature routinely exceeds 32.2°C (90°F)," which created a conflict in how the appropriate water quality criteria for marginal warmwater aquatic life uses were applied. The EPA recognizes that this discrepancy has resulted in a significant number of waters with a designated marginal warmwater aquatic life use being placed on New Mexico's CWA § 303(d) list as impaired for temperature. The EPA has determined that the revisions to the numeric temperature criterion for the marginal warmwater aquatic life use are consistent with the definition and would allow the NMED to assess these waters appropriately. The revisions to this provision, including the addition of the phrase "…temperature routinely exceed" are approved pursuant to CWA § 303(c) and are effective for CWA purposes.*

I. Hardness-dependent acute and chronic aquatic life criteria for metals are calculated using the following equations. The criteria are expressed as a function of [~~dissolved~~] hardness (as mg $CaCO_3$/L). With the exception of aluminum, the equations are valid only for [~~dissolved~~] hardness concentrations of 0-400 mg/L. For [~~dissolved~~] hardness concentrations above 400 mg/L, the criteria for 400 mg/L apply. For aluminum the equations are valid only for [~~dissolved~~] hardness concentrations of 0-220 mg/L. For [~~dissolved~~] hardness concentrations above 220 mg/L, the aluminum criteria for 220 mg/L apply. Calculated criteria must adhere to the treatment of significant figures and rounding identified in *Standard Methods For The Examination Of Water And Wastewater*, latest edition, American public health association.

(1) Acute aquatic life criteria for metals: The equation to calculate acute criteria in µg/L is $\exp(m_A[\ln(\text{hardness})] + b_A)$ (CF). Except for aluminum, the criteria are based on analysis of dissolved metal. For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that has a pH between 6.5 and 9.0 and is filtered to minimize mineral phases as specified by the department. [~~The EPA has disapproved the hardness-based equation for total recoverable aluminum in waters where the pH is less than 6.5 in the receiving stream for federal purposes of the Clean Water Act.~~] The equation parameters are as follows:

(2) Chronic aquatic life criteria for metals: The equation to calculate chronic criteria in µg/L is $\exp(m_C[\ln(\text{hardness})] + b_C)(CF)$**.** Except for aluminum, the criteria are based on analysis of dissolved metal. For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that has a pH between 6.5 and 9.0 and is filtered to minimize mineral phases as specified by the department.[~~The EPA has disapproved the hardness-based equation for total recoverable aluminum in waters where the pH is less than 6.5 in the receiving stream for federal purposes of the Clean Water Act.~~] The equation parameters are as follows:

***EPA Determination*:** *The NMED proposed, and the Commission adopted a definition of the term "hardness" to clarify the term and provide consistency when implementing New Mexico's hardness-based metals criteria for the protection of aquatic life at 20.6.4.900(I) NMAC. As described in the discussion of 20.6.4.12(F) NMAC in the Commission's SOR, the SJWC recommended removing the word "dissolved" before "hardness" in 20.6.4.12(F) NMAC and 20.6.4.900(I) NMAC, so that it aligned with the new definition of "hardness," and to eliminate redundancy and clarify the term. The Commission agreed and approved striking the word "dissolved" in 20.6.4.900(I) NMAC. These revisions do not alter or establish any new processes and would not change the implementation of the aluminum criteria. In addition, the reference to*

the latest edition of Standard Methods For The Examination Of Water And Wastewater[10] is consistent with 20.6.4.14(A)(2) NMAC. The deletion of the word "dissolved" throughout this provision and the reference to the Standard Methods are approved pursuant to CWA § 303(c) and revised language is effective for CWA purposes.

In its April 2012, action, the EPA disapproved the application of the hardness-based equation in 20.6.4.900(I)(1) and (2) for waters where the pH is below 6.5 as not protective of applicable designated uses. The EPA published updated §304(a) criteria for aluminum for freshwater (Aquatic Life Ambient Water Quality Criteria for Aluminum - 2018, EPA-822-R-18-001). The updated aluminum criteria are based on the latest science on aluminum toxicity to aquatic life and apply to waters within a pH range of 5.0 – 10.5. Although the EPA recommends that states update their aluminum criteria for waters within this pH range based on the updated §304(a) aluminum criteria, the EPA also recognizes that the conditions in New Mexico waters can be highly variable with pH levels as low as 3 standard units (SU). As a result, the EPA considers it protective to retain and continue to apply the 750 and 87 µg/L aluminium criteria as the applicable water quality standards for CWA purposes in waters where the pH is at or below 6.5. The revised language here and in 20.6.4.900(J)(1) clarifies that the previously approved 750 and 87 µg/L 304(a) criteria for aluminum will remain as the applicable criteria. See section 20.6.4.900(I)(3) NMAC below. These revisions are approved pursuant to CWA § 303(c) and are effective for CWA purposes.

In that 2012 action, the EPA also recommended that the State insert a footnote specifying that the hardness-based equations only apply at a pH of 6.5 to 9.0 to resolve the prior disapproval. The current revisions mean that the language referencing the EPA's partial disapproval of the hardness-based aluminum criteria as stated in 20.6.4.900(I)(1) and 20.6.4.900(I)(2) NMAC are no longer necessary and striking this language is appropriate.

(3) Selected values of calculated acute and chronic criteria (µg/L).

Hardness as $CaCO_3$, dissolved (mg/L)		**Al**	**Cd**	**Cr III**	**Cu**	**Pb**	**Mn**	**Ni**	**Ag**	**Zn**
[~~25~~] 25.0	Acute	512	[~~0.51~~] 0.490	[~~180~~] 183	[~~4~~] 3.64	[~~14~~] 13.9	[~~1,881~~] 1,880	[~~140~~] 145	[~~0.3~~] 0.30	[~~45~~] 45.4
	Chronic	205	[~~0.17~~] 0.253	[~~24~~] 23.8	[~~3~~] 2.74	[~~1~~] 0.541	1,040	[~~16~~] 16.1		[~~34~~] 34.4
[~~30~~] 30.0	Acute	658	[~~0.59~~] 0.581	[~~210~~] 212	[~~4~~] 4.32	[~~17~~] 17.0	[~~1,999~~] 2,000	[~~170~~] 169	[~~0.4~~] 0.40	[~~54~~] 53.5
	Chronic	263	[~~0.19~~] 0.290	[~~28~~] 27.6	[~~3~~] 3.20	[~~1~~] 0.664	[~~1,105~~] 1,100	[~~19~~] 18.8		[~~41~~] 40.5
[~~40~~] 40.0	Acute	975	[~~0.76~~] 0.761	[~~270~~] 269	[~~6~~] 5.67	[~~24~~] 23.5	2,200	[~~220~~] 16	[~~0.7~~] 0.66	[~~70~~] 69.5
	Chronic	391	[~~0.23~~] 0.360	[~~35~~] 35.0	[~~4~~] 4.09	[~~1~~] 0.916	[~~1,216~~] 1,220	[~~24~~] 24.0		[~~53~~] 52.7
[~~50~~] 50.0	Acute	[~~1,324~~] 1,320	[~~0.91~~] 0.938	[~~320~~] 323	[~~7~~] 6.99	[~~30~~] 30.1	2,370	260	[~~1.0~~] 0.98	[~~85~~] 85.2

[10] Baird, R. & Bridgewater, I. (2017). Standards methods for the examination of water and wastewater. 23rd edition. Washington, D.C., American Public Health Association.

