



2026 TRIENNIAL REVIEW

Draft Amendments to Water Quality Standards
Public Review Draft - 20.6.4 NMAC

Public Comment Period: August 15 – October 14, 2025

The New Mexico Environment Department is holding a 60-day public comment period on this document. Please see the preamble for information on submitting comments.

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Preamble

The federal Clean Water Act (CWA) requires states to review Water Quality Standards (WQS) every three years, commonly known as the Triennial Review. This public review draft of 20.6.4 NMAC contains draft amendments to New Mexico's Surface WQS and initiates the 2026 Triennial Review process. The Department based these draft amendments on past Triennial Review results, CWA requirements, and monitoring and assessment information. During the Triennial Review, the CWA requires states to consider adopting the U.S. Environmental Protection Agency's (EPA) recommended CWA Section 304(a) Criteria and review segments lacking CWA Section 101(a)(2) uses (i.e., swimmable/fishable) to see if any new data would support including these uses. The Department includes a "Basis for Change" following each draft amendment to provide a rationale or citations to supporting information.

Deleted materials are indicated by strikethrough, and new text are indicated by underline. Only the portions of the rule (sections, subsections, paragraphs, etc.) with draft amendments are provided below, unless needed for context and clarity of scope. In addition to these draft amendments, the department will accept comments on any Section of 20.6.4 NMAC.

Comments may be submitted via email at michael.bacal@env.nm.gov or the Department's public comment portal (<https://nmed.commentinput.com/comment/search>) through October 14, 2025. More information about the Triennial Review process, including the entire WQCC and EPA approved versions of 20.6.4 NMAC may be found at <https://www.env.nm.gov/surface-water-quality/wqs/>.

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 hydrologically based critical low flow as determined by the minimum average flow over four consecutive days that occurs with a frequency of once in three years.

BASIS FOR CHANGE: NMED proposes this amendment to clarify that the calculation utilized in New Mexico is hydrologically based. This definition was previously approved at 20.6.4.11 NMAC. However, EPA Region 6 did not approve this definition when it was moved to 20.6.4.7 NMAC during New Mexico’s 2020 Triennial Review.

20.6.4.7.A(2) through 20.6.4.7.P(6) NMAC – No changes proposed.

P. Terms beginning with the letter “P”.

(7) **“Public water supply”** means the use or storage of water to supply a public water system as defined by ~~New Mexico’s Drinking Water Regulations, 20.7.10 NMAC 40 CFR 141~~. Water provided by a public water system ~~may need to~~ shall undergo treatment to ~~achieve comply with~~ drinking water ~~quality standards~~.

BASIS FOR CHANGE: NMED’s Drinking Water Regulations at 20.7.10 NMAC, incorporate by reference the National Primary Drinking Water Regulations codified at 40 CFR Part 141. The definition for “public water system” is contained in the federal regulations and not in the NMAC as indicated in the existing language. NMED proposes an amendment to cite the federal regulation containing the definition.

The Drinking Water Regulations require disinfection, at a minimum, and filtration for most public water systems that use surface water sources or ground water sources under direct influence of surface water (See 40 CFR Part 141, Subpart H). Source water with low turbidity (< 5 NTU) and coliform concentrations (fecal < 20/100 ml and total <100/100ml) over the past six months are eligible for an exemption from filtration. NMED proposes changing “may” to “shall”. While surface waters may appear clean, they can carry harmful contaminants and micro-organisms that can cause illnesses and must be treated prior to drinking. NMED proposes to amend language to indicate compliance with drinking water standards and treatment requirements.

20.6.4.7.Q through 20.6.4.7.S NMAC – No changes proposed.

T. Terms beginning with the letter “T”.

(1) **“TDS”** means total dissolved solids, also termed “total filterable residue.”

(2) **“Temporary standard”** means a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the temporary standard.

(23) **“Toxic pollutant”** means those pollutants, or combination of pollutants, including disease-causing agents, that after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, shortened life spans, disease, adverse behavioral changes, reproductive or physiological impairment or physical deformations in such organisms or their offspring.

(34) **“Tributary”** means a perennial, intermittent or ephemeral waterbody that flows into a larger waterbody, and includes a tributary of a tributary.

(45) **“Turbidity”** is an expression of the optical property in water that causes incident light to be scattered or absorbed rather than transmitted in straight lines.

BASIS FOR CHANGE: NMED proposes to move the definition of “temporary standard” from 20.6.4.10.H(12) to 20.6.4.7.T(1) NMAC, to conform to State Records Center and Archives (SRCA) formatting guidelines.

20.6.4.7.U through 20.6.4.7.W(3) NMAC – No changes proposed.

W. Terms beginning with the letter “W”.

(4) **“Wetlands”** means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, ~~a prevalence of~~ vegetation, typically adapted for life in saturated soil conditions in New Mexico. Wetlands are unique surface waters of the state that vary widely because of regional and local differences in soils, topography, climate, hydrology, water chemistry, vegetation and other factors and provide distinct chemical, biological, physical, and hydrological functions within a watershed. Wetlands that are constructed outside of a surface water of the state for the purpose of providing wastewater treatment and that do not impound a surface water of the state are not included in this definition.

BASIS OF CHANGE: NMED proposes to clarify the definition of wetlands. Wetlands provide a variety of important functions, and vary regionally and locally due to their soils, topography, climate, hydrology, water chemistry, vegetation, and other factors. Recognizing these characteristics and functions will help protect and maintain these features through the implementation of Clean Water Act (CWA) and New Mexico surface water quality programs such as CWA Section 303(d)/305(b) Reporting and water quality condition assessments, evaluating antidegradation provisions and appropriate mitigation ratios, and developing permit conditions for surface water discharges, including point source and dredge and fill discharges.

20.6.4.7.W(5) through 20.6.4.7.Z NMAC – No changes proposed.

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 uses, as defined in Paragraph (4) of Subsection E of 20.6.4.7 NMAC, and the level of water quality or wetland condition necessary to protect the existing uses shall be maintained and protected in all surface waters of the state. Wetland condition is a measure of ecological integrity and, by inference, wetland quality (i.e., functions) and quantity (i.e., acreage).

(2) Where wetland condition or the quality of a surface water of the state exceeds levels necessary to support the propagation of fish, shellfish, and wildlife, and recreation in and on the water, that quality shall be maintained and protected unless the commission finds, after full satisfaction of the intergovernmental coordination and public participation provisions of the state’s continuing planning process, that allowing lower water quality or wetland condition, including loss of wetland acreage or wetland functions, is necessary to accommodate important economic and social development in the area in which the water is located. In allowing such degradation or lower water quality, the state shall assure water quality adequate to protect existing uses fully. Further, the state shall assure that there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and all cost-effective and reasonable BMPs for nonpoint source control. Additionally, the state shall encourage the use of watershed planning as a further means to protect surface waters of the state.

(3) No degradation, including loss of wetland acreage or wetland functions, shall be allowed in waters designated by the commission as outstanding national resource waters (ONRWs), except as provided in Subparagraphs (a) through (e) of this paragraph and in Paragraph (4) of this Subsection A.

BASIS FOR CHANGE: As stated in the Objective of this Part, water quality standards consist of designated uses, criteria to support those uses, and an antidegradation policy, which collectively are used to protect and enhance surface water quality. NMED proposes new antidegradation language to incorporate wetlands antidegradation provisions. NMED equates loss of wetland

condition (i.e., acreage or functions) to degradation and proposes language consistent with each Tier to provide wetland protections under New Mexico's antidegradation policy.

20.6.4.8.A(3)(a) through 20.6.4.9 NMAC – No changes proposed.

20.6.4.10 REVIEW OF STANDARDS; NEED FOR ADDITIONAL STUDIES:

20.6.4.10.A through 20.6.4.10.E NMAC – No changes proposed.

