PROPOSED AMENDMENTS AND STATEMENT OF BASIS
FOR NEW MEXICO ENVIRONMENT DEPARTMENT PETITION

THE 2003 TRIENNIAL REVIEW
OF THE NEW MEXICO SURFACE WATER QUALITY STANDARDS

AUGUST 15, 2003

This document contains the text of sections of the surface water quality standards that contain proposals for changes. Deleted materials are indicated by strikethrough, and new materials are indicated by underlining. Endnotes are used to provide the basis for changes that occur in multiple locations in the document and where the use of endnotes make the changes easier to follow. Endnotes begin at page 82.

20.6.4.2 SCOPE: Except as otherwise provided by statute or regulation of the water quality control commission, this part governs all surface waters of the state of New Mexico,[1] which are subject to the New Mexico Water Quality Act, Sections 74-6-1 through 74-6-17 NMSA 1978.

20.6.4.6 OBJECTIVE:

B. The state of New Mexico is required under the New Mexico Water Quality Act (Subsection C of Section 74-6-4 NMSA 1978) and the federal Clean Water Act, as amended (33 U.S.C. Section 1251 *et seq*.) to adopt water quality standards that protect the public health or welfare, enhance the quality of water, and are consistent with and serve the purposes of the New Mexico Water Quality Act and the federal Clean Water Act. It is the objective of the federal Clean Water Act to restore and maintain the chemical, physical, and biological integrity of the nation's waters, including those in New Mexico. This part is consistent with Section 101(a)(2) of the federal Clean Water Act, which declares that it is the national goal that wherever attainable, an interim goal of water quality [~~which~~] that[2] provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983. Agricultural, municipal, domestic and industrial water supply are other essential uses of New Mexico's surface water; however, water contaminants resulting from these activities will not be permitted to lower the quality of surface waters of the state below that [~~which is~~][3] required for [~~recreation and maintenance of a fishery and protection of wildlife~~] protection and propagation of fish, shellfish and wildlife, and recreation in and on the water, where practicable.

Basis: Final sentence rephrased for consistency with previous sentence and CWA Section 101(a)(2).

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.

B. "best management practices" or "BMPs" means schedules of activities, prohibitions of certain practices, implementation of maintenance procedures, or other measures

or practices selected by the state or a designated management agency to achieve control of sources of water pollutants.

Basis: Insert quotation marks to reflect that the definition is a term and its abbreviation.

H. "classified water of the state" means a surface water of the state, or reach of a surface water of the state, for which the commission has adopted a segment description, and has designated a use or uses and applicable water quality [~~standards. Segment descriptions, designated use or uses, and water quality standards for classified waters of the state are set forth~~] criteria[4] in [~~this part~~] 20.6.4.101 through 20.6.4.899 NMAC.

Basis: Rephrased to eliminate unnecessary wording and to provide a more specific reference to the location of the classified waters within "this part," which includes all of 20.6.4 NMAC.

I. "coldwater [~~fishery~~][5]" in reference to an aquatic life use means a surface water of the state where the water temperature and other characteristics are suitable for the support or propagation or both of coldwater[~~fishes~~] [5] aquatic life.

Basis: Revised to conform with the proposed changes in Subsection 900H.

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M. "designated use [~~or uses~~]" means [~~those~~] a use[~~s~~] specified in Sections 20.6.4.101 through 20.6.4.899 NMAC for [~~each~~] a surface water of the state whether or not [~~they are~~] it is being attained.

Basis: Inclusion of the plural is not necessary in the definition. The Uniform Statute and Rule Construction Act, NMSA 1978, Section 12-2A-5, provides that the use of the singular includes the plural.

N. "dissolved" means a constituent of a water sample [~~which~~] that[2] will pass through a 0.45-micrometer pore-size membrane filter under a pressure differential not exceeding one atmosphere. The "dissolved" fraction is also termed "filterable residue."

O. "domestic water supply" means a surface water of the state that [~~may~~] could be used for drinking or culinary purposes after disinfection.

Basis: Change to remove ambiguity from use of the word "may." This phrase could be interpreted to imply that the standards give authority to use water. The Uniform Statute and Rule Construction Act, Section 12-2A-4 states that "may" is used to confer a power, authority, privilege or right.

P. "ephemeral [~~stream~~]" when used to describe a surface water of the state means [~~a stream or reach of a stream that flows briefly~~] the water body contains water only in direct response to precipitation or snowmelt in the immediate locality; its [~~channel~~] bed is always above the water table of the adjacent region [~~adjoining the stream~~], and the water body does not [~~support~~] contain a self-sustaining population of fish.

Basis: The way the final phrase is currently written indicates that the channel bed (the subject of this phrase) does not support a self-sustaining population of fish. EPA suggests replacing "support" with "contain". "Channel" and "adjoining the stream" removed to recognize that lakes, ponds or playas could be ephemeral.

Q. "existing use" means [~~those uses~~] a use actually attained in a surface water of the state on or after November 28, 1975, whether or not [~~they are included in the water quality standards~~] it is a designated use.