	Chronic	530	[~~0.28~~] 0.426	[~~42~~] 42.0	[~~5~~] 4.95	[~~1~~] 1.17	[~~1,309~~] 1,310	[~~29~~] 28.9		[~~65~~] 64.5
[~~60~~] 60.0	Acute	[~~1,699~~] 1,700	[~~1.07~~] 1.11	[~~370~~] 375	[~~8~~] 8.30	[~~37~~] 36.9	[~~2,519~~] 2,520	[~~300~~] 304	1.3	[~~101~~] 100
	Chronic	681	[~~0.31~~] 0.489	[~~49~~] 48.8	[~~6~~] 5.79	[~~1~~] 1.44	[~~1,391~~] 1,390	[~~34~~] 33.8		[~~76~~] 76.2
[~~70~~] 70.0	Acute	[~~2,099~~] 2,100	[~~1.22~~] 1.28	[~~430~~] 425	[~~10~~] 9.60	[~~44~~] 43.7	[~~2,651~~] 2,650	[~~350~~] 346	1.7	116
	Chronic	841	[~~0.35~~] 0.549	[~~55~~] 55.3	[~~7~~] 6.60	[~~2~~] 1.70	[~~1,465~~] 1,460	[~~38~~] 38.5		[~~88~~] 87.6
[~~80~~] 80.0	Acute	2,520	[~~1.37~~] 1.46	[~~470~~] 474	[~~11~~] 10.9	[~~51~~] 50.6	[~~2,772~~] 2,770	[~~390~~] 388	2.2	131
	Chronic	1,010	[~~0.39~~] 0.607	[~~62~~] 61.7	[~~7~~] 7.40	[~~2~~] 1.97	[~~1,531~~] 1,530	[~~43~~] ~~43.0~~		[~~99~~] 98.9
[~~90~~] 90.0	Acute	[~~2,961~~] 2,960	[~~1.51~~] 1.62	[~~520~~] 523	[~~12~~] 12.2	[~~58~~] 57.6	[~~2,883~~] 2,880	[~~430~~] 428	2.7	145
	Chronic	[~~1,186~~] 1,190	[~~0.42~~] 0.664	[~~68~~] 68.0	[~~8~~] 8.18	[~~2~~] 2.24	[~~1,593~~] 1,590	[~~48~~] 47.6		110
100	Acute	[~~3,421~~] 3,420	[~~1.65~~] 1.79	570	[~~13~~] 13.4	[~~65~~] 64.6	[~~2,986~~] 2,980	[~~470~~] 468	3.2	160
	Chronic	1,370	[~~0.45~~] 0.718	[~~74~~] 74.1	[~~9~~] 8.96	[~~3~~] 2.52	1,650	[~~52~~] 52.0		121
200	Acute	[~~8,838~~] 8,840	[~~2.98~~] 3.43	[~~1,010~~] 1,000	[~~26~~] 25.8	[~~140~~] 136	[~~3,761~~] 3,760	[~~840~~] 842	[~~11~~] 10	[~~301~~] 300
	Chronic	[~~3,541~~] 3,540	[~~0.75~~] 1.21	[~~130~~] 131	[~~16~~] 16.2	[~~5~~] 5.30	[~~2,078~~] 2,080	[~~90~~] 93.5		228
220	Acute	[~~10,071~~] 10,100	[~~3.23~~] 3.74	[~~1,087~~] 1,090	[~~28~~] 28.2	151	[~~3,882~~] 3,880	912	[~~13~~] 12	328
	Chronic	[~~4,035~~] 4,030	[~~0.80~~] 1.30	141	[~~18~~] 17.6	[~~6~~] 5.87	[~~2,145~~] 2,140	101		248
300	Acute		[~~4.21~~] 5.00	1,400	[~~38~~] 37.8	[~~210~~] 208	[~~4,305~~] 4,300	[~~1190~~] 1,190	21	[~~435~~] 434
	Chronic		[~~1.00~~] 1.64	[~~180~~] 182	[~~23~~] 22.9	[~~8~~] 8.13	[~~2,379~~] 2,380	[~~130~~] 132		329
400 and above	Acute		[~~5.38~~] 6.54	1,770	[~~50~~] 49.6	[~~280~~] 281	[~~4,738~~] 4,740	[~~1510~~] 1,510	35	564
	Chronic		[~~1.22~~] 2.03	[~~230~~] 231	[~~29~~] 29.3	[~~11~~] 10.9	[~~2,618~~] 2,620	[~~170~~] 168		428

EPA Determination: *The revisions to the table in 20.6.4.900(I)(3) NMAC represent the EPA's national recommended aquatic life water quality criteria for metals, or in some cases, criteria developed by the NMED. The criteria for hardness-based metals are specific to the water hardness (expressed as $CaCO_3$) at the time of sample collection, accounting for the potential for variations in hardness over time resulting in fluctuations in metals criteria. As part of its 2020 triennial review, the NMED verified the calculations for the hardness-based criteria values for mathematical accuracy. These revisions include the EPA's 2016 update to recommended acute and chronic hardness-based aquatic life criteria for cadmium that represent increased bioavailabity over New Mexico's current criteria. Based on this analysis and recalculations, the NMED proposed, and the Commission adopted the revised acute and chronic hardness-based metals criteria in this table depicting the graduating hardness levels of these metals criteria as a reference. The revisions to the selected values for aluminum, chromium III, copper, lead,*

manganese, nickel, silver and zinc in this table are approved as nonsubstantive revisions pursuant to CWA § 303(c) and are effective for CWA purposes.

*The EPA approval of aquatic life criteria is subject to consultation pursuant to Section 7(a)(2) of the Endangered Species Act (ESA). The EPA is taking no action on the revised aquatic life criterion for cadmium, pending ESA consultation (**Section III**). The revised criterion for cadmium is not effective for CWA purposes until the EPA concludes consultation with the U.S. Fish and Wildlife Service (Service). See **Section V** for additional information regarding the completion of the ESA consultation.*

J. Use-specific numeric criteria.

(1) Table of numeric criteria: The following table sets forth then numeric criteria applicable to existing, designated and attainable uses. For metals, criteria represent the total sample fraction unless otherwise specified in the table. Additional criteria that are not compatible with this table are found in Subsections A through I, K and L of this section.

NOTE; This is not a compete table but only includes revisions to the use-specific criteria table for brevity:

Pollutant	**CAS Number**	**DWS**	**Irr/Irr storage**	**LW**	**WH**	**Aquatic Life**			**Type**
						Acute	Chronic	HH-OO	
Aluminum, dissolved	7429-90-5		5,000			750 i	87 i		
Chloride	1688-70-06					860,000	230,000		
Iron	7439-89-6						1,000		
Acenaphthene	83-32-9	2,100						[~~990~~] 90	
Acrolein	107-02-8	18				3.0	3.0	[~~9~~] 400	
Acrylonitrile	107-13-1	0.65						[~~2.5~~] 70	C
Aldrin	309-00-2	0.021				3.0		[~~0.00050~~] 0.0000077	C,P
Anthracene	120-12-7	10,500						[~~40,000~~] 400	
Benzene	71-43-2	5						[~~510~~] 160	C
Benzidine	92-87-5	0.0015						[~~0.0020~~] 0.11	C
Benzo(a)anthracene	56-55-3	0.048						[~~0.18~~] 0.013	C
Benzo(a)pyrene	50-32-8	0.2						[~~0.18~~] 0.0013	C,P
Benzo(b)fluoranthene	205-99-2	0.048						[~~0.18~~] 0.0013	C
Benzo(k)fluoranthene	207-08-9	0.048						[~~0.18~~] 0.13	C
alpha-BHC	319-84-6	0.056						[~~0.049~~] 0.0039	C
beta-BHC	319-85-7	0.091						[~~0.17~~] 0.14	C
[~~Gamma~~] gamma-BHC (Lindane)	58-89-9	0.20				0.95		[~~1.8~~] 4.4	
Bis(2-chloroethyl) ether	111-44-4	0.30						[~~5.3~~] 22	C
Bis([2-chloroisopropyl] 2-chloro-1-methylethyl) ether	108-60-1	1,400						[~~65,000~~] 4,000	
Bis(2-ethylhexyl) phthalate	117-81-7	6						[~~22~~] 3.7	C
Bis(chloromethyl) ether	542-88-1							0.17	C
Bromoform	75-25-2	44						[~~1,400~~] 1,200	C
Butylbenzyl phthalate	85-68-7	7,000						[~~1,900~~] 1	C
Carbaryl	63-25-2					2.1	2.1		
Carbon tetrachloride	56-23-5							[~~16~~] 50	C
Chlordane	57-74-9	2				2.4	0.0043	[~~0.0081~~] 0.0032	C,P
Chlorobenzene	108-90-7	100						[~~1,600~~] 800	
Chlorodibromomethane	124-48-1	4.2						[~~130~~] 210	C
Chloroform	67-66-3	57						[~~4,700~~] 2,000	[~~C~~]
Chlorpyrifos	2921-88-2					0.083	0.041		
2-Chloronaphthalene	91-58-7	2,800						[~~1,600~~] 1,000	