F. If the commission grants a rulemaking hearing for the amendment or adoption of a water quality standard, including ONRW nominations, site-specific criteria, use attainability analyses, and designating classified segments, the petitioner shall be responsible for the costs of the administrative rulemaking process. Costs include: venue, hearing officer, court reporter, original transcripts, translation services, interpretation services, and public notice requirements including publication in newspapers and in the New Mexico register. The petitioner shall coordinate with the commission administrator and the department on rulemaking hearing requirements.

BASIS FOR CHANGE: The Water Quality Control Commission (WQCC) historically depended on NMED, as the petitioner, to carry out administrative functions and pay the costs of a rulemaking. And, as petitioner, NMED fulfilled these responsibilities and costs to further the Department's proposed amendments. However, with more interest in water quality regulations and external parties proposing various standards amendments, NMED cannot predict when external rulemaking petitions will be filed and therefore cannot cover the hearing costs or administrative functions for these petitions. NMED cannot plan for unknown proposals in their grant workplans or request funding in their operating budget for unknown proposals, especially if the Department does not know if it will actually need the funding or if a non-NMED petitioner will complete the workplan deliverable as required. NMED proposes to clarify that the financial responsibility for the costs of the administrative rulemaking process lies with the petitioner, whether that be NMED, another state agency, or an external party. Additional costs for the development of a rulemaking petition may include technical experts, scientific reports, and additional stakeholder and public outreach, depending on public interest.

FG. Site-specific criteria.

(1) The commission may adopt site-specific numeric criteria applicable to all or part of a surface water of the state based on relevant site-specific conditions such as:

(a) actual species at a site are more or less sensitive than those used in the national criteria data set;

(b) physical or chemical characteristics at a site such as pH or hardness alter the biological availability and/or toxicity of the chemical;

(c) physical, biological or chemical factors alter the bioaccumulation potential of a chemical;

(d) the concentration resulting from natural background exceeds numeric criteria for aquatic life, wildlife habitat or other uses if consistent with Subsection G of 20.6.4.10 NMAC; or

(e) other factors or combination of factors that upon review of the commission may warrant modification of the default criteria, subject to EPA review and approval.

(2) Site-specific criteria must fully protect the designated use to which they apply. In the case of human health-organism only criteria, site-specific criteria must fully protect human health when organisms are consumed from waters containing pollutants.

(3) Any person may submit notice to the department stating their intent to derive site-specific criteria for a surface water of the state. The notice shall include a work plan supporting the development of site-specific criteria for the department's review and comment.

(4) Site-specific criteria shall be developed in accordance with the reviewed work plan, based on one or more of the site-specific conditions noted in paragraph 1, derived from a scientifically defensible method and protect the designated uses to which they apply.

(5) The work plan shall identify, at a minimum:

- (a) the waterbody to consider and the reasoning for site-specific criteria;
- (b) the methodology to be used to derive criteria;
- (c) the source and validity of data to be used;
- (d) the provisions for consultation with appropriate state and federal agencies;
- (e) a description of how stakeholders and potentially affected Indian nations, tribes, or pueblos will be identified and engaged;
- (f) a description of the public notice mechanisms to be employed; and
- (g) the expected timelines and associated administrative actions to be taken for a rulemaking petition, pending the outcome of criteria development.

(6) Upon completion of site-specific criteria development, the data, findings and conclusions shall be submitted to the department, and public notice shall be provided in accordance with the approved work plan.

~~(37)~~ Any person may petition the commission to adopt site-specific criteria. A petition for the adoption of site-specific criteria shall:

- (a) identify the specific waters to which the site-specific criteria would apply;
- (b) explain the rationale for proposing the site-specific criteria;
- (c) describe the methods used to notify and solicit input from potential stakeholders and from the general public in the affected area, and present and respond to the public input received;
- (d) present and justify the derivation of the proposed criteria.

~~(48)~~ A derivation of site-specific criteria shall rely on a scientifically defensible method, such as one of the following:

- (a) the recalculation procedure, the water-effect ratio for metals procedure or the resident species procedure as described in the water quality standards handbook (EPA-823-B-94-005a, 2nd edition, August 1994);
- (b) the streamlined water-effect ratio procedure for discharges of copper (EPA-822-R-01-005, March 2001);
- (c) the biotic ligand model as described in aquatic life ambient freshwater quality criteria - copper (EPA-822-R-07-001, February 2007);
- (d) the methodology for deriving ambient water quality criteria for the protection of human health (EPA-822-B-00-004, October 2000) and associated technical support documents; or
- (e) a determination of the natural background of the water body as described in Subsection G of 20.6.4.10 NMAC.

BASIS FOR CHANGES: NMED proposes including work plan requirements for entities outside of the department for deriving site-specific criteria. A work plan will improve communication between outside agencies, regulated community, stakeholders, and the department. The work plan should clearly outline expectations and responsibilities for deriving criteria. Additionally, work plans are already required for conducting a Use Attainability Analysis by an entity other than NMED and this will bring more uniformity to the process of water quality standards amendments.

~~GH.~~ Site-specific criteria based on natural background. The commission may adopt site-specific criteria equal to the concentration resulting from natural background where that concentration protects the designated use. The concentration resulting from natural background supports the level of aquatic life and wildlife habitat expected to occur naturally at the site absent any interference by humans. Domestic water supply, primary or secondary contact, or human health-organism only criteria shall not be modified based on natural background. A determination of natural background shall:

- (1) consider natural spatial and seasonal to interannual variability as appropriate;
- (2) document the presence of natural sources of the pollutant;

- (3) document the absence of human sources of the pollutant or quantify the human contribution; and
- (4) rely on analytical, statistical or modeling methodologies to quantify the natural background.

BASIS FOR CHANGE: NMED proposes to renumber the subsection as the result of the proposed subsection at 20.6.4.10.F NMAC.

~~HJ. Temporary standards.
(12) “Temporary standard” means a time limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the temporary standard.~~

BASIS FOR CHANGE: NMED proposes to renumber the subsection as the result of the proposed subsection at 20.6.4.10.F NMAC. Additionally, NMED proposes to move the definition of “temporary standard” from 20.6.4.10.H(12) to 20.6.4.7.T(1) NMAC to conform to SRCA formatting guidelines.

20.6.4.11 APPLICABILITY OF WATER QUALITY STANDARDS:

20.6.4.11.A through 20.6.4.11.F NMAC – No changes proposed.

G. Human health-organism only criteria in Subsection J of 20.6.4.900 NMAC apply to those waters with a designated, existing or attainable aquatic life use. When limited aquatic life is a designated use, the human health-organism only criteria apply only for persistent toxic pollutants, if unless adopted on a segment-specific basis. The human health-organism only criteria for persistent toxic pollutants, as identified in Subsection J of 20.6.4.900 NMAC, also apply to all tributaries of waters with a designated, existing or attainable aquatic life use.

BASIS FOR CHANGE: NMED proposes this amendment to remain consistent with the Limited Aquatic Life Designated Use language in 20.6.4.900(H)(7) NMAC.

20.6.4.11.H through 20.6.4.11.I NMAC – No changes proposed.

20.6.4.12 COMPLIANCE WITH WATER QUALITY STANDARDS: The following provisions apply to determining compliance for enforcement purposes; they do not apply for purposes of determining attainment of uses. The department has developed assessment protocols for the purpose of determining attainment of uses that are available for review from the department’s surface water quality bureau.

20.6.4.12.A through 20.6.4.12.E NMAC – No changes proposed.

F. For compliance with ~~hardness-dependent calculated~~ numeric criteria, that depend on water chemistry, hardness (as mg CaCO₃/L) all input parameters shall be determined from a sample taken at the same time that the sample for the contaminant is taken. If not all the input data are available to calculate a criterion, default input values may be used if justified and supported by ecoregional or other watershed data.