Basis: Change "those uses" to singular to match the term being defined. Final phrase changed for clarification, "included in the water quality standards" refers to the entire standards document and it is not clear what "included" means.

R. "fecal coliform bacteria" means the portion of the coliform group [~~which is~~] of bacteria present in the gut or the feces of warmblooded animals. It generally includes organisms [~~which are~~] capable of producing gas from lactose broth in a suitable culture medium within 24 hours at 44.5 ± 0.2°C.

Basis: "Which is" and "which are" are unnecessary phrases. If retained, "which" should be replaced by "that."[2] If an E. coli criterion is adopted this definition should be eliminated.

[~~**T. "flow,"** relative to the four definitions of streams herein means natural flow ensuing from the earth's hydrologic cycle, i.e., atmospheric precipitation resulting in surface and/or ground-water runoff. Natural in-stream flow may be interrupted or eliminated by dams and diversions.~~]

Basis: This definition is no longer necessary because "the four definitions of streams herein" no longer use the term.

U. "high quality coldwater [~~fishery~~] [5]" in reference to an aquatic life use means a perennial surface water of the state in a minimally disturbed condition [~~which has~~] with considerable aesthetic value and [~~is a~~] superior coldwater [~~fishery~~] [5] aquatic life habitat. A surface water of the state to be so categorized must have water quality, stream bed characteristics, and other attributes of habitat sufficient to protect and maintain a propagating coldwater [~~fishery~~] [5] aquatic life population.

Basis: The "fishery" classifications will be redefined as subcategories of "aquatic life."

V. "intermittent [~~stream~~]" when used to describe a surface water of the state means [~~a stream or reach of a stream that flows~~] the water body contains water during most years, but only at certain times of the year, such as when it receives flow from springs, melting snow, or localized precipitation.

Basis: the phrase "intermittent stream" is used only once and parenthetically in the current standards (Section 7.RR). "Stream" and "a stream or reach of a stream that flows" removed to recognize that lakes, ponds or playas could be intermittent.

~~**W. "interrupted [stream]"** when used to describe a stream means [a] the stream [that] contains perennial reaches with intervening intermittent or ephemeral reaches.~~

Basis: The definition for "interrupted stream" is eliminated because it is not used anywhere else in the standards.

X. "interstate waters" means all surface waters of the state [~~which~~] that[2] cross or form a part of the border between states.

Y. "intrastate waters" means all surface waters of the state [~~which~~] that[2] are not interstate waters.

Z. "irrigation" means [~~a water of the state used as a supply of water for crops~~] application of water to land areas to supply the water needs of beneficial plants.

Basis: "Irrigation" is a use, not a water of the state. "Crops" changed to "plants". The term "crop" generally implies a product grown and harvested for profit or subsistence. The current definition may be interpreted to exclude the use of water for golf courses or landscaping, or other plants that are not grown for harvest, but which uses are generally understood to be irrigation.

BB. "[~~limited~~] marginal warmwater [~~fishery~~] [5]" in reference to an aquatic life use means [~~a surface water of the state where~~] natural intermittent or low flow [~~may~~] severely limits the ability of the [~~reach~~] surface water of the state to sustain a natural [~~fish~~] [5] aquatic life population on a continuous annual basis; or [~~a surface water of the state where~~] historical data indicate that natural water temperature [~~may~~] routinely exceeds 32.2°C (90°F).

Basis: The "fishery" classifications will be redefined as subcategories of "aquatic life." The references to natural intermittent or low flow and natural water temperature is added to address an EPA concern in the last triennial review that the use not include waters affected by man-made conditions. "May" eliminated in second line in response to an EPA concern that this use should not be assigned without evidence of such conditions. Second "may" eliminated for same reason.

CC. "livestock watering" means the use of a surface water of the state [~~used~~] as a supply of water for consumption by livestock.

Basis: "Livestock watering" is a use, not a surface water of the state.

DD. "marginal coldwater [~~fishery~~] [5]" in reference to an aquatic life use means [~~a surface water of the state known to support~~] a coldwater [~~fish~~] [5] aquatic life population can be supported during at least some portion of the year, even though historical data indicate that the maximum temperature in the surface water of the state may exceed 20°C (68°F).

Basis: The "fishery" classifications will be redefined as subcategories of "aquatic life." The previous phrase "known to support" appears to preclude consideration of marginal coldwater as an attainable use, "can be supported" is substituted.

HH. "natural causes" means those causal agents [~~which~~] that[2] would affect water quality and the effect is not caused by human activity but is due to naturally occurring conditions.

II. "nonpoint source" means any source of pollutants not regulated as a point source [~~which~~] that[2] degrades the quality or adversely affects the biological, chemical, or physical integrity of surface waters of the state.

KK. "perennial [~~stream~~]" when used to describe a surface water of the state means [~~a stream or reach of a stream that flows~~] the water body contains water continuously throughout the year in all years; its upper surface, generally, is lower than the water table of the region adjoining the stream.