2-Chlorophenol	95-57-8	175						[~~150~~] 800	
Chrysene	218-01-9	0.048						[~~0.18~~] 1.3	C
Demeton	8065-48-3						0.1		
Diazinon	333-41-5					0.17	0.17		
2,4-Dichlorophenoxyacetic acid	94-75-7							12,000	
Dichlorodiphenyldichloroethane (DDD)	72-54-8							0.0012	K
Dichlorodiphenyldichloroethylene (DDE)	72-55-9							0.00018	C
Dichlorodiphenyltrichloroethane (DDT)	50-29-3							0.0003	C, P
4,4'-DDT and derivatives		1.0			0.001	1.1	0.001	[~~0.0022~~]	[~~C,P~~]
Dibenzo(a,h)anthracene	53-70-3	0.048						[~~0.18~~] 0.0013	C
Dibutyl phthalate	84-74-2	3,500						[~~4,500~~] 30	
1,2-Dichlorobenzene	95-50-1	600						[~~1,300~~] 3,000	
1,3-Dichlorobenzene	541-73-1	469						[960] 10	
1,4-Dichlorobenzene	106-46-7	75						[190] 900	
3,3'-Dichlorobenzidine	91-94-1	0.78						[~~0.28~~] 1.5	C
Dichlorobromomethane	75-27-4	5.6						[~~170~~] 270	C
1,2-Dichloroethane	107-06-2	5						[~~370~~] 6,500	C
1,1-Dichloroethylene	75-35-4	7						[~~7,100~~] 20,000	[C]
2,4-Dichlorophenol	120-83-2	105						[~~290~~] 60	
1,2-Dichloropropane	78-87-5	5.0						[~~150~~] 310	C
1,3-Dichloropropene	542-75-6	3.5						[~~210~~] 120	C
Dieldrin	60-57-1	0.022				0.24	0.056	[~~0.00054~~] 0.000012	C, P
Diethyl phthalate	84-66-2	28,000						[~~44,000~~] 600	
Dimethyl phthalate	131-11-3	350,000						[1,100,000] 2,000	
2,4-Dimethylphenol	105-67-9	700						[~~850~~] 3,000	
Dinitrophenols	25550-58-7							1,000	
2,4-Dinitrophenol	51-28-5	70						[~~5,300~~] 300	
2,4-Dinitrotoluene	121-14-2	1.1						[~~34~~] 17	C
Dioxin	1746-01-6	3.0E^{-05}						5.1E^{-08}	C, P
1,2-Diphenylhydrazine	122-66-7	0.44						2.0	C
alpha-Endosulfan	959-98-8	62				0.22	0.056	[~~89~~] 30	
beta-Endosulfan	33213-65-9	62				0.22	0.056	[~~89~~] 40	
Endosulfan sulfate	33213-65-9	62						[~~89~~] 40	
Endrin	72-20-8	2				0.086	0.036	[~~0.060~~] 0.03	
Endrin aldehyde	7421-93-4	10.5						[~~0.30~~] 1	
Ethylbenzene	100-41-4	700						[~~2,100~~] 130	
Fluoranthene	206-44-0	1,400						[~~140~~] 20	
Fluorene	86-73-7	1,400						[~~5,300~~] 70	
Guthion	86-50-0						0.01		
Heptachlor	76-44-8	0.40				0.52	0.0038	[~~0.00079~~]0.000059	C
Heptachlor epoxide	1024-57-3	0.20				0.52	0.0038	[~~0.00039~~] 0.00032	C
Hexachlorobenzene	118-74-1	1						[~~0.0029~~] 0.00079	C, P
Hexachlorobutadiene	87-68-3	4.5						[~~180~~] 0.1	
Hexachlorocyclohexane (HCH)-Technical	608-73-1							0.1	C
Hexachlorocyclopen-tadiene	77-47-4	50						[~~1,100~~] 4	
Hexachloroethane	67-72-1	25						[~~33~~] 1	C
Ideno(1,2,3-cd)pyrene	193-39-5	0.048						[~~0.18~~] 0.013	C
Isophorone	78-59-1	368						[~~9,600~~] 18,000	C
Malathion	121-75-5						0.1		
Methoxychlor	72-43-5						0.03	0.02	

Methyl bromide	74-83-9	49						[~~1,500~~] 10,000	
3-Methyl-4-chlorophenol	59-50-7							2,000	
2-Methyl-4,6-dinitrophenol	534-52-1	14						[~~280~~] 30	
Methylene chloride	75-09-2	5						[~~5,900~~] 10,000	C
Mirex	2385-85-5						0.001		
Nitrobenzene	98-95-3	18						[~~690~~] 600	
Nitrosamines	Various							12.4	C
Nitrosodibutylamine	924-16-3							2.2	C
Nitrosodiethylamine	55-18-5							12.4	C
N-Nitrosodimethylamine	62-75-9	0.0069						30	C
N-Nitrosodi-n-propylamine	621-64-7	0.050						5.1	C
N-Nitrosodiphenylamine	86-30-6	71						60	C
N-Nitrosopyrrolidine	930-55-2							340	C
Nonylphenol	84852-15-3					28	6.6		
Parathion	56-38-2					0.065	0.013		
~~[Polychlorinated Biphenyls (PCBs)]~~	~~[1336-36-3]~~	~~[0.50]~~			~~[0.014]~~	~~[2]~~	~~[0.014]~~	~~[0.00064]~~	~~[C,P]~~
Pentachlorobenzene	608-93-5							0.1	
Phenol	108-95-2	10,500						[860,000]300,000	
Polychlorinated Biphenyls (PCBs)	336-36-3	0.50			0.014	2	0.014	0.00064	[C, P]
Pyrene	129-00-0	1,050						[4,000] 30	
1,2,4,5-Tetrachlorobenzene	95-94-3							0.03	
1,1,2,2-Tetrachloroethane	79-34-5	1.8						[~~40~~] 30	C
Tetrachloroethylene	127-18-4	5						[~~33~~] 290	C, P
Toluene	108-88-3	1,000						[15,000] 520	
Toxaphene	8001-35-2	3				0.73	0.0002	[~~0.0028~~] 0.0071	C
1,2-Trans-dichloroethylene	156-60-5	100						[~~10,000~~] 4,000	
Tributyltin (TBT)	Various					0.46	0.072		
1,2,4-Trichlorobenzene	120-82-1	70						[~~70~~] 0.76	C
1,1,1-Trichloroethane	71-55-6	200						200,000	
1,1,2-Trichloroethane	79-00-5	5						[~~160~~] 89	C
Trichloroethylene	79-01-6	5						[300] 70	C
2,4,5-Trichlorophenol	95-95-4							600	
2,4,6-Trichlorophenol	88-06-2	32						[~~24~~] 28	C
2-(2,4,5-Trichlorophenoxy) propionic acid (Silvex)	93-72-1							400	
Vinyl chloride	75-01-4	2						[~~24~~] 16	C

(2) Notes applicable to the table of numeric criteria in Paragraph (1) of this subsection.

(i) The acute and chronic aquatic life criteria for dissolved aluminum only apply when the concurrent pH is less than 6.5 or greater than 9.0 S.U. If the concurrent pH is between 6.5 and 9.0 S.U. then the hardness-dependent total recoverable aluminum criteria in Paragraphs (1) and (2) of Subsection I of 20.6.4.900 NMAC apply.

EPA Determination: *As part of its 2020 triennial review, the NMED proposed, and the Commission adopted revisions adding new criteria and updating acute and chronic criteria for the protection of aquatic life and those based on human consumption of an aquatic organism (human health-organism only). New Mexico continues to adjust criteria for carcinogenic contaminants based on based on a lifetime risk of one cancer per 100,000 exposed persons (see 20.6.4.13(F)(2)(a)) in comparison to the EPA's lifetime risk level of more than one cancer per 1,000,000 exposed persons, consistent with EPA guidance. Revisions also reincorporate the previously approved chronic and acute dissolved aluminum criteria of 87 µg/L and 750 µg/L, respectively related to the EPA's 2012 disapproval. As specified in the note at 20.6.4.900(J)(2)(i)*

NMAC. these criteria are the applicable aluminum criteria for all waters with a pH less than 6.5 SU, outside the applicable range for hardness-based aluminum criteria.

In addition to the proposed changes to the aquatic life criteria described above, the revisions include completion of missing chemical abstract service numbers for several pollutants and nonsubstantive spelling corrections. These revisions are consistent with the EPA's recommended § 304(a) criteria and with language in 40 CFR §131.20(a). The revised human health criteria in 20.6.4.900(J)(1) and notes in (J)(2)(i) NMAC are not subject to ESA consultation and are approved pursuant to CWA § 303(c) and are effective for CWA purposes.

20.6.4.901 PUBLICATION REFERENCES: These documents are intended as guidance and are available for public review during regular business hours at the offices of the surface water quality bureau. Copies of these documents have also been filed with the New Mexico state records center in order to provide greater access to this information.

A. American public health association. 1992. *Standard Methods for The Examination of Water and Wastewater, 18th Edition.* Washington, D.C. 1048 p.

B. American public health association. 1995. *Standard Methods for The Examination of Water and Wastewater, 19th Edition.* Washington, D.C. 1090 p.

C. American public health association. 1998. *Standard Methods for The Examination of Water and Wastewater, 20th Edition.* Washington, D.C. 1112 p.

D. American public health association. 2018. *Standard Methods for The Examination of Water and Wastewater, 23rd Edition.* Washington, D.C. 1796 p.

[~~D.~~] **E.** United States geological survey. [1987] 1989. *Methods For Determination of Inorganic Substances In Water And Fluvial Sediments, Techniques of Water-Resource Investigations of The United States Geological Survey.* Washington, D.C. [80] 545 p.

[~~E.~~] **F.** United States geological survey. 1987. *Methods [~~for the determination of organic substances in water and fluvial sediments, techniques of water-resource investigations of the U.S. Geological survey~~] For The Determination Of Organic Substances In Water And Fluvial Sediments, Techniques Of Water-Resource Investigations Of The United States Geological Survey.* Washington, D.C. 80 p.

[~~F.~~] **G.** United States environmental protection agency. [~~1974~~] 1983. *Methods For Chemical Analysis Of Water And Wastes.* [~~National environmental research center, Cincinnati, Ohio~~] Office of research and development, Washington, DC. [~~(EPA-625-/6-74-003)~~] (EPA/600/4-79/020). [~~298~~] 491 p.

[~~G.~~] **H.** New Mexico water quality control commission. [~~2003~~] 2020. [*(208)*] *State Of New Mexico Water Quality Management Plan and Continuing Planning Process*. Santa Fe, New Mexico. [~~85~~] 277 p.

[~~H.~~] **I.** Colorado river basin salinity control forum. [2014] 2020. [2014] *2020 Review, Water Quality Standards For Salinity, Colorado River System.* Phoenix, Arizona. [99] 97 p.