BASIS FOR CHANGE: NMED proposes amendments to acknowledge that New Mexico’s water quality standards at 20.6.4.900.I NMAC contains numeric criteria calculations that are dependent on more than concurrent hardness as input values. NMED also proposes adding a statement regarding default input values when collection of concurrent data is not feasible and default values are justified and supported.

20.6.4.12.G through 20.6.4.12.H NMAC – No changes proposed.

20.6.4.13 GENERAL CRITERIA: General criteria are established to sustain and protect existing or attainable uses of surface waters of the state. These general criteria apply to all surface waters of the state at all times, unless a specified criterion is provided elsewhere in this part. Surface waters of the state shall be free of any water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or unreasonably interfere with the public welfare or the use of property.

20.6.4.13.A through 20.6.4.13.M NMAC – No changes proposed.

N. Wetlands: Only wetlands of the state are subject to this general criterion. Wetlands shall be maintained and protected such that degradation through direct, indirect, or cumulative impacts does not result in the net loss of wetland acreage or biological, chemical, physical, and hydrological functions to the extent that such functions occur, as characterized by state-specific benchmarks. The functions of a wetland that are to be maintained and protected may include:

- (1) erosion control through bank and shoreline stabilization;
- (2) flood attenuation and flood protection;
- (3) sediment and pollutant retention, which prevents or mitigates downstream migration;
- (4) groundwater recharge and water storage for future use;
- (5) low flow augmentation including baseflow maintenance;
- (6) water filtration including removal or storage of nutrients and other contaminants;
- (7) propagation or maintenance of aquatic and terrestrial species indigenous to wetlands;
- (8) preservation of wildlife habitat including habitat for threatened or endangered species; or
- (9) supporting biological diversity.

In addition, wetlands shall be suitable for recreation, wildlife habitat, and use by aquatic life and livestock.

BASIS FOR CHANGE: The above section was added to provide explicit water quality protections for New Mexico's wetlands. Wetlands are unique surface waters that provide important environmental, economic, and social benefits, such as water purification, flood control, groundwater recharge, climate change mitigation, recreation and tourism, infrastructure protection, and crucial habitat for fish, birds, mammals, and other wildlife. These benefits are the result of the unique characteristics of wetlands; however, New Mexico has lost over 50% of its wetlands. Wetlands of New Mexico remain ecologically and economically important. Providing explicit regulatory language to maintain and protect wetland condition is vital for keeping our remaining wetlands healthy and functioning for the benefit of all New Mexicans.

20.6.4.14 SAMPLING AND ANALYSIS:

20.6.4.14.A through 20.6.4.14.B NMAC – No changes proposed.

C. Sampling Procedures:

- (1) Streams: Stream monitoring stations below discharges shall be located a sufficient distance downstream to ensure adequate vertical and lateral mixing.
- (2) Lakes: Sampling stations in lakes shall be located at least 250 feet from a discharge.
- (3) Lakes: Except for the restriction specified in Paragraph (2) of this subsection, lake sampling stations shall be located at any site where the attainment of a water quality criterion is to be assessed. ~~Water quality measurements taken at intervals in the entire water column at a sampling station shall be averaged for the epilimnion, or in the absence of an epilimnion, for the upper one-third of the water column of the lake to determine attainment of criteria, except that attainment of criteria for toxic pollutants shall be assessed during periods of complete vertical mixing, e.g., during spring or fall turnover, or by taking depth-integrated composite samples of the water column.~~

BASIS FOR CHANGE: NMED proposes striking the above section because it is more appropriate to provide this level of detail in Standard Operating Procedures (SOPs) available at:

<https://www.env.nm.gov/surface-water-quality/sop/>. Specifically, this detailed sampling information should and does reside in “SOP 12.1 Lake Sampling,” which is reviewed and updated every two years by the NMED SWQB staff with lake sampling and fisheries expertise. Removing this sampling detail from 20.6.4 NMAC to the SOPs provides flexibility to ensure NMED’s lake monitoring techniques are aligned with current lake monitoring state of knowledge and best practices, based in part on resident fish species in the specific lake or reservoir being sampled when fisheries data are available.

20.6.4.14.D through 20.6.4.14.F NMAC – No changes proposed.

20.6.4.15 USE ATTAINABILITY ANALYSIS:

20.6.4.15.A NMAC – No changes proposed.

B. Methods for developing a use attainability analysis. 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)~~ the United States environmental protection agency’s water quality standards handbook and use attainability analysis website for current recommendations and case studies;

~~(2)~~ *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;

~~(3)~~ the department’s *Hydrology Protocol*, latest edition, approved by the commission, for identifying ephemeral, intermittent, and perennial waters; or

~~(4)~~ *Interim Economic Guidance For Water Quality Standards - Workbook*, March 1995, in conjunction with *Clean Water Act Financial Capability Assessment Guidance, March 2024*, United States environmental protection agency, office of water, Washington, D.C. for evaluating economic impacts.

BASIS FOR CHANGE: NMED proposes to add a reference to EPA’s WQS Handbook and Use Attainability Analysis website that was updated in 2025. The WQS Handbook provides information on Designated Uses. The website contains information on how to conduct a UAA and provides EPA’s collection of guidance documents on the topic in one area.

NMED proposes to include the updated March 2024 version of the CWA Financial Capability Assessment Guidance that was originally published by EPA in February of 2023. This guidance supplements the existing 1995 Interim Economic Guidance for WQS: Workbook and provides a framework for WQS decisions with economic considerations, like UAAs and Temporary Standards.

20.6.4.15.C NMAC – No changes proposed.

D. Process to amend a designated use through a use attainability analysis.

(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*.

(2) If the findings of a use attainability analysis, conducted by the department, in accordance with the department’s *Hydrology Protocol* (latest edition) demonstrates 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 posted the use attainability analysis on its water quality standards website and notified its interested parties list of a 30-day public comment period;

(f) The department reviewed and responded to any comments received during the 30-day public comment period ; and

(g) The department submitted the use attainability analysis and response to comments to ~~region 6~~ EPA for technical ~~approval~~review.

(3) If EPA approves the designated use revision(s) under section 303(c) of the Clean Water Act, 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, 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.

BASIS FOR CHANGE: NMED proposes to remove reference to region 6 of EPA as this level of specificity is not required and does not enhance the practical application of the rule. NMED proposes to change approval to review in paragraph (2)(g). This proposal is based on EPA's recommendation in their Triennial Review Letter submitted to the department on January 19, 2023. This amended language clarifies that EPA will not provide technical approval of a Use Attainability Analysis before the Water Quality Control Commission approves and adopts standards into the NMAC.

NMED proposes to include a new paragraph (3) to conform to NMAC style and formatting guidelines. Include the term designated use and pluralize revision to clarify the element of the Water Quality Standards being amended.

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 notice~~ shall ~~provide such notice along with~~include a work plan supporting the development of a use attainability analysis ~~to for~~ the department's ~~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 shall be conducted in accordance with the applicable portions of Subsections A through D of this Section and ~~implement~~ public ~~noticing~~notice provided 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 source and validity of data to be used to demonstrate whether the current designated use is not attainable;

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

(d) a description of the data being proposed to be used to demonstrate the highest attainable use;

(e) 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

(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 completion of the use attainability analysis, ~~the proponent shall submit~~ the data, findings and conclusions ~~shall be submitted~~ to the department, and ~~provide~~ public notice of the use attainability analysis provided in accordance with the approved work plan.

(5) Pending the conclusions of the use attainability analysis and as described in the approved work plan, ~~the department or the proponent~~ person conducting the use attainability analysis may petition the commission to modify the designated use. ~~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.~~

BASIS FOR CHANGE: NMED proposes to remove the term “proponent” from the regulations as it is undefined and may cause confusion in the development of water quality petitions and the administrative rulemaking process. Additionally, all references to the costs of the administrative rulemaking process have been consolidated in 20.6.4.10(F) NMAC.