Basis: the phrase "perennial stream" is not used anywhere else in the standards. Phrases used are "perennial surface waters," "perennial tributaries," and "perennial reaches." "The water body contains water" substituted for "a stream or reach of stream that flows" to recognize that lakes, ponds and reservoirs can also be perennial.

NN. "primary contact" means any recreational or other water use in which there is prolonged and intimate contact with the water, such as swimming and water skiing, involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard. Primary contact also means any use of surface waters of the state for [~~native American traditional~~] cultural, religious, or ceremonial purposes in which there is intimate contact with the water, including but not limited to ingestion or immersion, that [~~involves considerable risk sufficient to~~] could pose a significant health [~~risk~~] hazard. [~~The contact may include but is not limited to ingestion or immersion~~]

Basis: The use of water for cultural, religious, or ceremonial purposes is not limited to use by native Americans. Removal of "native American traditional" expands the definition of primary contact to include the use by others with cultural, religious or ceremonial uses of a water body. Although "the contact" in the final sentence apparently refers to the immediately preceding sentence, it could also refer back to the first sentence. To avoid possible confusion the phrase is included in the preceding sentence. The word "risk" in the second sentence is changed to "hazard" to parallel the language in the first sentence.

PP. "segment" means [~~a water quality standards segment, the surface waters of which~~] a classified surface water of the state described in 20.6.4.101 through 20.6.4.899 NMAC. The water within a segment should have the same uses, [~~have common~~] similar hydrologic characteristics or flow [~~regulation~~] regimes, [~~possess common~~] and natural physical, chemical, and biological characteristics, and exhibit [~~common~~] similar reactions to external stresses, such as the discharge of pollutants.

Basis: The present definition uses the term to define itself. The term "common" is changed because "common" could be interpreted to mean "ordinary." If the term "common" is retained it should be rephrased to say that the waters in segment have "characteristics in common" rather than "common characteristics."

RR. "surface water(s) of the state" means all [~~interstate~~] surface waters situated wholly or partly within or bordering upon the state, including [~~interstate wetlands, and all intrastate waters, such as intrastate~~] lakes, rivers, streams (including intermittent and ephemeral streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, reservoirs or natural ponds [~~the use, degradation, or destruction of which would affect interstate or foreign commerce~~]. Surface waters of the state also means all tributaries of such waters, including adjacent wetlands, [~~and~~] any manmade bodies of water [~~which~~] that[2] 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. 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 § 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 423.11(m) [~~which~~] that[2] 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.

Basis: Initial phrase revised to incorporate a portion of the definition of "water" in the Water Quality Act. Phrase referring to interstate commerce eliminated to recognize that the state has plenary power within its borders and is not constrained by interstate commerce considerations. Phrases added to ensure that all "waters of the U.S." are included, and to clarify that the exemption for waste treatment systems does not apply once the system has been deactivated.

TT. "technology-based [~~controls~~] limitations" means the application of technology-based effluent limitations as required under Section 301(b) of the federal Clean Water Act.

Basis: The phrase "technology-based limitations" is the phrase used in the standards.

UU. "total" means a constituent of a water sample [~~which~~] that[2] is analytically determined without filtration.

VV. "toxic pollutant" means those pollutants, or combination of pollutants, including disease-causing agents, [~~which~~] that[2] 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, disease, behavioral malfunctions or physical deformations in such organisms or their offspring.

XX. "warmwater [~~fishery~~] [5]" with reference to an aquatic life use means [~~a surface water of the state where the~~] water temperature and other characteristics are suitable for the support or propagation or both of warm water [~~fishes~~] [5] aquatic life.

Basis: The "fishery" classifications will be redefined as subcategories of "aquatic life.

ZZ. "water pollutant" means a water contaminant in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or [~~to~~][3] unreasonably interfere with the public welfare or the use of property.

AAA. "water quality-based controls" means effluent limitations, as provided under Section 301(b)(1)(C) of the federal Clean Water Act, [~~which~~] that[2] are developed and imposed on point-source dischargers in order to protect and maintain applicable water quality standards. These controls are more stringent than the technology-based effluent limitations required under other paragraphs of Section 301(b).

BBB. "wetlands" means those areas [~~which~~] that[2] 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. [~~Constructed wetlands used for wastewater treatment purposes~~] Wetlands that are constructed outside of a surface water of the state for the purpose of providing wastewater treatment and that do not impound or discharge into a surface water of the state are not included in this definition.

Basis: Final phrase added to address EPA comments during the last triennial review that this sentence should not preclude jurisdiction over manmade bodies of water originally created in, or resulting from the impoundment of, surface waters of the state.

DDD.[25] "aquatic life"[5] means any plant or animal life that inhabits or uses an aquatic environment as primary habitat for at least a portion of its life cycle, but does not include avian or mammalian species.

Basis: To define a term used in the standards.

EEE.[25] "attainable" means achievable by the imposition of effluent limits required under sections 301(b) and 306 of the Clean Water Act and cost-effective and reasonable best management practices for nonpoint source control.