[~~I.~~] **J.** United States environmental protection agency. 2002. *Methods For Measuring The Acute Toxicity Of Effluents And Receiving Waters To Freshwater And Marine Organisms.* Office of research and development, Washington, D.C. (5th Ed., EPA 821-R-02-012). 293 p. [~~http://www.epa.gov/ostWET/disk2/atx.pdf~~]

[~~J.~~] **K.** United States environmental protection agency. 2002. *Short-Term Methods For Estimating The Chronic Toxicity Of Effluents And Receiving Waters To Freshwater Organisms.* Environmental monitoring systems laboratory, Cincinnati, Ohio. (4th Ed., EPA 821-R-02-013). 335 p.

[~~K.~~] **L.** [~~Ambient-induced mixing, in~~] United States environmental protection agency. 1991. Ambient-induced mixing, in *Technical Support Document For Water Quality-Based Toxics Control*. Office of water, Washington, D.C. (EPA/505/2-90-001). [~~2~~] 335 p.

[~~L.~~] **M.** United States environmental protection agency. 1983. *Technical Support Manual: Waterbody Surveys And Assessments For Conducting Use Attainability Analyses, ~~Volume I~~*:. Office of water, regulations and standards, Washington, D.C. [~~251~~] 232 p.
[~~http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf~~]

[~~M.~~] **N.** United States environmental protection agency. 1984. *Technical Support Manual: Waterbody Surveys And Assessments For Conducting Use Attainability Analyses, Volume* [*Iii*] *III: Lake Systems*. Office of water, regulations and standards, Washington, D.C. 208 p.

[~~http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf~~]
[20.6.4.901 NMAC - Rp 20 NMAC 6.1.4000, 10/12/2010; A, 5/23/2005; A, 12/1/2010; A, 3/2/2017; A, 4/23/2022]

***EPA Determination*:** *The EPA considers the updates to the publication references important, but they are not considered a water quality standard and not subject to action under CWA § 303(c).*

III. Provisions Where the EPA has or is Taking No Action

In today's action, the EPA is taking no action on the following new or revised provisions in the *New Mexico Standards for Interstate and Intrastate Waters* (20.6.4 NMAC) pursuant to §303(c) of the CWA. The following new or revised provisions where the EPA did not have adequate information to make a determination for action are not effective for CWA purposes until approved by the EPA as specified in 40 CFR 131.21(c).

20.6.4.7 Definitions

20.6.4.7 DEFINITIONS: Terms defined in the New Mexico Water Quality Act, but not defined in this part will have the meaning given in the Water Quality Act.

A. Terms beginning with numerals or the letter "A," and abbreviations for units.

(1) "4Q3" means the critical low flow as determined by the minimum average flow over four consecutive days that occurs with a frequency of once in three years.

As described in Chapter 5 of the EPA's WQS Handbook[11]*, referring to the Technical Support Document for Water Quality Based Controls (1991) and Appendix D of that document, the EPA describes and recommends two methods for calculating acceptable critical low-flow values: the traditional hydrologically based method developed by the United States Geological Survey (USGS) and a biologically based method developed by the EPA.*

The hydrologically based critical low-flow value is determined statistically using probability and extreme values for acute and chronic criteria (1Q10 and 7Q10). The advantage of this method is that it utilizes extreme value analytical techniques (e.g., log-Pearson Type III flow estimating technique) supported by past engineering and statistical practice. The disadvantages of this method are that it is independent of biological considerations, and it cannot easily utilize site-specific durations and frequencies that are sometimes specified in aquatic life criteria. When using hydrologically based critical low-flow values for aquatic life and human health criteria, the EPA recommends that states and tribes adopt the critical low-flow values for use in steady-state analyses so that criteria are implemented appropriately. If criteria are implemented using inappropriate critical low-flow values (i.e., calculated values that are too high), the resulting control of toxic pollutants may not be fully protective because the resulting ambient concentrations could exceed criteria when such low flows occur. In the case of aquatic life, more

[11] U.S. Environmental Protection Agency (EPA). 2017. Water Quality Standards Handbook: 2nd Edition. EPA-823-B-17-001. EPA Office of Water, Office of Science and Technology, Washington, DC. https://www.epa.gov/sites/production/files/2014-10/documents/handbook-chapter3.pdf

frequent excursions than are allowable (e.g., more than once in three years) could result in unacceptable effects on aquatic organisms and designated uses if the appropriate value is not used in the calculations.

The biologically based critical low flow is determined empirically using the specific duration and frequency associated with the criterion (1B3 and 4B3). The biologically-based design flow is intended to examine the duration and frequency of biological exposure. The method directly uses site-specific durations (i.e., averaging periods) and frequencies specified in the aquatic life criteria (e.g., 1 day and 3 years for CMC and 4 days and 3 years for CCC). This method is empirical, not statistical, because it deals with the actual flow record itself, not with a statistical distribution that is intended to describe the flow record. Since biologically-based design flows are based on durations and frequencies specified in water quality criteria for individual pollutants and whole effluents, they can be based on the available biological, ecological and toxicological information concerning the stresses that aquatic organisms, ecosystems and their uses can tolerate.

The EPA compared hydrologically based design flow method and biologically-based design flow methods, the 1Q10 with the 1B3 and the 7Q10 with the 4B3 in 60 rivers. In most instances, the hydrologically based design flows (i.e., 1Q10, 7Q10) resulted in more than the allowed excursions. In other instances, the 1Q10 and 7Q10 allowed substantially more or fewer excursions than the intended number of excursions. In contrast, since the biologically-based method calculates the design flows directly from the national or site-specific duration and frequency, it always provided the maximum allowed number of excursions (and never provides more or fewer excursions than allowed).
It is unclear if this new definition of 4Q3 in intended as an alternative flow to address streams with limited or no flow at 7Q10. As noted in the WQS Handbook, Chpt.5, when a criterion specifies a four-day average concentration that should not be exceeded more than once every three years, this condition should not be interpreted as implying that a 4Q3 low flow is appropriate for use as the hydrologically based critical low-flow value for assessing impacts on the receiving water.

***EPA Determination*:** *Given that some aspects of this definition make it unclear how a 4Q3 is intended to be used as the hydrologically based critical low-flow value for assessing impacts on low-flow receiving waters, the EPA has determined that it needs additional information before the Agency can take action on this definition. This definition is not effective for CWA purposes until approved by the EPA.*

20.6.4.126 Rio Grande Basin

20.6.4.126 RIO GRANDE BASIN: Perennial waters within lands managed by the U.S. department of energy (DOE) within Los Alamos National Laboratory (LANL), including but not limited to [~~portions of~~] Cañon de Valle from [~~Los Alamos national laboratory (~~]LANL[~~)~~] stream gage E256 upstream to Burning Ground spring, Sandia canyon from Sigma canyon upstream to LANL NPDES outfall 001, Pajarito canyon from 0.5 miles below Arroyo de La Delfe upstream to Homestead spring, Arroyo de la Delfe from Pajarito canyon to Kieling spring, [~~into~~] Starmers gulch and Starmers spring and Water canyon from Area-A canyon upstream to State Route 501.

A. Designated uses: coldwater aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria: the use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses.

[20.6.4.126 NMAC - N, 5/23/2005; A, 12/1/2010; A, 4/23/2022]

The EPA has taken into consideration the extensive history of the designation of uses for waters within the DOE/LANL in its review of the revisions to 20.6.4.126 NMAC. The following discussion considers the NMED's initial proposed revisions and determinations, and those revisions brought by the DOE/LANL, the latter of which were adopted by the Commission. An important part of the recent history is related to the Joint Stipulation Regarding Proposed Changes to 20.6.4.128 NMAC (WQCC 14-05(R)). The Joint Stipulation agreement between the NMED, DOE/LANL, and Amigos Bravos is the result of amendments initially proposed by Amigos Bravos during the NMED's 2013 triennial review to revise the designated use for all waters in 20.6.4.128 NMAC from limited aquatic life to marginal warmwater aquatic life designated use, arguing that these waters were under-protected. Amigos Bravos withdrew its proposed revisions in exchange for DOE/LANL agreeing to share information on waters within its property boundary. The Joint Stipulation is significant because it outlines commitments made in the effort to determine the appropriate designated uses for ephemeral and intermittent waters within 20.6.4.128 NMAC. This process affected the revisions to 20.6.4.126 NMAC under consideration here.

Consistent with the Joint Stipulation, the NMED, in coordination with the DOE/LANL and to a lesser extent Amigos Bravos, conducted numerous Hydrology Protocol[12] surveys on waters within regulatory segment 20.6.4.128 NMAC from November 2016 to October 2019 to document aquatic life and recreation use support of these waters. The NMED's Hydrology Protocol (HP) assessments consider hydrologic, geomorphic, and biological indicators related to the persistence of water. The NMED's HP is the only hydrologic condition survey method for surface waters that is approved by both the Commission and the EPA as a component of the New Mexico's Water Quality Management Plan/Continuing Planning Process (WQMP/CPP). See 40 CFR 130.5 and 40 CFR 130.5(c). As detailed in the WQMP/CPP, HP assessment information can then be used to provide technical support for a UAA but cannot be used in place of a UAA to make use determinations.