20.6.4.16 through 20.6.4.97 NMAC – No changes proposed.

20.6.4.98 INTERMITTENT WATERS: All non-perennial surface waters of the state, except those ephemeral waters included under section 20.6.4.97 NMAC, ~~or~~ classified in 20.6.4.101-899 NMAC, or wetlands protected under 20.6.4.13 NMAC.

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

BASIS FOR CHANGE: NMED proposes adding clarification that wetlands are protected under proposed subsection N in 20.6.4.13 NMAC.

20.6.4.99 PERENNIAL WATERS: All perennial surface waters of the state except those classified in 20.6.4.101-899 NMAC, or wetlands protected under 20.6.4.13 NMAC.

A. Designated uses: Warmwater 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.

BASIS FOR CHANGE: NMED proposes adding clarification that wetlands are protected under proposed subsection N in 20.6.4.13 NMAC.

20.6.4.100 through 20.6.4.134 NMAC – No changes proposed.

20.6.4.135 RIO GRANDE BASIN: Bluewater lake and Santa Cruz lake.

A. Designated uses: coldwater aquatic life, irrigation, domestic water supply, primary contact, 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 except that the following segment-specific criteria apply: phosphorus (unfiltered sample) 0.1 mg/L or less for Bluewater lake; the monthly geometric mean of *E. coli* bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

BASIS FOR CHANGE: NMED proposes to add Santa Cruz Lake to 20.6.4.135 NMAC based on available temperature, fisheries, and other water quality data; air-water temperature modeling performed during development of the 2024 approved temperature TMDL; and elevation and ecoregion data.

20.6.4.136 through 20.6.4.205 NMAC – No changes proposed.

20.6.4.206 PECOS RIVER BASIN: Perennial reaches of the Rio Felix ~~and perennial reaches of tributaries to the Rio Hondo downstream of Bonney canyon, excluding North Spring river.~~

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.

BASIS FOR CHANGE: NMED reviewed available 2021-2022 E. coli and pH data and determined a recreational use change from Secondary Contact to Primary Contact for Berrendo Creek, the only other perennial tributary to the Rio Hondo downstream of Bonney canyon, is warranted. Therefore, “perennial reaches of its tributaries” to the Rio Hondo downstream of Bonney canyon was added to 20.6.4.231 NMAC to assign Primary Contact to both perennial tributaries. No E. coli and pH data were available for perennial reaches of the Rio Felix.

20.6.4.207 NMAC – No changes proposed.

20.6.4.208 PECOS RIVER BASIN: Perennial reaches of the Rio Peñasco above ~~state highway 24 near DunkenBear Canyon~~, perennial reaches of tributaries to the Rio Peñasco above ~~state highway 24 near DunkenBear Canyon~~, perennial reaches of Cox canyon, perennial reaches of the Rio Bonito downstream from ~~state highway 48 (near Angus canyon)~~, the Rio Ruidoso downstream of ~~the U.S. highway 70 bridge~~Palo Verde canyon 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.

BASIS FOR CHANGE: NMED proposes changing segment breaks from “state highway 24 near Dunken” to “Bear Canyon,” from “state highway 48 (near Angus Canyon)” to “Angus Canyon,” and from “U.S. highway 70 bridge” to “Palo Verde Canyon” because water quality segment breaks should be described by hydrologic features rather than road crossings wherever possible.

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 canyon)~~ excluding Bonito lake, perennial reaches of tributaries to the Rio Bonito upstream of ~~state highway 48 (near Angus canyon)~~, perennial reaches of the Rio Ruidoso upstream of ~~the U.S. highway 70 bridge~~Palo Verde canyon near Seeping Springs lakes above and below the Mescalero Apache boundary and perennial reaches of tributaries to the Rio Ruidoso upstream of ~~the U.S. highway 70 bridge~~Palo Verde canyon 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.

BASIS FOR CHANGE: NMED proposes changing segment breaks from “state highway 24 near Dunken” to “Bear Canyon,” from “state highway 48 (near Angus Canyon)” to “Angus Canyon,” and from “U.S. highway 70 bridge” to “Palo Verde Canyon” because water quality segment breaks should be described by hydrologic features rather than road crossings wherever possible.

20.6.4.210 through 20.6.4.212 NMAC – No changes proposed.

20.6.4.213 PECOS RIVER BASIN: McAllister lake.

A. **Designated uses:** coldwater aquatic life, ~~secondary primary~~ contact, 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, except that the following segment-specific criterion applies: temperature 25°C (77°F) or less.

BASIS FOR CHANGE: NMED reviewed available 2001 E. coli and pH data and determined a recreational use change from Secondary Contact to Primary Contact is warranted. There is also regular recreation and public access at this lake.

20.6.4.214 through 20.6.4.218 NMAC – No changes proposed.

20.6.4.219 PECOS RIVER BASIN: Avalon reservoir.

A. **Designated uses:** irrigation storage, livestock watering, wildlife habitat, ~~secondary 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.

BASIS FOR CHANGE: NMED reviewed all available E. coli and pH data to determine if a recreational use change from Secondary Contact to Primary Contact is warranted. Although no data could be located, recreation occurs regularly in this lake with BLM public access. Management at nearby Brantley Lake reports that this lake has “... a lot of public use including paddle boarding and kayaking, as well as high traffic for fishing and swimming. This reservoir does have a boat ramp, but limited use for big boats due to its shallow nature.” NMED is collecting E. coli and pH data.

20.6.4.220 through 20.6.4.230 NMAC – No changes proposed.

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 Bear canyon, perennial reaches of North Spring river and~~ perennial reaches of the Rio Hondo and perennial reaches of its tributaries 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.

BASIS FOR CHANGE: NMED reviewed available 2021-2022 E. coli and pH data and determined a recreational use change from Secondary Contact to Primary Contact for Berrendo Creek, the only other perennial tributary to the Rio Hondo downstream of Bonney canyon, is warranted. Therefore, “perennial reaches of its tributaries” to the Rio Hondo downstream of

Bonney canyon was added, and “perennial reaches of North Spring river” was removed, to assign Primary Contact to both perennial tributaries.

NMED also proposes changing the segment break from “state highway 24 near Dunken” to “Bear Canyon” because water quality segment breaks should be described by hydrologic features rather than road crossings wherever possible.

20.6.4.232 through 20.6.4.306 NMAC – No changes proposed.

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 waters~~ identified in 20.6.4.309 NMAC or 20.6.4.313 NMAC, perennial reaches of Ocate creek downstream of Ocate, 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.

BASIS FOR CHANGE: NMED proposes this revision because the entire Coyote Creek was covered by both this section and section 309 as written. Coyote Creek from the Mora River to Amola Ridge is predominantly in Level 4 Ecoregion 26I (Upper Canadian Plateau) and the corresponding Xeric sedimentation class. Thermograph data (2015) met MCWALU criteria (Tmax 27.3C). AWTC modeling results (1980-2010 input dataset) indicate attainment of MCWALU criteria (Tmax 25.2C, 6T3 21.0C). Therefore, this is the appropriate segment for this reach of Coyote Creek.

20.6.4.308 CANADIAN RIVER BASIN: Charette lakes.

A. Designated uses: coldwater aquatic life, warmwater aquatic life, ~~secondary~~ primary contact, 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.

BASIS FOR CHANGE: NMED reviewed available 2015-2016 E. coli and pH data and determined a recreational use change from Secondary Contact to Primary Contact is warranted. There is also public access with regular recreation occurring at this lake.