Basis: To define a term used in the standards. This definition is derived from 40 CFR 131.10(d): "At a minimum, uses are deemed attainable if they can be achieved by the imposition of effluent limits required under sections 301(b) and 306 of the Clean Water Act and cost-effective and reasonable best management practices for nonpoint source control."

FFF.[25] "CAS Number" means an assigned number by Chemical Abstract Service (CAS) to identify a substance. CAS numbers index information published in chemical abstracts by the American Chemical Society.

Basis: To define a term used in the standards. This term is used in section 900M and in the proposed definition of "DDT and derivatives".

GGG.[25] "cfu" means colony forming units.

Basis: To define a term used in the standards. The term is used with reference to bacterial criteria for E. coli throughout the document.

HHH[25]. "DDT and derivatives" means 4,4'-DDT (CAS number 50293), 4,4'-DDE (CAS number 72559), and 4,4'-DDD (CAS number 72548).

Basis: DDT has several metabolites or derivatives. The two most frequently found in the environment are DDD (TDE or Rhothane) and DDE. DDD was manufactured and used as an insecticide for a number of years. Most of the available toxicity data are for DDT. However, because of their widespread occurrence and their toxicities to consumer species, DDD and DDE are included in EPA's Ambient Water Quality Criteria for DDT, EPA 440/5-80-038. EPA criteria guidance is only available for DDT, DDD and DDE. Other metabolites, such as DDMU, DDMS, DDNU, DDOH, and DDA, are apparently rare and no criteria guidance is available

III[25]. "discharge" means the addition of any water contaminant to a water of the state from a point source.

Basis: To define a term used in the standards. In the past there has been confusion over the meaning of the term since it has several possible definitions, including a regulatory definition, a hydrologic definition and general dictionary definitions. The proposed definition describes the regulatory use of the word.

JJJ[25]. "*Escherechia coli*" or "*E. coli*" means a bacterial species that inhabits the intestinal tract of humans and other warm-blooded animals, the presence of which indicates the potential presence of pathogenic microorganisms capable of producing disease.

Basis: EPA guidance requires adoption of E. coli criteria instead of fecal coliform. To adopt E. coli criteria, a definition of E coli is needed. See National Recommended Water Quality Criteria: 2002, EPA 822-R-02-047, November 2002; Ambient Water Quality Criteria for Bacteria – 1986, EPA 440/5-84-002, January 1986; Implementation Guidance for Ambient Water Quality Criteria for Bacteria (Draft), EPA-823-B-02-003, May 2002; Federal Register, Vol. 68, No. 139, July 21, 2003, pp. 43272-43283.

KKK.[25] "fish early life stages" means the egg and larval stages of development of fish ending when the fish has its full complement of fin rays and loses larval characteristics.

Basis: To define a term used in Section 900 L & M. EPA recommends adopting a definition for this term. The distinction is important because early life stages of fishes are more sensitive to effects of contaminants that can adversely influence development, growth, function and form of the individual and the population as a whole. Definition derived from Biology of Fishes, Bond, Carl E., Saunders College Publishing, 2nd Ed., 1979, pp. 473-475.

LLL.[25] "grab sample" means a discrete, individual sample taken within a short period of time (usually less than fifteen minutes). Analysis of a grab sample characterizes the quality of a water at the time of sampling.

Basis: Incorporates the definition adopted in Work Element 10 of the water quality management plan.

MMM.[25] **"harmful plant"** means a plant as defined in the New Mexico Harmful Plant Act [Chapter 76, Article 7A NMSA]

Basis: Defines a term used in the proposed pesticide provision.

NNN.[25] **"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 rapid environmental changes, intermittent flow, high turbidity, fluctuating temperature, low dissolved oxygen content, or unique chemical characteristics.

Basis: This new use is proposed for naturally poor quality waters that may not support a fishery but that support other aquatic life. A prime example is Sulphur Creek, which has a natural pH range of generally between 2.0 and 4.0, and does not support fish, but does contain a limited macroinvertebrate community.

OOO.[25] **"noxious weed"** means a plant as defined by the NM Noxious Weed Act [Chapter 76, Article 7]

Basis: Defines a term used in the proposed pesticide provision.

PPP.[25] **"organoleptic"** means the capability to produce a detectable sensory stimulus such as odor or taste.

Basis: Defines a term used in new Section 12.D.

QQQ.[25] **"pest"** means an organism as defined in the New Mexico Pest Control Act [Chapter 76, Article 6 NMSA]

Basis: Defines a term used in the proposed provision for pesticides.

RRR.[25] **pesticide"** means any substance or mixture of substances as defined in the New Mexico Pesticide Control Act [Chapter 76, Article 4 NMSA], or the Federal Insecticide, Fungicide, and Rodenticide Act [7 U.S.C. Section 136].

Basis: Defines a term used in the proposed provision for pesticides.

SSS.[25] **"playa"** means a shallow closed basin lake typically found in the high plains and deserts.