This effort to determine the hydrologic regime and thus the appropriate designated uses is consistent with the requirements in 40 CFR 131.20(a). This federal regulation requires states to re-examine any waterbody segment with standards that do not include the uses specified in CWA § 101(a)(2) every 3 years to determine if any new information has become available. If new information is available that indicate the uses specified in CWA § 101(a)(2) may be attainable, federal regulations require states/authorized tribes to revise their standards accordingly. Although the initial presumption by the participants was that all waters assessed within 20.6.5.128 NMAC would be ephemeral or intermittent, after conducting HP surveys on some but not all waters within 20.6.5.128 NMAC, it was determined that several are perennial. These findings were not expected but were significant since the Joint Stipulation obligated the NMED, DOE/LANL, and Amigos Bravos to meet, discuss and come to agreement on the appropriate level of protections for waters found to be perennial. If agreement was reached, the Joint

[12] New Mexico Environment Department (2011). New Mexico WQMP/CPP Appendix C: Hydrology Protocol.

Stipulation specifically obligated the NMED to petition the Commission, proposing appropriate designated uses for those waters no later than the next, now the current 2020 triennial review. The Joint Stipulation did not preclude Amigos Bravos and DOE/LANL from filing separate petitions to revise designated uses if there was no agreement.

Based on the NMED's testimony before the Commission, it appears that the three parties concurred that Ancho Canyon from the Rio Grande to Ancho Springs; Pajarito Canyon from Starmers Gulch to Homestead Spring; Pajarito Canyon from 500 meters downstream of Arroyo de la Delfe to Arroyo de la Delfe, and DP Canyon from 100 meters downstream of grade control to 400 meters upstream of grade control are perennial waters. Although the basis is unclear, it appears that DP canyon was withdrawn following further discussion. Consistent with its commitments under the Joint Stipulation, the NMED initially proposed to classify waters where there was agreement, including DP canyon, Ancho canyon, and additional perennial portions of Water canyon waters within 20.6.126 NMAC.

However, the NMED did not move forward with its initial proposals for 20.6.126 NMAC. It is the EPA's understanding that prior to petitioning the Commission for a hearing (August 2020), the NMED anticipated the need to prepare a supporting UAA for to classify those waters referred to above within 20.6.4.126 NMAC. The determination through the HP assessments that some waters assumed to have been defined in 20.6.4.128 NMAC are perennial is significant since it means that these waters were not adequately protected under this regulatory segment. In its direct testimony, the NMED noted that the resources needed to develop a UAA for waters in 20.6.4.126 NMAC would affect its ability to meet its obligation under the Joint Stipulation to provide protection for those intermittent waters identified through HP assessments in 20.6.4.128 NMAC – those proposed to be classified in 20.6.4.140 NMAC discussed previously.

Given the decision to meet its obligation under the Joint Stipulation, the NMED relied on existing provisions in 20.6.4. NMAC to ensure protections for those waters that had been identified as perennial through the HP assessments. Those waters that were identified as perennial through the HP analyses are not specifically defined 20.6.4.128 NMAC and thus are "unclassified waters of the state" that "…are not identified in 20.6.4.101 through 20.6.4.899 NMAC." In its testimony before the Commission, the NMED referred to the provision at 20.6.4.11(H) NMAC which states that "An unclassified surface water of the state is presumed to support the uses specified in Section 101(a)(2) of the federal Clean Water Act. As such, it is subject to 20.6.4.98 NMAC if nonperennial or subject to 20.6.4.99 NMAC if perennial." This provision requires that those waters that were found to be perennial through the HP analyses are subject to under 20.6.4.99 NMAC consistent with the rebuttable presumption that CWA § 101(a)(2).

The DOE/LANL opposed the NMED's determination that those waters identified as perennial through HP assessments are in fact unclassified and protected under 20.6.4.99 NMAC. In its testimony before the Commission, the DOE/LANL's contended that the NMED could not "move" waters or portions of waters defined in 20.6.4.126 and 128 NMAC because they could not be "automatically unclassified to 20.6.4.99 NMAC, without a Commission decision…" However, there is no provision in 20.6.4 NMAC that requires the Commission to affirmatively act to define unclassified waters within 20.6.4.99 NMAC – the provisions at 20.6.4.11(H) and 20.6.4.99 NMAC require these protections for unclassified waters. The NMED noted that the application of HP analyses are explicitly addressed in the WQMP/CPP section entitled Establishing or

Revising a Designated Use using the Hydrology Protocol. This section states that "For waterbodies that are perennial but have not been classified under 20.6.4.101 to 899 NMAC, the State asserts perennial protections for these waters under 20.6.4.99 NMAC. Thus, the NMED did not "move" waters to 20.6.4.99 NMAC but appears to have followed the established provision at 20.6.4.11(H) and the specific processes outlined in New Mexico's WQMP/CPP to ensure protection of those unclassified perennial waters identified through the HP analyses.

In testimony before the Commission, the DOE/LANL described its proposed revisions to 20.6.4.126 NMAC as a reclassification of two segments from 20.6.4.128 NMAC: (1) Pajarito canyon from 0.5 miles below Arroyo de la Delfe upstream to Homestead Spring (the Pajarito "Lower Section" and "Upper Section" respectively); and (2) Arroyo de la Delfe from Pajarito canyon to Kieling Spring. In that testimony, the DOE/LANL stated that it proposed the more protective cold water aquatic life designated use as potentially obtainable based on the joint HP work done with NMED and additional analysis DOE/LANL itself conducted. The DOE/LANL referred to supporting data based on HP Level-1 and HP Leve1-2 field sheets, photographs conventional water chemistry parameters and benthic taxa summary for the Pajarito Lower and Upper Sections. Macroinvertebrate taxa requiring water for their entire life cycle were identified as well as EPT (Ephemeroptera, Plecoptera, and Trichoptera) taxa. Data for the fish, amphibians and bivalves were not identified during the HP assessments. However, DOE/LANL testimony contradicts its statement that no species of bivalve was identified through laboratory examination although also stating that amphibians are known to exist in these reaches.

While the biological data derived through the HP and any additional analyses of these waters is significant, the specific processes outlined in the WQMP/CPP is specific to ensuring protection of those unclassified perennial waters identified through the HP analyses. The NMED noted in its testimony that the application of HP analyses are explicitly addressed in the WQMP/CPP section entitled Establishing or Revising a Designated Use using the Hydrology Protocol. This section states that "For waterbodies that are perennial but have not been classified under 20.6.4.101 to 899 NMAC, the State asserts perennial protections for these waters under 20.6.4.99 NMAC. A survey using the Hydrology Protocol may be used to verify the hydrological regime for these unclassified perennial waters. A revision to incorporate the results of the Hydrology Protocol survey to classify a waterbody under 20.6.4.101 to 899 NMAC is done through the UAA process." Thus, HP assessment information can only be used to provide technical support for a UAA - it cannot be used in place of a UAA to make use determinations. Thus, the basis for the Commission's adoption of the DOE/LANL proposals for 20.6.4.126 NMAC appear to be inconsistent with state's own requirements in the WQMP/CPP. The EPA considers the WQMP/CPP requirement to be an important part of a well-supported designated use determination while not specifically required under federal regulation at 40 CFR 131.10(j).

Further, the DOE/LANL does not appears to have developed any new data related to the attainable contact recreation use specific to the Pajarito canyon and Arroyo de la Delfe in its testimony and stated that there is no new data to suggest that the non-primary contact recreational use has changed from the initial the NMED's 2007 UAA. The 2007 UAA does not refer to or provide any specific data on conditions in either Pajarito canyon or Arroyo de la Delfe related to attainment of the contact recreation use. Since Pajarito canyon and Arroyo de la Delfe have not been specifically defined in 20.6.4.101 through 20.6.4.899 NMAC, to support the inclusion of these waters in 20.6.4.126 NMAC, 40 CFR 131.10(g)(j) require that DOE/LANL must provide a supporting UAA for the secondary contact use designation in these waters.

Further, the EPA considers the revised language in 20.6.4.126 NMAC referring to the defined perennial waters as "including but not limited to" inconsistent with the definition of "classified waters of the state," which specifically refers to a surface water or reach of a surface water of the state where the Commission has adopted a segment description.

***EPA Determination*:** *The EPA does not have adequate information to make a definitive determination on the Commission's revisions to 20.6.4.126 NMAC. Based on both current and revised language in 20.6.4.126 NMAC, the EPA has identified the following overarching findings and questions:*

Waters within the DOE/LANL are defined within two separate regulatory segments, 20.6.4.126 and 20.6.4.128 NMAC. Waters within both regulatory segments are broadly defined as "Classified water(s) of the state." The current regulatory segment definition at 20.6.4.126 NMAC specifically delineates perennial waters by their upstream and downstream boundaries. Regulatory segment 20.6.4.128 NMAC defines ephemeral or intermittent waters more generally as ephemeral and intermittent waters within DOE/LANL as "including but not limited to" specific waters and "those not specifically identified in 20.6.4.126 NMAC." Given the definitions of classified and unclassified waters in 20.6.7 NMAC, the rebuttable presumption of CWA § 101(a)(2) uses, the closely related state regulatory provisions at 20.6.4.11(H), the Commission and EPA approved regulatory procedures in the New Mexico WQMP/CPP, the EPA agrees with the NMED's determination that waters that are not specifically defined within a regulatory segment that have or may be determined to be perennial through HP analyses are protected under 20.6.4.99 NMAC.