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, upstream of Amola ridge and perennial reaches of tributaries to Coyote creek upstream to Amola ridge, the Cimarron river above state highway 21 in Cimarron, 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, 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, on perennial reaches of Rayado creek and on perennial reaches of 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.

BASIS FOR CHANGE: NMED proposes this revision because the entire Coyote Creek was covered by both this section and section 307 as written. See segment 307 Basis for Change.

20.6.4.310 through 20.6.4.317 NMAC – No changes proposed.

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~~ July 24, 2020.

(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 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."

BASIS FOR CHANGE: The Temporary Standard became effective upon EPA's approval on July 24, 2020. NMED proposes this amendment to reflect the now established effective date.

NMED completed its reevaluation of the Raton Temporary Standard and presented its findings to the WQCC at its regular meeting on May 13, 2025. NMED found that the social and economic impact from installing controls to meet the underlying standard remained the same (40 CFR

131.10(g)(6)). Additionally, the Highest Attainable Condition (HAC), reflected by the interim effluent condition for Total Nitrogen and Total Phosphorus, remained the same and implementation of a Pollutant Minimization Program should continue. Monitoring data from 2020-2024 showed a slight improvement in nutrient levels in Doggett Creek, but not enough to meet the underlying Water Quality Standard in the future. The WQCC adopted a resolution to continue the Temporary Standard and incorporate an updated actions and implementation schedule into the NPDES permit in the renewal process expected to begin in July 2025. NMED has submitted its reevaluation to EPA and remains in communication with them. Public comment on the Raton NPDES permit renewal will occur through separate processes from EPA (permit issuance) and NMED (401 permit certification). For more information visit <https://www.env.nm.gov/surface-water-quality/ts-raton/>.

20.6.4.319 through 20.6.4.402 NMAC – No changes proposed.

20.6.4.403 SAN JUAN RIVER BASIN: The Animas river from its confluence with the San Juan river upstream to Estes arroyo.

A. Designated uses: Public water supply, industrial water supply, irrigation, livestock watering, wildlife habitat, coolwater 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 criterion applies: temperature 29°C (84.2°F) or less.~~

BASIS FOR CHANGE: NMED Proposes to remove this segment-specific criteria because this is the default temperature for Coolwater aquatic life use per 20.6.4.900.H(4) NMAC so it is unnecessary.

20.6.4.404 through 20.6.4.501 NMAC – No changes proposed.

20.6.4.502 GILA RIVER BASIN: The main stem of the Gila river from Redrock canyon upstream to the confluence of the West Fork Gila river and East Fork Gila river and perennial reaches of tributaries to the Gila river downstream of Mogollon creek.

A. Designated uses: industrial water supply, irrigation, livestock watering, wildlife habitat, marginal coldwater aquatic life, and 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, except that the following segment-specific criterion applies: 28°C (82.4°F) or less.

BASIS FOR CHANGE: NMED proposes removing the warmwater aquatic life use based on a thorough review and analysis of existing fisheries data, thermograph data, air-water temperature correlation (AWTC) modeling, and recreational fishing information. The Gila River from Mogollon Creek to Red Rock is predominantly in Level 4 Ecoregion 23b (Madrean Lower Montane Woodlands) and the corresponding Foothills sedimentation class. Thermograph data (2007, 2019, 2020) along this reach primarily indicate attainment of the WWALU default criteria, but there was evidence of attainment of the CoolWALU default criteria in the upper reaches of the section in 2007 (TMAX ~28°C). AWTC modeling results (1980-2010 input dataset) also indicate meeting WWALU criteria.

Despite both the predicted and actual water temperature values trending warmer, fisheries species and length data from Iron Bridge, Cherokee Canyon, and Ash Canyon document a fish assemblage dominated by transitional species — those whose temperature tolerances are intermediate between warmwater and coldwater taxa. The proportion of coldwater species

increased from the 1980s to the 2020s. Additionally, fish size-class data indicate that the reach supports propagation of both coldwater and transitional species.

Removing the warmwater aquatic life use results in no change to applicable criteria because the most stringent criteria is used for Clean Water Act purposes (e.g. 303(d), permitting, TMDLs, etc.).

20.6.4.503 GILA RIVER BASIN: All perennial tributaries to the Gila river upstream of and including Mogollon creek.

A. Designated uses: domestic water supply, 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 of 400 µS/cm or less for all perennial tributaries except West Fork Gila and tributaries thereto, specific conductance of 300 µS/cm or less; ~~32.2~~ 29°C (~~90~~84°F) or less in the east fork of the Gila river and Sapillo creek downstream of Lake Roberts; the monthly geometric mean of E. coli bacteria 126 cfu/100 mL or less, single sample 235 cfu/100 mL or less.

BASIS FOR CHANGE: NMED proposes lowering the segment-specific temperature criterion for East Fork Gila River and Sapillo Creek downstream of Lake Roberts of 32.2°C (90°F) to 29°C (84°F) based on a thorough review and analysis of existing fisheries data, thermograph data, air-water temperature correlation (AWTC) modeling, and recreational fishing information.

East Fork Gila River downstream of Taylor Creek is predominantly in Level 4 Ecoregion 23 (Conifer Woodlands and Savannas) and the corresponding Foothills sedimentation site class. Fisheries species and size class data for coldwater and transitional fish species Falls Spring area 1980 to present documents a predominance of transitional species, with a small proportion of propagating coldwater species no longer present post 2010. Thermograph data (2007, 2019) document attainment of the CoolWAL default criteria in 2019 (TMAX ~28°C). AWTC modeling (1980-2010 input dataset) indicate attainment of the MCWAL default criteria across the entire reach (TMAX ~28°C and 6T3 ~24°C). Recreational fishing information documents presence of smallmouth bass (transitional species) and channel catfish (warmwater species).

Sapillo Creek is in Level 4 Ecoregion 23b (Madrean Lower Montane Woodlands) and the corresponding Foothills sedimentation site class. Thermograph data (2007) document attainment of HQCWAL default criteria (TMAX ~22°C). The very low temperatures are likely due to thermograph placement below the dam and may not be representative of the entire reach. AWTC modeling (1980-2010 input dataset) indicate attainment of the MCWAL default criteria (TMAX ~27°C, 6T3 ~23°C). Recreational fishing information documents presence of wild brown and rainbow trout, and stocked Gila trout. The presence of wild trout indicates thermal conditions support propagation of coldwater fish species.

Thermograph data and AWTC modeling in combination with the fisheries data and recreational fishing reports indicate a segment-specific temperature criterion of 29°C (84°F) is existing and attainable for East Fork Gila River and Sapillo Creek downstream of Lake Roberts.

20.6.4.504 through 20.6.4.600 NMAC – No changes proposed.

20.6.4.601 SAN FRANCISCO RIVER BASIN: The main stem of the San Francisco river from the New Mexico-Arizona line upstream to ~~state highway 12 at Reserve~~ the confluence with Largo canyon and perennial reaches of Mule creek.

A. Designated uses: irrigation, ~~marginal warmwater and~~ marginal coldwater 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.

BASIS FOR CHANGE: NMED proposes moving the segment break from “state highway 12 at Reserve” approximately 0.65 miles downstream to “the confluence with Largo Canyon” because water quality segment breaks should be described by hydrologic features rather than road crossings wherever possible. See the BASIS FOR CHANGE at 20.6.4.602 NMAC for additional information.

In addition, NMED proposes removing the marginal warmwater aquatic life use based on a thorough review and analysis of existing fisheries data, thermograph data, air-water temperature correlation (AWTC) modeling, and recreational fishing information. The San Francisco River running from Box Canyon to Whitewater Creek is in Level 4 Ecoregion 23b (Madrean Lower Montane Woodlands) and the corresponding Foothills sedimentation class. Thermograph data (2019 & 2020) along this reach indicate attainment of the MCWAL default criteria (TMAX ~28, 6T3 ~23). AWTC modeling results (1980-2010 input dataset) indicate attainment of the WWAL criteria (TMAX ~30). Fisheries species and size class data from near Whitewater Creek document a predominantly transitional assemblage with a smaller proportion of coldwater species. Additionally, fish size class data indicate that the reach supports propagation of both coldwater and transitional species.