Basis: To provide a definition for the benefit of persons using the standards that may not be familiar with the term.

TTT.[25] **"specific conductance"** means conductivity adjusted to 25 degrees C.[23]

UUU.[25] **"total PCBs"** means the sum of all homolog, all isomer, all congener, or all Aroclor analyses.

Basis: New definition provided in EPA National Recommended Water Quality Criteria: 2002.

VVV.[25] **"tributary"** means a stream, whether perennial, intermittent or ephemeral, that flows into a larger stream, or into a lake or reservoir, and includes a tributary of a tributary.

Basis: To provide a definition of a term currently undefined in the standards.

20.6.4.8 ANTIDEGRADATION POLICY AND IMPLEMENTATION PLAN:

~~**B. Procedures for nominating an ONRW**: Any person may nominate a surface water of the state for designation as an ONRW by filing a petition with the commission pursuant to the *Guidelines for water quality control commission regulation hearings*. A petition to classify a surface water of the state as an ONRW shall include:~~

~~**(1)** a map of the surface water of the state, including the location and proposed upstream and downstream boundaries;~~

~~**(2)** a written statement based on scientific principles in support of the nomination, including specific reference to the applicable criteria for ONRW;~~

~~**(3)** supporting scientific evidence demonstrating that one or more of the applicable ONRW criteria listed in Subsection C of this section has been met;~~

~~**(4)** water quality data to establish a baseline for the proposed ONRW;~~

~~**(5)** a discussion of activities that might contribute to the reduction of water quality in the proposed ONRW;~~

~~**(6)** any additional evidence to substantiate such a designation, including an analysis of the economic impact of the designation on the local and regional economy within the state of New Mexico; and~~

~~**(7)** affidavit of publication of notice of the petition in a newspaper of general circulation in the affected counties and in a newspaper of general statewide circulation.~~

~~**C.** Pursuant to a petition filed under Subsection B of this section, the commission may classify a surface water of the state as an ONRW.~~

~~**D. Reserved:** This subsection is reserved for a list of waters classified as ONRWs.~~

[Move Subparagraphs B, C & D to new section. Renumber following paragraphs accordingly.]
Basis: The antidegradation policy and implementation plan relate to all classes of water. Although ONRW's receive special treatment under the antidegradation policy and implementation plan, the procedures for nomination and creation of an ONRW are a separate matter.

[~~E~~] B. Implementation Plan: The department, acting under authority delegated by the commission, implements the water quality standards, including the antidegradation policy, by describing specific methods and procedures in the continuing planning process and by establishing and maintaining controls on the discharge of pollutants to surface waters of the state.

The steps summarized in the following paragraphs, which may not all be applicable in every water pollution control action, list the implementation activities of the department. These implementation activities are supplemented by detailed antidegradation review procedures developed under the state's continuing planning process. The department:

(1) obtains information pertinent to the impact of the effluent on the receiving water and advises the prospective discharger of requirements for obtaining a permit to discharge;

(2) reviews the adequacy of [~~the~~] existing data [~~base~~], and [~~if additional information is needed,~~] conducts a water quality survey of the receiving water in accordance with an annually reviewed, ranked priority list of surface waters of the state requiring total maximum daily loads pursuant to Section 303(d) of the federal Clean Water Act;

(3) assesses the probable impact of the effluent on the receiving water relative to its attainable or designated uses and numeric and narrative [~~standards~~] criteria[4]

(4) requires the highest and best degree of wastewater treatment practicable and commensurate with protecting and maintaining the designated uses and existing water quality of surface waters of the state;

(5) develops water quality based effluent limitations and comments on technology based effluent limitations, as appropriate, for inclusion in any federal permit issued to a discharger pursuant to Section 402 of the federal Clean Water Act;

(6) requires that these effluent limitations be included in any such permit as a condition for state certification pursuant to Section 401 of the federal Clean Water Act;

(7) coordinates its water pollution control activities with other constituent agencies of the commission, and with local, state and federal agencies, as appropriate;

(8) develops and pursues inspection and enforcement programs to ensure that dischargers comply with state regulations and standards, and complements EPA's enforcement of federal permits;

(9) ensures that the provisions for public participation required by the New Mexico Water Quality Act and the federal Clean Water Act are followed;

(10) provides continuing technical training for wastewater treatment facility operators through the utility operators training and certification programs;

(11) provides funds to assist the construction of publicly owned wastewater treatment facilities through the wastewater construction program authorized by Section 601 of the federal Clean Water Act, and through funds appropriated by the New Mexico legislature;

(12) conducts water quality surveillance of the surface waters of the state to assess the effectiveness of water pollution controls, determines whether water quality standards are being attained, and proposes amendments to improve water quality standards;

(13) encourages, in conjunction with other state agencies, voluntary implementation of the best management practices set forth in the New Mexico statewide water quality management plan and the nonpoint source management program;

(14) evaluates the effectiveness of BMPs selected to prevent, reduce or abate sources of water pollutants;

(15) develops procedures for assessing use attainment as required by 20.6.4.14 NMAC and establishing site-specific standards; and

(16) develops list of surface waters of the state not attaining designated uses, pursuant to Sections 305(b) and 303(d) of the federal Clean Water Act.