The EPA considers the new phrase "including but not limited to" and the striking of the term "specifically" in the first sentence in referring to specific waters to be inconsistent with the definitions of all other regulatory segment in 20.6.4.101 through 20.6.4.899 NMAC that specifically delineate protected waters. The exceptions are 20.6.4.128 NMAC and 20.6.4.808 NMAC, the latter which the EPA previously took no action on (see below). The EPA recommends that this exception language be removed from these regulatory segment definitions. Although the supporting HP (Level-1 and Level-2) hydrologic and biological data is significant in determining the appropriate aquatic life use determination for "Pajarito canyon from 0.5 miles below Arroyo de la Delfe upstream to Homestead Spring; and Arroyo de la Delfe from Pajarito canyon to Kieling Spring," the New Mexico WQMP/CPP only allows the results of HP analyses to supplement but not substitute for a UAA. Thus, the HP Level-1 and Level-2 field data should not have been used as the basis for revisions adding the specific segments described above to 20.6.4.126 NMAC.

The EPA finds that it does not have an adequate basis to make a determination on the Commission's revisions to 20.6.4.126 NMAC. The EPA requests that the NMED provide supporting information to allow the EPA to make such a determination. The EPA anticipates that the additional information would include clarification of the basis for the Commission's actions for those waters/tributaries that are or are not now defined in 20.6.4.99 NMAC and a detailed information related to the revisions to 20.6.4.126 NMAC. The EPA anticipates that this would include a supporting UAA developed by the DOE/LANL to support the coldwater aquatic life and secondary contact recreation uses for Pajarito canyon from 0.5 miles below Arroyo de la Delfe upstream to Homestead Spring; and Arroyo de la Delfe from Pajarito canyon to Kieling Spring, now defined in 20.6.4.126 NMAC consistent with the requirements in the New Mexico WQMP.

The revisions to this provision are not approved and are not effective for CWA purposes until approved by the EPA.

20.6.4.800 Closed Basins

20.6.4.808 and 809 Water Effect Ratios (WER)

20.6.4.808 CLOSED BASINS: Perennial and intermittent watercourses within Smelter Tailing Soils Investigation Unit lands at the Chino mines company, excluding those ephemeral waters listed in 20.6.4.809 NMAC and including, but not limited to the mainstem of Lampbright draw, beginning at the confluence of Lampbright Draw with Rustler canyon, all tributaries that originate west of Lampbright draw to the intersection of Lampbright draw with U.S. 180, and all tributaries of Whitewater creek that originate east of Whitewater creek from the confluence of Whitewater creek with Bayard canyon downstream to the intersection of Whitewater creek with U.S. 180.

A. Designated uses: Warmwater aquatic life, livestock watering, wildlife habitat and primary contact.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the acute and chronic aquatic life criteria for copper set forth in Subsection I of 20.6.4.900 NMAC shall be determined by multiplying that criteria by the water effect ratio ("WER") adjustment expressed by the following equation:

$$WER = \frac{[10^{0.588+(0.703 \times \log DOC)+(0.395 \times \log Alkalinity)}] \times (\frac{100}{Hardness})^{0.9422}}{19.31}]$$

For purposes of this section, dissolved organic carbon (DOC) is expressed in units of milligrams carbon per liter or mg C/L; alkalinity is expressed in units of mg/L as $CaCO_3$, and hardness is expressed in units of mg/L as $CaCO_3$. In waters that contain alkalinity concentrations greater than 250 mg/L, a value of 250 mg/L shall be used in the equation. In waters that contain DOC concentrations greater than 16 mg C/L, a value of 16 mg C/L shall be used in the equation. In waters that contain hardness concentrations greater than 400 mg/L, a value of 400 mg/L shall be used in the equation. The alkalinity, hardness and DOC concentrations used to calculate the WER value are those measured in the subject water sample. [20.6.4.808 NMAC - N, 3/2/2017]

20.6.4.809 CLOSED BASINS: Ephemeral watercourses within smelter tailing soils investigation unit lands at the Chino mines company, limited to Chino mines property subwatershed drainage A and tributaries thereof, Chino mines property subwatershed drainage B and tributaries thereof (excluding the northwest tributary containing Ash spring and the Chiricahua leopard frog critical habitat transect); Chino mines property subwatershed drainage C and tributaries thereof (excluding reaches containing Bolton spring, the Chiricahua leopard frog critical habitat transect and all reaches in subwatershed C that are upstream of the Chiricahua leopard frog critical habitat); subwatershed drainage D and tributaries thereof (drainages D-1, D-2 and D-3, excluding the southeast tributary in drainage D1 that contains Brown spring) and subwatershed drainage E and all tributaries thereof (drainages E-1, E-2 and E-3).

A. Designated uses: Limited aquatic life, livestock watering, wildlife habitat and secondary contact.

B. Criteria: The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses, except that the following segment-specific criteria apply: the acute aquatic life criteria for copper set forth in Subsection I of 20.6.4.900 NMAC shall be determined by multiplying that criteria by the water effect ratio ("WER") adjustment expressed by the following equation:

$$WER = \frac{[10^{0.588+(0.703 \times \log DOC)+(0.395 \times \log Alkalinity)}] \times (\frac{100}{Hardness})^{0.9422}}{19.31}$$

For purposes of this section, dissolved organic carbon (DOC) is expressed in units of milligrams carbon per liter or mg C/L; alkalinity is expressed in units of mg/L as $CaCO_3$, and hardness is expressed in units of mg/L as $CaCO_3$. In waters that contain alkalinity concentrations greater than 250 mg/L, a value of 250 mg/L shall be used in the equation. In waters that contain DOC concentrations greater than 16 mg C/L, a value of 16 mg C/L shall be used in the equation. In waters that contain hardness concentrations greater than 400 mg/L, a value of 400 mg/L shall be used in the equation. The alkalinity, hardness and DOC concentrations used to calculate the WER value are those measured in the subject water sample. [20.6.4.809 NMAC - N, 3/2/2017]

EPA Determination: *The EPA previously took no action on the amendments to 20.6.4.97.C. (6)(b)(ii)-(vi) NMAC, 20.6.4.808 and 809 NMAC– Closed Basins and Water Effects Ratios (WER) in its June 8, 2017, as described the supporting TSD. The proposed revisions were based on a 3rd party proposal developed by Freeport-McMoRan/Chino Mines Company ("Chino Mines") supported by a report entitled "Application of the Hydrology Protocol to Smelter Tailings Soils Investigation Unit (STSIU) Drainages" (Chino report). The NMED submitted the Chino Mines report to EPA Region 6 for review and technical approval as a UAA pursuant to 20.6.4.15. C. and D. NMAC to support designated use and associated criteria downgrades in five subwatersheds contained in the area that drains the STSIU.*

In the supporting TSD, the EPA stated that there was not adequate information to fully assess the downgraded use designations for the Chino STSIU waters at 20.6.4.97.C.(6)(b)(ii)-(vi) NMAC. Thus, the EPA determined that it was premature to evaluate the criteria to support those uses adopted by the Commission for regulatory segments 20.6.4.808 and 809 NMAC. The EPA outlined its concerns with the proposal in detail and described the additional information that is needed to supplement the Chino report's conclusions. In addition, the EPA recommended that the NMED provide a comparison between the WER and the results of a Biotic Ligand Model to facilitate EPA's review of the site-specific aquatic life criteria for copper. However, to date, the NMED has not addressed the concerns outlined in the EPA's TSD or provided a BLM to allow a determination if the WER specific to waters within 20.6.4.808 and 809 NMAC. The EPA did not approve the proposed revisions to 20.6.4.97.C. (6)(b)(ii)-(vi) NMAC, 20.6.4.808 and 809 NMAC. The EPA reiterates that these provisions are not effective for CWA purposes until approved by the EPA. See 40 CFR § 131.21(c).

20.6.4.900 Criteria Applicable to Existing or Attainable Uses

I. Hardness-dependent acute and chronic aquatic life criteria for metals

(3) Selected values of calculated acute and chronic criteria (µg/L).