Removing the warmwater aquatic life use results in no change to applicable criteria because the most stringent criteria are used for Clean Water Act purposes (e.g. 303(d), permitting, TMDLs, etc.).

20.6.4.602 SAN FRANCISCO RIVER BASIN: The main stem of the San Francisco river from ~~state highway 12 at Reserve~~ the confluence with Largo canyon upstream to the New Mexico-Arizona line.

A. Designated uses: 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 criterion applies: temperature 25°C (77°F) or less.

BASIS FOR CHANGE: NMED proposes moving the segment break from “state highway 12 at Reserve” approximately 0.65 miles downstream to “the confluence with Largo Canyon” because water quality segment breaks should be described by hydrologic features rather than road crossings wherever possible.

20.6.4.603 through 20.6.4.899 NMAC – No changes proposed.

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:

20.6.4.900.A through 20.6.4.900.C NMAC – No changes proposed.

D. Primary contact: The monthly geometric mean of *E. coli* bacteria of 126 cfu/100 mL or MPN/100 mL, 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.

BASIS FOR CHANGE: NMED proposes retaining the water quality criteria associated with harmful algal blooms (HABs) in the standards but removing the assessment methodology for microcystins and cylindrospermopsin. Cyanotoxins are emerging contaminants and the science, technology, and best practices for monitoring them are evolving. Primary contact is a designated use addressing health risks during recreation on the water and criteria are critical for evaluating whether the water conditions are safe for recreation. HABs are unpredictable, are difficult to monitor, and can become a concern very quickly. Removing the assessment methodology allows NMED to keep up with the evolving science regarding cyanotoxin monitoring and assessment to ensure New Mexico's waters are safe for recreation and respond quickly to communicate potential risk to the public.

20.6.4.900.E through 20.6.4.900.G NMAC – No changes proposed.

H. Aquatic life: Surface waters of the state with a designated, existing or attainable use of aquatic life shall be free from any substances at concentrations that can impair the community of plants and animals in or the ecological integrity of surface waters of the state. Except as provided in Paragraph (7) of this subsection, the acute and chronic aquatic life criteria set out in Subsections I, J, K and L of this section and the human health-organism only criteria set out in Subsection J of this section are applicable to all aquatic life use subcategories. In addition, the specific criteria for aquatic life subcategories in the following paragraphs apply to waters classified under the respective designations.

(1) **High quality coldwater:** dissolved oxygen 6.0 mg/L or more, 4T3 temperature 20°C (68°F), maximum temperature 23°C (73°F), pH within the range of 6.6 to 8.8 and specific conductance a segment-specific limit between 300 µS/cm and 1,500 µS/cm depending on the natural background in the particular surface water of the state (the intent of this criterion is to prevent excessive increases in dissolved solids which would result in changes in community structure). Where a single segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature and no 4T3 temperature applies.

(2) **Coldwater:** dissolved oxygen 6.0 mg/L or more, 6T3 temperature 20°C (68°F), maximum temperature 24°C (75°F) and pH within the range of 6.6 to 8.8. Where a single segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature and no 6T3 temperature applies.

(3) **Marginal coldwater:** dissolved oxygen 6 mg/L or more, 6T3 temperature 25°C (77°F), maximum temperature 29°C (84°F) and pH within the range from 6.6 to 9.0. Where a single segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature and no 6T3 temperature applies.

(4) **Coolwater:** dissolved oxygen 5.0 mg/L or more, maximum temperature 29°C (84°F) and pH within the range of 6.6 to 9.0.

(5) **Warmwater:** dissolved oxygen 5 mg/L or more, maximum temperature 32.2°C (90°F) and pH within the range of 6.6 to 9.0. Where a segment-specific temperature criterion is indicated in 20.6.4.101-899 NMAC, it is the maximum temperature.

(6) **Marginal warmwater:** dissolved oxygen 5 mg/L or more, pH within the range of 6.6 to 9.0 and 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.

(7) **Limited aquatic life:** pH within the range of 6.0 to 9.0. The acute aquatic life criteria of Subsections I and J of this section apply to this subcategory. Chronic aquatic life criteria do not apply unless adopted on a segment-specific basis. Human health-organism only criteria apply only for persistent toxic pollutants unless adopted on a segment-specific basis.

BASIS FOR CHANGE: NMED proposes including a default pH range for limited aquatic life within 6.0 to 9.0 SU in agreement with Technology Based Effluent Limits included in National Pollutant Discharge Elimination System (NPDES) Permits. Limited Aquatic life applies to waters listed in sections 97, 124, 128, 136 and 809 of 20.6.4 NMAC. Section 136 waters include Primary Contact designated use and have existing pH criteria of 6.6 – 9.0 per 20.6.4.900.D NMAC. The most stringent criteria apply to waters with criteria for the same parameter for multiple designated uses; therefore, 6.6 – 9.0 would remain the applicable criteria for Section 136. In addition, literature shows that a pH range of 6.0 to 9.0 provides adequate protection for the life of freshwater fish and bottom-dwelling macroinvertebrates and a pH range of 5.0-9.0 is not directly lethal. Outside this range, aquatic life populations would be reduced and growth or reproduction impacted until lethal levels are reached (USEPA 1986; Robertson-Bryan, Inc. 2004). For more information regarding pH criteria see US EPA Quality Criteria for Water at <https://www.epa.gov/sites/production/files/2018-10/documents/quality-criteria-water-1986.pdf> and Road, W., and E. Grove. 2004. pH Requirements of Freshwater Aquatic Life. Technical Memorandum, Robertson-Bryan Inc., Central Valley California Water Resources Control Board.

20.6.4.900.I NMAC – No changes proposed.

J. Use-specific numeric criteria.

(1) **Table of numeric criteria:** The following table sets forth the numeric criteria in µg/L, unless otherwise indicated, 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 and K through M of 20.6.4.900 NMAC.

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Aluminum, dissolved	7429-90-5		5,000			750 µh	87 µh		
Aluminum, total recoverable	7429-90-5					a	a		
Antimony, dissolved	7440-36-0	6						640	P
Arsenic, dissolved	7440-38-2	10	100	200		340	150	9.0	C,P
Asbestos (<u>fibers/L</u>)	1332-21-4	7,000.000 fibers/L 7.0E06							
Barium, dissolved	7440-39-3	2,000							
Beryllium, dissolved	7440-41-7	4							
Boron, dissolved	7440-42-8		750	5,000					
Cadmium, dissolved	7440-43-9	5	10	50		a	a		
Chloride	1688-70-06					860,000 8.6E05	230,000 2.3E05		
Chlorine residual	7782-50-5				11	19	11		