Basis: Paragraph (2) revised to more accurately reflect the procedure.

20.6.4.8a[24] Outstanding National Resource Waters

A. Procedures for nominating an ONRW: Any person may nominate a surface water of the state or a portion of a surface water of the state for designation as an ONRW by filing a petition with the commission pursuant to the *Guidelines for water quality control commission regulation hearings*. A petition to classify a surface water of the state as an ONRW shall include:

(1) a map of the surface water of the state, including the location and proposed boundaries;

(2) a written statement and evidence based on scientific principles in support of the nomination, including specific reference to one or more applicable characteristics listed in Paragraph (3) of Subsection A of 20.6.4.8 NMAC for ONRW has been met;

(3) water quality data including chemical, physical or biological parameters, if available, to establish a baseline condition for the proposed ONRW;

(4) a discussion of activities that might contribute to the reduction of water quality in the proposed ONRW;

(5) any additional evidence to substantiate such a designation, including an analysis of the economic impact of the designation on the local and regional economy within the state of New Mexico; and

(6) affidavit of publication of notice of the petition in a newspaper of general circulation in the affected counties and in a newspaper of general statewide circulation.

B. Pursuant to a petition filed under Subsection A of this section, the commission may classify a surface water of the state as an ONRW.

C. Reserved: This subsection is reserved for a list of waters classified as ONRW's.

Basis: For existing language see "strikeout" in 20.6.4.8 above. Following the last Triennial Review, EPA Region 6 expressed concern that requirements for baseline water quality data and an economic impact analysis could "effectively bar the general public from nominating any waters" as ONRW's, and commented that the "ONRW designation is also intended to offer protection to those waters of exceptional ecological or recreational significance that may have little to do with water quality." EPA Region 6 also indicated that if no waters were nominated "EPA will review the circumstances and consider whether to exercise its 303(c)(4)(B) authority to amend the nominating process." The "upstream and downstream boundaries" phrase in current Paragraph (1) excludes lakes from the possibility of nomination. Current Paragraphs (2) and (3) are combined.

20.6.4.9 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. It is recognized that, in some cases, numeric [~~standards~~] criteria[4] have been adopted [~~which~~] that[2] reflect use designations rather than existing conditions of surface waters of the state. Narrative [~~standards~~] criteria[4] 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 [~~standards~~]

criteria[4]. When justified by sufficient data and information, the water quality [~~standards~~] criteria[4] will be modified to protect the [~~designated~~] attainable uses [~~which are attainable~~].

Basis: Change "designated uses which are attainable" to "attainable uses" to simplify.

C. It is also recognized that contributions of water contaminants by diffuse nonpoint sources of water pollution may make attainment of certain [~~standards~~] criteria[4] difficult. Revision of these [~~standards~~] criteria[4] may be [~~required~~] necessary as new information is obtained on nonpoint sources and other problems unique to semi-arid regions.

Basis: Change "required" to "necessary." "Required" raises questions as to who or what will require the changes.

20.6.4.10 APPLICABILITY OF WATER QUALITY STANDARDS:

A. [~~**Livestock Watering and Wildlife Habitat Uses**~~] **Waters Created by Discharge**

~~**(1)**~~ When a discharge [~~creates a water which could be used by livestock and/or wildlife in a non-classified~~,] to an otherwise ephemeral surface water of the state[~~, such water shall be protected for the uses of livestock watering and/or wildlife habitat by the standards applicable to these uses as set forth in 20.6.4.900 NMAC.~~

~~**(2)** Designated uses of such water will be limited to livestock watering and/or wildlife habitat only when such a water does not enter a classified surface water of the state with criteria which are more restrictive than those necessary to protect livestock watering and/or wildlife habitat, except in direct response to precipitation or runoff. The commission shall adopt any additional designated uses for such surface waters of the state by rulemaking proceedings.~~

~~**(3)** When such a water, except in direct response to precipitation or runoff~~,] causes water to enter a [~~enters a classified~~] surface water of the state with criteria [~~which~~] that[2] are more restrictive than ~~[those~~ [~~necessary to protect secondary contact, livestock watering and or wildlife habitat, the numeric standards~~] the criteria listed in 20.6.4.98 NMAC, the more restrictive criteria [~~established for the classified surface water of the state~~] shall apply at the point such a water enters the [~~classified~~] surface water of the state with the more restrictive criteria. If discharge to such otherwise ephemeral water of the state ceases or is diverted elsewhere[~~, all uses adopted under this section or subsequently under additional rulemaking proceedings for such waters of the state shall be deemed no longer designated, existing, or attainable~~] the criteria listed in 20.6.4.98 NMAC shall apply.