(1) Acute aquatic life criteria for metals: The equation to calculate acute criteria in µg/L is $\exp(m_A[\ln(\text{hardness})] + b_A)$ (CF). Except for aluminum, the criteria are based on analysis of dissolved metal. For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that has a pH between 6.5 and 9.0 and is filtered to minimize mineral phases as specified by the department. [~~The EPA has disapproved the hardness-based equation for total recoverable aluminum in waters where the pH is less than 6.5 in the receiving stream for federal purposes of the Clean Water Act.~~] The equation parameters are as follows:

Metal	**m_A**	**b_A**	**Conversion factor (CF)**
Aluminum (Al)	1.3695	1.8308	
Cadmium (Cd)	[~~0.8968~~] 0.9789	[~~-3.5699~~] -3.866	1.136672-[(ln hardness)(0.041838)]
Chromium (Cr) III	0.8190	3.7256	0.316
Copper (Cu)	0.9422	-1.700	0.960

Lead (Pb)	1.273	-1.460	1.46203-[(ln hardness)(0.145712)]
Manganese (Mn	0.3331	6.4676	
Nickel (Ni)	0.8460	2.255	0.998
Silver (Ag)	1.72	-6.59	0.85
Zinc (Zn)	0.9094	0.9095	0.978

(2) Chronic aquatic life criteria for metals: The equation to calculate chronic criteria in µg/L is exp(m_C[ln(hardness)] + b_C)(CF**)**. Except for aluminum, the criteria are based on analysis of dissolved metal. For aluminum, the criteria are based on analysis of total recoverable aluminum in a sample that has a pH between 6.5 and 9.0 and is filtered to minimize mineral phases as specified by the department.[~~The EPA has disapproved the hardness-based equation for total recoverable aluminum in waters where the pH is less than 6.5 in the receiving stream for federal purposes of the Clean Water Act.~~] The equation parameters are as follows:

Metal	**m_C**	**b_C**	**Conversion factor (CF)**
Aluminum (Al)	1.3695	1.8308	
Cadmium (Cd)	[0.7647] 0.7977	[-4.2180] -3.909	1.101672-[(ln hardness)(0.041838)]
Chromium (Cr) III	0.8190	0.6848	0.860
Copper (Cu)	0.8545	-1.702	0.960
Lead (Pb)	1.273	-4.705	1.46203-[(ln hardness)(0.145712)]
Manganese (Mn	0.3331	5.8743	
Nickel (Ni)	0.8460	0.0584	0.997
Zinc (Zn)	0.9094	0.6235	0.986

EPA Determination: *In 2016, the EPA updated its recommendations for acute and chronic hardness-based aquatic life criteria for cadmium based on toxicological studies for protection of aquatic life. Consistent with 40 CFR §131.11, the NMED proposed, and the Commission adopted the updated hardness-based criteria for cadmium resulting in the revised factors found in table 20.6.4.900(J)(1) NMAC. The EPA's approval of aquatic life criteria for cadmium is subject to consultation pursuant to Section 7(a)(2) of the Endangered Species Act (ESA). The EPA is taking no action on the revised aquatic life criterion for cadmium and the corresponding revised factors in table 20.6.4.900(J)(1), pending the conclusion of ESA consultation. The criterion for cadmium is not effective for CWA purposes until approved by the EPA. See Section V for additional information regarding the completion of the ESA consultation.*

J. Use-specific numeric criteria.

(1) Table of numeric criteria: The following table sets forth then numeric criteria applicable to existing, designated and attainable uses. For metals, criteria represent the total sample fraction unless otherwise specified in the table. Additional criteria that are not compatible with this table are found in Subsections A through I, K and L of this section.

NOTE; This is not a compete table but only includes revisions to the use-specific criteria table for brevity:[13]

Pollutant	**CAS Number**	**DWS**	**Irr/Irr storage**	**LW**	**WH**	**Aquatic Life**			**Type**
						Acute	Chronic	HH-OO	
Chloride	1688-70-06					860,000	230,000		
Iron	7439-89-6						1,000		

[13] This table has been condensed from the original table in **J(1)** to include and highlight revisions to aquatic life criteria subject to ESA consultation. Full table can be found in ***Section II***.

Acrolein	107-02-8	18				3.0	3.0		
Carbaryl	63-25-2					2.1	2.1		
Chlorpyrifos	2921-88-2					0.083	0.041		
Demeton	8065-48-3						0.1		
Guthion	86-50-0						0.01		
Malathion	121-75-5						0.1		
Methoxychlor	72-43-5						0.03		
Mirex	2385-85-5						0.001		
Parathion	56-38-2					0.065	0.013		
Tributyltin (TBT)	Various					0.46	0.072		

EPA Determination: *The EPA's approval of aquatic life criteria for acrolein, cadmium, carbaryl, chloride, chlorpyrifos, demeton, iron, guthion, malathion, methoxychlor, mirex, parathion, and tributyltin are subject to consultation pursuant to Section 7(a)(2) of the ESA. The EPA is taking no action on these revised aquatic life criteria, pending the conclusion of ESA consultation. The criteria for acrolein, cadmium, carbaryl, chloride, chlorpyrifos, demeton, iron, guthion, malathion, methoxychlor, mirex, parathion, and tributyltin are not effective for CWA purposes until approved by the EPA. See Section V for additional information regarding the completion of the ESA consultation.*

K. The criteria for total ammonia consider sensitive freshwater mussel species in the family Unionidae, freshwater non-pulmonate snails, and *Oncorhynchus* spp. (a genus of fish in the family Salmonidae), hence further protecting the aquatic community. The total ammonia criteria magnitude is measured as Total Ammonia Nitrogen (TAN) mg/L. TAN is the sum of and TAN mg/L magnitude is derived as a function of pH and temperature (EPA 2013).

L. The acute aquatic life criteria for TAN (mg/L) was derived by the EPA (2013) as the one-hour average concentration of TAN mg/L that shall not be exceeded more than once every three years on average. The EPA acute criterion magnitude was derived using the following equation:

$$\text{Acute TAN Criterion Magnitude for 1-hour average} = \text{MIN}\left(\left(\frac{0.275}{1+10^{7.204-pH}}+\frac{39}{1+10^{pH-7.204}}\right),\left(0.7249\text{x}\left(\frac{0.0114}{1+10^{7.204-pH}}+\frac{1.6181}{1+10^{pH-7.204}}\right)\text{x}\left(23.12\times 10^{0.036(20-T)}\right)\right)\right)$$

T (temperature °C) and pH are defined as the paired values associated with the TAN sample

(1) Temperature and pH-dependent values of the acute TAN criterion magnitude – when *Oncorhynchus* spp. absent.

	Temperature (°C)																				
pH	0-10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	51	48	44	41	37	34	32	29	27	25	23	21	19	18	16	15	14	13	12	11	9.9
6.6	49	46	42	39	36	33	30	28	26	24	22	20	18	17	16	14	13	12	11	10	9.5
6.7	46	44	40	37	34	31	29	27	24	22	21	19	18	16	15	14	13	12	11	9.8	9
6.8	44	41	38	35	32	30	27	25	23	21	20	18	17	15	14	13	12	11	10	9.2	8.5
6.9	41	38	35	32	30	28	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9
7.0	38	35	33	30	28	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9	7.3
7.1	34	32	30	27	25	23	21	20	18	17	15	14	13	12	11	10	9.3	8.5	7.9	7.2	6.7

7.2	31	29	27	25	23	21	19	18	16	15	14	13	12	11	9.8	9.1	8.3	7.7	7.1	6.5	6
7.3	27	26	24	22	20	18	17	16	14	13	12	11	10	9.5	8.7	8	7.4	6.8	6.3	5.8	5.3
7.4	24	22	21	19	18	16	15	14	13	12	11	9.8	9	8.3	7.7	7	6.5	6	5.5	5.1	4.7
7.5	21	19	18	17	15	14	13	12	11	10	9.2	8.5	7.8	7.2	6.6	6.1	5.6	5.2	4.8	4.4	4
7.6	18	17	15	14	13	12	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5
7.7	15	14	13	12	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.2	2.9
7.8	13	12	11	10	9.3	8.5	7.9	7.2	6.7	6.1	5.6	5.2	4.8	4.4	4	3.7	3.4	3.2	2.9	2.7	2.5
7.9	11	9.9	9.1	8.4	7.7	7.1	6.6	3	5.6	5.1	4.7	4.3	4	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.1
8.0	8.8	8.2	7.6	7	6.4	5.9	5.4	5	4.6	4.2	3.9	3.6	3.3	3	2.8	2.6	2.4	2.2	2	1.9	1.7
8.1	7.2	6.8	6.3	5.8	5.3	4.9	4.5	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4
8.2	6	5.6	5.2	4.8	4.4	4	3.7	3.4	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2
8.3	4.9	4.6	4.3	3.9	3.6	3.3	3.1	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1	0.96
8.4	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79
8.5	3.3	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	0.98	0.9	0.83	0.77	0.71	0.65
8.6	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.5	1.3	1.2	1.1	1	0.96	0.88	0.81	0.75	0.69	0.63	0.58	0.54
8.7	2.3	2.2	2	1.8	1.7	1.6	1.4	1.3	1.2	1.1	1	0.94	0.87	0.8	0.74	0.68	0.62	0.57	0.53	0.49	0.45
8.8	1.9	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37
8.9	1.6	1.5	1.4	1.3	1.2	1.1	1	0.93	0.85	0.79	0.72	0.67	0.61	0.56	0.52	0.48	0.44	0.4	0.37	0.34	0.32
9.0	1.4	1.3	1.2	1.1	1	0.93	0.86	0.79	0.73	0.67	0.62	0.57	0.52	0.48	0.44	0.41	0.37	0.34	0.32	0.29	0.27

(2) Temperature and pH-dependent values for the acute TAN criterion magnitude-when *Oncorhynchus* spp. are present.