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Chromium III, dissolved	16065-83-1					a	a		
Chromium VI, dissolved	18540-29-9					16	11		
Chromium, dissolved	7440-47-3	100	100	1,000					
Cobalt, dissolved	7440-48-4		50	1,000					
Copper, dissolved	7440-50-8	1300	200	500		a	a		
Cyanide, total recoverable	57-12-5	200			5.2	22.0	5.2	400	
Iron	7439-89-6						1,000		
Lead, dissolved	7439-92-1	15 10	5,000	100		a	a		
Manganese, dissolved	7439-96-5					a	a		
Mercury	7439-97-6	2		10	0.77				P
Mercury, dissolved	7439-97-6					1.4	0.77		P
Methylmercury	22967-92-6							0.3 mg/kg in fish tissue	P
Molybdenum, dissolved	7439-98-7		1,000						
Molybdenum, total recoverable	7439-98-7					7,920	1,895		
Nickel, dissolved	7440-02-0	700				a	a	4,600	P
Nitrate as N (mg/L)		10 mg/L							
Nitrite + Nitrate (mg/L)				132 mg/L					
Selenium, dissolved	7782-49-2	50	b	50			1.5 in lentic water, i 3.1 in lotic water, i	4,200	P
Selenium, total recoverable	7782-49-2				5.0	20.0	5.0 8.5 mg/kg Dry Weight in Whole-Body Fish Tissue 11.3 mg/kg Dry Weight in Fish Muscle Tissue		
Silver, dissolved	7440-22-4					a			
Thallium, dissolved	7440-28-0	2						0.47	P

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Uranium, dissolved	7440-61-1	30							
Vanadium, dissolved	7440-62-2		100	100					<u>P</u>
Zinc, dissolved	7440-66-6	10,500	2,000	25,000		a	a	26,000	P
Adjusted gross alpha (<u>pCi/L</u>)		15 <u>pCi/L</u>		15 <u>pCi/L</u>					
Radium 226 + Radium 228 (<u>pCi/L</u>)		5 <u>pCi/L</u>		30.0 <u>pCi/L</u>					
Strontium 90 (<u>pCi/L</u>)		8 <u>pCi/L</u>							
Tritium (<u>pCi/L</u>)		20,000 <u>pCi/L</u>		20,000 <u>pCi/L</u>					
Acenaphthene	83-32-9	2,100						90	
Acrolein	107-02-8	18				3.0	3.0	400	
Acrylonitrile	107-13-1	0.65						70	C
Aldrin	309-00-2	0.021				3.0		0.000007 7 7.7E-06	C,P
Anthracene	120-12-7	10,500						400	
Benzene	71-43-2	5						160	C
Benzidine	92-87-5	0.0015						0.11	C
Benzo(a)anthracene	56-55-3	0.048						0.013	C, <u>P</u>
Benzo(a)pyrene	50-32-8	0.2						0.0013	C,P
Benzo(b)fluoranthene	205-99-2	0.048						0.013	C, <u>P</u>
Benzo(k)fluoranthene	207-08-9	0.048						0.13	C, <u>P</u>
alpha-BHC	319-84-6	0.056						0.0039	C
beta-BHC	319-85-7	0.091						0.14	C
gamma-BHC (Lindane)	58-89-9	0.20				0.95		4.4	
Bis(2-chloroethyl) ether	111-44-4	0.30						22	C
Bis(2-chloro-1-methylethyl) ether	108-60-1	1,400						4,000	
Bis(2-ethylhexyl) phthalate	117-81-7	6						3.7	C
Bis(chloromethyl) ether	542-88-1							0.17	C
Bromoform	75-25-2	44						1,200	C
Butylbenzyl phthalate	85-68-7	7,000						1	C
Carbaryl	63-25-2					2.1	2.1		
Carbon tetrachloride	56-23-5	5						50	C
Chlordane	57-74-9	2				2.4	0.0043	0.0032	C,P
Chlorobenzene	108-90-7	100						800	
Chlorodibromomethane	124-48-1	4.2						210	C
Chloroform	67-66-3	57						2,000	
Chlorpyrifos	2921-88-2					0.083	0.041		<u>P</u>
2-Chloronaphthalene	91-58-7	2,800						1,000	
2-Chlorophenol	95-57-8	175						800	
Chrysene	218-01-9	0.048						1.3	C, <u>P</u>
Demeton	8065-48-3						0.1		
Diazinon	333-41-5					0.17	0.17		

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
2,4-Dichlorophenoxyacetic acid (<u>2,4-D</u>)	94-75-7	<u>70</u>						12,000	
Dichlorodiphenyldichloroethane (DDD)	72-54-8							0.0012	C
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		<u>P</u>
Dibenzo(a,h)anthracene	53-70-3	0.048						0.0013	<u>C, P</u>
Dibutyl phthalate	84-74-2	3,500						30	
1,2-Dichlorobenzene	95-50-1	600						3,000	
1,3-Dichlorobenzene	541-73-1	469						10	
1,4-Dichlorobenzene	106-46-7	75						900	
3,3'-Dichlorobenzidine	91-94-1	0.78						1.5	C
Dichlorobromomethane	75-27-4	5.6						270	C
1,2-Dichloroethane	107-06-2	5						6,500	C
1,1-Dichloroethylene	75-35-4	7						20,000	
2,4-Dichlorophenol	120-83-2	105						60	
1,2-Dichloropropane	78-87-5	5.0						310	C
1,3-Dichloropropene	542-75-6	3.5						120	C
Dieldrin	60-57-1	0.022				0.24	0.056	0.000012 <u>1.2E-05</u>	C,P
Diethyl phthalate	84-66-2	28,000						600	
Dimethyl phthalate	131-11-3	350.00 <u>0</u> <u>3.5E05</u>						2,000	
2,4-Dimethylphenol	105-67-9	700						3,000	
Dinitrophenols	25550-58-7							1,000	
2,4-Dinitrophenol	51-28-5	70						300	
2,4-Dinitrotoluene	121-14-2	1.1						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	30	
beta-Endosulfan	33213-65-9	62				0.22	0.056	40	
Endosulfan sulfate	1031-07-8	62						40	
Endrin	72-20-8	2				0.086	0.036	0.03	<u>P</u>
Endrin aldehyde	7421-93-4	10.5						1	
Ethylbenzene	100-41-4	700						130	
Fluoranthene	206-44-0	1,400						20	<u>P</u>
Fluorene	86-73-7	1,400						70	
Guthion	86-50-0						0.01		
Heptachlor	76-44-8	0.40				0.52	0.0038	0.000059 <u>5.9E-05</u>	<u>C, P</u>

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
Heptachlor epoxide	1024-57-3	0.20				0.52	0.0038	0.00032	C
Hexachlorobenzene	118-74-1	1						0.00079	C,P
Hexachlorobutadiene	87-68-3	4.5						0.1	C, <u>P</u>
Hexachlorocyclohexane (HCH)-Technical	608-73-1							0.1	C
Hexachlorocyclopentadiene	77-47-4	50						4	
Hexachloroethane	67-72-1	25						1	C
<u>Indeno</u> (1,2,3-cd)pyrene	193-39-5	0.048						0.013	C, <u>P</u>
Isophorone	78-59-1	368						18,000	C
Malathion	121-75-5						0.1		
Methoxychlor	72-43-5	<u>40</u>					0.03	0.02	<u>P</u>
Methyl bromide	74-83-9	49						10,000	
3-Methyl-4-chlorophenol	59-50-7							2,000	
2-Methyl-4,6-dinitrophenol	534-52-1	14						30	
Methylene chloride	75-09-2	5						10,000	C
Mirex	2385-85-5						0.001		<u>P</u>
Nitrobenzene	98-95-3	18						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		
Pentachlorobenzene	608-93-5							0.1	
Pentachlorophenol	87-86-5	1.0				19	15	0.4	C
<u>Perfluorooctane sulfonate (PFOS)</u>	<u>Various</u>					<u>71</u>	<u>0.25 in water</u> <u>0.028 mg/kg Wet Weight in Invertebrate Whole-Body Tissue</u> <u>0.201 mg/kg Wet Weight in Fish Whole-Body Tissues</u> <u>0.087 mg/kg Wet Weight in Fish Muscle Tissue</u>		<u>P</u>