Basis: This subsection currently serves two purposes. First, it is considered to be the source of "default" uses of livestock watering and wildlife habitat for all unclassified ephemeral waters. The need for that interpretation would be eliminated by adoption of the proposed Section 98, which would assign uses to all currently unclassified ephemeral and intermittent surface waters. The second purpose is to deal with effluent dependent waters. This subsection retains the provision that when a discharge to an otherwise ephemeral stream causes water to enter a classified stream with more stringent criteria, the more stringent criteria apply to water entering the classified stream. If the discharge ceases or is diverted elsewhere the criteria in Section 98 apply.

B. Critical Low Flow: The numeric standards set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC may not be attainable when streamflow is less than the critical low flow [~~of the stream in question~~][3], but narrative criteria in 20.6.4.12 NMAC will continue to apply. The critical low flow of a stream at a particular site shall be:

Basis: The current provision does not address what criteria are applicable below the critical low flow.

(1) for human health criteria, 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.

$$\text{Harmonic Mean} = \frac{n}{\sum \frac{1}{\cancel{x}\ Q}}$$

where, n = number of flow values
and Q = flow value

$$\text{Modified Harmonic Mean} = \left[\frac{\sum_{i=1}^{Nt-No} \frac{1}{Qi}}{Nt-No}\right]^{-1} x \left[\frac{Nt-No}{Nt}\right]$$

where, Qi = nonzero flow
Nt = total number of flow values
and No = number of zero flow values

Basis: "Q" substituted for "x" in equation for harmonic mean for consistency with formula for modified harmonic mean; definitions provided for "n" and "Q".

(2) for all other narrative and numeric criteria, the minimum average four consecutive day flow [~~which~~] that[2] occurs with a frequency of once in three years (4Q3). Critical low-flow numeric values may be determined on an annual, a seasonal or a monthly basis, as appropriate, after due consideration of site-specific conditions.

C. Guaranteed Minimum Flow: [~~On a case-by-case basis and upon consultation with the interstate stream commission,~~] The commission may allow the use of a contractually guaranteed minimum streamflow in lieu of a critical low flow determined under Subsection B of this section on a case-by-case basis and upon consultation with the interstate stream commission. Should drought, litigation or any other reason interrupt or interfere with minimum flows under a

guaranteed minimum flow contract for a period of at least thirty consecutive days, such permission, at the sole discretion of the commission, may then be revoked. Any minimum flow specified under such revoked permission shall be superseded by a critical low flow determined under Subsection B of this section. A public notice of the request for a guaranteed minimum flow shall be published in a newspaper of general circulation by the department at least 30 days prior to scheduled action by the commission. These water quality standards do not grant to the commission or any other entity the power to create, take away or modify property rights in water.

Basis: First sentence contains references to two commissions. Restructured to remove possible ambiguity in the identity of the commission.

D. Mixing Zones: A limited mixing zone, contiguous to a point source wastewater discharge, may be allowed in any stream receiving such a discharge. Mixing zones serve as regions of initial dilution [~~which~~] that[2] allow the application of a dilution factor in calculations of effluent limitations. Effluent limitations shall be developed [~~which~~] that[2] will protect the most sensitive existing, designated or attainable use of the receiving water.

E. Mixing Zone Limitations: Wastewater mixing zones, in which the numeric [~~standards~~] criteria[4] set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC or 20.6.4.900 NMAC may be exceeded, shall be subject to the following limitations:

(1) Mixing zones are not allowed for discharges to publicly owned lakes, reservoirs, or playas; these effluents shall meet all applicable [~~standards~~] criteria[4] set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC at the point of discharge.

(2) The acute numeric [~~standards~~] criteria[4], as set out in Paragraph (1) of Subsection [~~J~~] I[14], Subsection [~~M~~] J[14], [~~Paragraph (1) of Subsection N, and Paragraph (1) of~~] and Subsection [~~O~~] K[14] of 20.6.4.900 NMAC, shall be attained at the point of discharge for any discharge to a surface water of the state with a designated [~~fishery~~] [5] aquatic life use.

(3) The general [~~standards~~] criteria[4] set out in Subsections A, B, C, D, E, G, H, J of 20.6.4.12 NMAC, and the provision set out in Subsection D of 20.6.4.13 NMAC are applicable within mixing zones.

(4) The areal extent and concentration isopleths of a particular mixing zone will depend on site-specific conditions including, but not limited to, wastewater flow, receiving water critical low flow, outfall design, channel characteristics and climatic conditions and, if needed, shall be determined on a case-by-case basis. When the physical boundaries or other characteristics of a particular mixing zone must be known, the methods presented in Section 4.4.5, "Ambient-induced mixing," in "Technical support document for water quality-based toxics control" (March 1991, EPA/505/2-90-001) shall be used.

(5) All applicable water quality [~~standards~~] criteria[4] set under Subsection F of 20.6.4.12 NMAC, 20.6.4.101 through 20.6.4.899 NMAC and 20.6.4.900 NMAC, except Paragraph (1) of Subsection [~~J~~] I, acute aquatic life criteria of Subsection [~~M~~] J[14], [~~Paragraph (1) of Subsection N, and Paragraph (1) of Subsection O~~] and Subsection K[14] of 20.6.4.900 NMAC, shall be attained at the boundaries of mixing zones. A continuous zone of passage through or around the mixing zone shall be maintained in which the water quality meets all applicable [~~standards~~] criteria[4] and allows the migration of aquatic life presently common in surface waters of the state with no effect on their populations.