	Temperature (°C)																
pH	0-14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	33	33	32	29	27	25	23	21	19	18	16	15	14	12	12	11	9.9
6.6	31	31	30	28	26	24	22	20	18	17	16	14	13	12	11	10	9.5
6.7	30	30	29	27	24	22	21	19	18	16	15	14	13	12	11	9.8	9
6.8	28	28	27	25	23	21	20	18	17	15	14	13	12	11	10	9.2	8.5
6.9	26	26	25	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	7.9
7.0	24	24	23	21	20	18	17	15	14	13	12	11	10	9.4	8.6	8	7.3
7.1	22	22	21	20	18	17	15	14	13	12	11	10	9.3	8.5	7.9	7.2	6.7
7.2	20	20	19	18	16	15	14	13	12	11	9.8	9.1	8.3	7.7	7.1	6.5	6
7.3	18	18	17	16	14	13	12	11	10	9.5	8.7	8	7.4	6.8	6.3	5.8	5.3
7.4	15	15	15	14	13	12	11	9.8	9	8.3	7.7	7	6.5	6	5.5	5.1	4.7
7.5	13	13	13	12	11	10	9.2	8.5	7.8	7.2	6.6	6.1	5.6	5.2	4.8	4.4	4
7.6	11	11	11	10	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5
7.7	9.6	9.6	9.3	8.6	7.9	7.3	6.7	6.2	5.7	5.2	4.8	4.4	4.1	3.8	3.5	3.2	3
7.8	8.1	8.1	7.9	7.2	6.7	6.1	5.6	5.2	4.8	4.4	4	3.7	3.4	3.2	2.9	2.7	2.5
7.9	6.8	6.8	6.6	6	5.6	5.1	4.7	4.3	4	3.7	3.4	3.1	2.9	2.6	2.4	2.2	2.1
8.0	5.6	5.6	5.4	5	4.6	4.2	3.9	3.6	3.3	3	2.8	2.6	2.4	2.2	2	1.9	1.7
8.1	4.6	4.6	4.5	4.1	3.8	3.5	3.2	3	2.7	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4
8.2	3.8	3.8	3.7	3.5	3.1	2.9	2.7	2.4	2.3	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2
8.3	3.1	3.1	3.1	2.8	2.6	2.4	2.2	2	1.9	1.7	1.6	1.4	1.3	1.2	1.1	1	1

8.4	2.6	2.6	2.5	2.3	2.1	2	1.8	1.7	1.5	1.4	1.3	1.2	1.1	1	0.9	0.9	0.8
8.5	2.1	2.1	2.1	1.9	1.8	1.6	1.5	1.4	1.3	1.2	1.1	1	0.9	0.8	0.8	0.7	0.7
8.6	1.8	1.8	1.7	1.6	1.5	1.3	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.6	0.6	0.5
8.7	1.5	1.5	1.4	1.3	1.2	1.1	1	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.5
8.8	1.2	1.2	1.2	1.1	1	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4
8.9	1	1	1	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3
9.0	0.88	0.9	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3

M. The chronic aquatic life criteria for TAN (mg/L) was derived by the EPA (2013) as a thirty-day rolling average concentration of TAN mg/L that shall not be exceeded more than once every three years on average. In addition, the highest four-day average within the 30-day averaging period should not be more than 2.5 times the CCC (e.g., 2.5 x 1.9 mg TAN/L at pH 7 and 20°C, or 4.8 mg TAN/L) more than once in three years on average. The EPA chronic criterion magnitude was derived using the following equation:

Chronic TAN Criterion Magnitude for 30-day average=

$$0.8876 \times \left(\frac{0.0278}{1+10^{7.688-pH}} + \frac{1.1994}{1+10^{pH-7.688}}\right) \times \left(2.126 \times 10^{0.028\times(20-MAX(T,7))}\right)$$

'T' (temperature °C) and pH are defined as the paired values associated with the 'TAN sample.

Temperature and pH-Dependent Values of the Chronic TAN Criterion Magnitude.

	Temperature (°C)																							
pH	0-7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
6.5	4.9	4.6	4.3	4.1	3.8	3.6	3.3	3.1	2.9	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.6	1.5	1.5	1.4	1.3	1.2	1.1
6.6	4.8	4.5	4.3	4	3.8	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1
6.7	4.8	4.5	4.2	3.9	3.7	3.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1
6.8	4.6	4.4	4.1	3.8	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1
6.9	4.5	4.2	4	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1
7.0	4.4	4.1	3.8	3.6	3.4	3.2	3	2.8	2.6	2.4	2.3	2.2	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1
7.1	4.2	3.9	3.7	3.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	1
7.2	4	3.7	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	1	0.9
7.3	3.8	3.5	3.3	3.1	2.9	2.7	2.6	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	1	0.9	0.9
7.4	3.5	3.3	3.1	2.9	2.7	2.5	2.4	2.2	2.1	2	1.8	1.7	1.6	1.5	1.4	1.3	1.3	1.2	1.1	1	1	0.9	0.9	0.8
7.5	3.2	3	2.8	2.7	2.5	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7
7.6	2.9	2.8	2.6	2.4	2.3	2.1	2	1.9	1.8	1.6	1.5	1.4	1.4	1.3	1.2	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7
7.7	2.6	2.4	2.3	2.2	2	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6
7.8	2.3	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5
7.9	2.1	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5
8.0	1.8	1.7	1.6	1.5	1.4	1.3	1.2	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.4	0.4
8.1	1.5	1.5	1.4	1.3	1.2	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4
8.2	1.3	1.2	1.2	1.1	1	1	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3
8.3	1.1	1.1	1	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
8.4	1	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2
8.5	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
8.6	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8.7	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1

8.8	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1
8.9	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9.0	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

[20.6.4.900 NMAC - Rp 20 NMAC 6.1.3100, 10/12/2010; A, 10/11/2002; A, 5/23/2005; A, 7/17/2005; A, 12/1/2010; A, 3/2/2017; A, 4/23/2022]

EPA Determination:

As part of its 2020 triennial review, the NMED proposed, and the Commission adopted the EPA's updated § 304(a) recommended acute and chronic aquatic life criteria for Total Ammonia Nitrogen (TAN). The associated revisions to 20.6.4.900(K), (L) and (M) NMAC, including the equations, temperature and pH-dependent values in the associated tables are all consistent with the values in EPA's current nationally recommended freshwater ammonia criteria. However, the EPA acknowledges that the value of 3.0 for pH 7.9 and 17°C in (L)(1), should be 6.0 when the equation for the Acute TAN Criterion Magnitude for 1-hour average is applied. This is a typographical error that is also present in EPA's Ammonia 2013 aquatic life criteria document and the EPA cautions NMED to beware of the difference in the criteria and correct in their next revision. Since the acute criterion equation is correct, this typographical error is nonsubstantive. These revisions are consistent with the EPA's recommended § 304(a) criteria and with language in 40 CFR §131.20(a). However, the EPA approval of aquatic life criteria is subject to consultation pursuant to Section 7(a)(2) of the ESA. The EPA is taking no action on the revised ammonia aquatic life criteria and narrative in 20.6.4.900(K), (L) and (M) NMAC and these provisions are not effective for CWA purposes until approved by the EPA. See Section V for additional information regarding the completion of the ESA consultation.

IV. Provisions the EPA Is Disapproving

[RESERVED]

V. Additional Considerations

Endangered Species Act Consultation

The EPA's approval of revised WQS and associated aquatic life criteria are subject to the consultation requirement of Section 7(a)(2) of the Endangered Species Act[14] (ESA). Under Section 7(a)(2) of the ESA, the EPA has the obligation to ensure that its approval of modifications to the *New Mexico Standards for Interstate and Intrastate Waters* (20.6.4 NMAC) will not jeopardize the continued existence of threatened and endangered species and critical habitat in New Mexico.

[14] Endangered Species Act, 16 U.S.C. §1536

The EPA's current practice is to consult with the Service(s) where the EPA determines that approval of a new or revised WQS may affect federally listed species. The revisions to 20.6.4.900 (I), (J), (K), (L) and (M) NMAC being considered in today's action are subject to ESA consultation. Specifically, the EPA determined that its approval of acrolein, ammonia, cadmium, carbaryl, demeton, guthion, methoxychlor, mirex, parathion, and tributyltin criteria is subject to ESA consultation. The EPA has initiated informal consultation with the New Mexico Ecological Services Field Office (ESFO) for the approval of acrolein, ammonia, cadmium, carbaryl, demeton, guthion, methoxychlor, mirex, parathion, and tributyltin criteria and is currently reviewing comments. Once comments are fully addressed, the EPA will request written concurrence from the ESFO. The EPA anticipates formal consultation will be needed for the approval of revised iron and chloride aquatic life criteria in 20.6.4.900 (J), based on the EPA's preliminary Likely to Adversely Affect determination for some threatened and endangered aquatic dependent species residing in New Mexico.