Pollutant	CAS Number	DWS	Irr/Irr storage	LW	WH	Aquatic Life			Type
						Acute	Chronic	HH-OO	
<u>Perfluorooctanoic acid (PFOA)</u>	<u>Various</u>					<u>3,100</u>	<u>100 in water</u> <u>1.18 mg/kg Wet Weight in Invertebrate Whole-Body Tissue</u> <u>6.49 mg/kg Wet Weight Fish Whole-Body Tissue</u> <u>0.133 mg/kg Wet Weight Fish Muscle Tissue</u>		<u>P</u>
Phenol	108-95-2	10,500						300,000 <u>3.0E05</u>	
Polychlorinated Biphenyls (PCBs)	1336-36-3	0.50			0.014	2	0.014	0.00064	C,P
Pyrene	129-00-0	1,050						30	
1,2,4,5-Tetrachlorobenzene	95-94-3							0.03	
1,1,2,2-Tetrachloroethane	79-34-5	1.8						30	C
Tetrachloroethylene	127-18-4	5						290	C,P
Toluene	108-88-3	1,000						520	
Toxaphene	8001-35-2	3				0.73	0.0002	0.0071	C, <u>P</u>
1,2-Trans-dichloroethylene	156-60-5	100						4,000	
Tributyltin (TBT)	Various					0.46	0.072		
1,2,4-Trichlorobenzene	120-82-1	70						0.76	C
1,1,1-Trichloroethane	71-55-6	200						200,000 <u>2.0E05</u>	
1,1,2-Trichloroethane	79-00-5	5						89	C
Trichloroethylene	79-01-6	5						70	C
2,4,5-Trichlorophenol	95-95-4							600	
2,4,6-Trichlorophenol	88-06-2	32						28	C
2-(2,4,5-Trichlorophenoxy)propionic acid (Silvex)	93-72-1	<u>50</u>						400	
Vinyl chloride	75-01-4	2						16	C

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

(a) Where the letter “a” is indicated in a cell, the criterion is based on receiving water characteristics and can be referenced in Subsection I of 20.6.4.900 NMAC.

(b) Where the letter “b” is indicated in a cell, the criterion can be referenced in Subsection C of 20.6.4.900 NMAC.

~~(c) Criteria are in µg/L unless otherwise indicated.~~

~~(d)~~ Abbreviations are as follows: CAS - chemical abstracts service (see definition for “CAS number” in 20.6.4.7 NMAC); DWS - domestic water supply; Irr/Irr storage- irrigation and irrigation storage; LW - livestock watering; WH - wildlife habitat; HH-OO - human health-organism only; C – criteria based on cancer-causing endpoint; P - persistent toxic pollutant.

~~(e)~~ The criteria are based on analysis of an unfiltered sample unless otherwise indicated. The acute and chronic aquatic life criteria for aluminum are based on analysis of total recoverable aluminum in a sample that is filtered to minimize mineral phases as specified by the department.

(~~fe~~) The criteria listed under human health-organism only (HH-OO) are intended to protect human health when aquatic organisms are consumed from waters containing pollutants. These criteria do not protect the aquatic life itself; rather, they protect the health of humans who ingest fish or other aquatic organisms.

(~~gf~~) The dioxin criteria apply to the sum of the dioxin toxicity equivalents expressed as 2,3,7,8-TCDD dioxin.

(~~hg~~) The criteria for polychlorinated biphenyls (PCBs) apply to the sum of all congeners, to the sum of all homologs or to the sum of all aroclors.

(~~ih~~) 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.

(i) Selenium water column criteria include 30-day mean dissolved selenium concentrations for lentic systems, including lakes and impoundments, and lotic systems, including rivers and streams.

BASIS FOR CHANGE: NMED proposes several non-substantive changes to more prominently and uniformly display units for the table. Scientific notation applied to values less than 0.0001 and equal to or greater than 100,000 for ease of reading and uniformity with existing criteria in scientific notation. Changes to lettering as the result of moving note 2(c) to paragraph (1) proceeding the table.

New aquatic life use criteria

Per- and poly- fluoroalkyl substances (PFAS): NMED proposes to adopt EPA recommended acute and chronic 304(a) criteria for perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) aquatic life uses. EPA published final freshwater aquatic life criteria for acute and chronic PFOA and PFOS exposure (Federal Register Vol. 89, pp 81077-81079, October 7, 2024). EPA developed chronic and acute freshwater-based criteria and chronic tissue-based criteria for PFOA and PFOS. Chronic freshwater-based and chronic tissue-based criteria are independently applicable and no one criterion takes primacy.

PFAS, including PFOA and PFOS, are human-made organic chemicals that are persistent in the environment and are found in environmental samples worldwide. At elevated concentrations, PFOA and PFOS are toxic to aquatic species, including fish. Due to the widespread distribution and toxic effects of PFOA and PFOS, NMED recommends adoption of EPA's recommended criteria to protect aquatic life.

Selenium: NMED proposes to adopt EPA recommended 304(a) chronic criteria for selenium aquatic life uses. EPA published selenium aquatic life criteria in 2016 (Federal Register Vol. 81, pp 45285-45287, July 13, 2016), but NMED elected not to adopt new criteria during previous triennial review due to lack of EPA implementation guidance to states or tribes. In 2024, EPA published technical support documents for the adoption and implementation of selenium water quality standards.

Selenium is a naturally occurring element that can enter surface waters from natural or anthropogenic sources. Selenium bioaccumulates in aquatic organisms and at high concentrations can cause reproductive impairment of egg-laying species like fish. Due to the negative effects of high concentrations of selenium to aquatic organisms, including fish

propagation. NMED recommends adoption of EPA's recommended criteria to protect aquatic life.

New criteria for Domestic Water Supply (DWS) designated use proposed based on an EPA Maximum Contaminant Level (MCL) or Treatment Technique established under the National Primary Drinking Water Regulations. DWS criteria are only adopted for chemicals with an EPA recommended 304(a) criteria.

NMED proposes to review and update designations of persistent toxic pollutants in the numeric criteria table.

20.6.4.900.K NMAC – No changes proposed.

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:

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

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	36.0	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

BASIS FOR CHANGE: NMED proposes this non-substantive change to align with EPA’s recommendation in their 2020 Triennial Review Technical Support Document. The published value is a typographical error carried over from previous EPA 304(a) criteria documents.

20.6.4.900.L(2) through 20.6.4.900.M NMAC – No changes proposed.

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.
- E.** American public health association. 2023. *Standard Methods for The Examination of Water and Wastewater, 24th Edition*. Washington, D.C. 1516 p.
- EF.** United States geological survey. 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. 545 p.
- FG.** United States geological survey. 1987. *Methods 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.
- GH.** United States environmental protection agency. 1983. *Methods For Chemical Analysis Of Water And Wastes*. Office of research and development, Washington, DC. (EPA/600/4-79/020). 491 p.
- HI.** New Mexico water quality control commission. 2020. *State Of New Mexico Water Quality Management Plan and Continuing Planning Process*. Santa Fe, New Mexico. 277 p.
- IJ.** Colorado river basin salinity control forum. ~~2020~~2023. ~~2020~~2023 Review, *Water Quality Standards For Salinity, Colorado River System*. Phoenix, Arizona. ~~97~~112 p.
- JK.** 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.
- KL.** 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.
- LM.** 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). 335 p.
- MN.** 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. 232 p.
- NO.** United States environmental protection agency. 1984. *Technical Support Manual: Waterbody Surveys And Assessments For Conducting Use Attainability Analyses, Volume III: Lake Systems*. Office of water, regulations and standards, Washington, D.C. 208 p.

BASIS FOR CHANGE: NMED proposes to remove unnecessary language in the initial paragraph of Section 901. NMED proposes adding the most recent edition of Standard Methods

for the Examination of Water and Wastewater. This addition results in the re-lettering of the subsequent references to 20.6.4.901.F through 20.6.4.901.O NMAC. NMED proposes to update the Colorado River Basin Salinity Control Forum to the most recent version.