F. **Multiple Uses**: When a classified water of the state has more than a single designated use, the applicable numeric [~~standards~~] criteria[4] shall be the most stringent of those established for such classified water.

G. Human health [~~standards~~] criteria[4] in Subsection J of Section 20.6.4.900 NMAC shall apply to those waters with a designated, existing or attainable [~~fishery~~] aquatic life[5] use, except that when limited aquatic life is a designated use, the human health criteria shall apply only if adopted on a segment-specific basis. The human health [~~standards~~] criteria[4] for persistent toxic pollutants, as identified in Subsection [~~M~~] J[14] of Section 20.6.4.900 NMAC, shall also apply to all tributaries of waters with a designated, existing or attainable [~~fishery~~] aquatic life[5] use.

Basis: This proposal is intended to retain the applicability of human health criteria as they are currently applicable. An exception is provided for waters receiving the new limited aquatic life designated use.

H. **Aquatic Life:** Aquatic life criteria shall apply to all surface waters of the state containing an aquatic life community. Except when a limited aquatic life use has been designated on a segment-specific basis, or when otherwise provided in this part, chronic aquatic life criteria listed in 20.6.4.900 M are applicable to all perennial surface waters of the state, and acute aquatic life criteria listed in 20.6.4.900 M are applicable to all surface waters of the state.

Basis: Adds language to define when aquatic life criteria are applicable.

I. **Exceptions:** Numeric criteria for temperature, dissolved solids, dissolved oxygen, sediment or turbidity adopted under the Water Quality Act do not apply when changes in temperature, dissolved solids, dissolved oxygen, sediment or turbidity in a surface water of the state are attributable to:

(1) natural causes (Discharges from municipal separate storm sewers are not covered by this exception.); or

(2) the reasonable operation of irrigation and flood control facilities that are not subject to federal or state water pollution control permitting. Major reconstruction of storage dams or diversion dams except for emergency actions necessary to protect health and safety of the public are not covered by this exception.

Language moved from 20.6.4.12 and restructured.

20.6.4.11 COMPLIANCE WITH WATER QUALITY STANDARDS:

A. Compliance with acute water quality [~~standards~~] criteria[4] shall be determined from the analytical results of a single grab sample. Acute [~~standards~~] criteria[4] shall not be exceeded.

B. Compliance with chronic water quality [~~standards~~] criteria[4] shall be determined from the arithmetic mean of the analytical results of samples collected using applicable protocols. Chronic [~~standards~~] criteria[4] shall not be exceeded more than once every three years.

C. Compliance with water quality [~~standards~~] criteria[4] for total ammonia shall be determined by performing the biomonitoring procedures set out in Subsections D and E of

20.6.4.13 NMAC, or by attainment of applicable ammonia [~~standards~~] criteria[4] set out in Subsections [~~N and O~~] K, L and M[14] of 20.6.4.900 NMAC.

D. Compliance with water quality [~~standards~~] criteria[4] for the protection of human health shall be determined from the analytical results of representative grab samples, as defined in the Water Quality Management Plan. Human health [~~standards~~] criteria[4] shall not be exceeded.

E. The commission may establish a numeric water quality [~~standard~~] criterion[4] at a concentration that is below the minimum quantification level. In such cases, the water quality [~~standard~~] criterion[4] is enforceable at the minimum quantification level.

F. In determining compliance with [~~standards~~] criteria[4] for chromium an analysis [~~which~~] that[2] measures both the trivalent and hexavalent ions shall be used.

G. For compliance with hardness-dependent numeric [~~standards dependent on hardness~~] criteria[4], hardness (as mg $CaCO_3$/L) shall be determined from a sample taken at the same time that the sample for the water contaminant is taken[~~, or from available verifiable data sources including, but not limited to, the U.S. environmental protection agency's STORET water quality database~~].

Basis: "Standards dependent on hardness" changed to "hardness-dependent" to simplify. Final phrase eliminated to require hardness determination be made from same sampling event.

H. The hardness-dependent formulae for metals shall be valid only for hardness values of 0-400 mg/L. For values above 400 mg/L, the value for 400 mg/L shall apply.

I. The total ammonia tables shall be valid only for temperatures of 0 to 30°C and for pH values of 6.5 to 9.0. For temperatures below 0°C, the total ammonia [~~standards~~] criteria[4] for 0°C shall apply; for temperatures above 30°C, the total ammonia [~~standards~~] criteria[4] for 30°C shall apply. For pH values below 6.5, the total ammonia [~~standards~~] criteria[4] for 6.5 shall apply; for pH values above 9.0, the total ammonia [~~standards~~] criteria[4] for 9.0 shall apply.

J. **Compliance Schedules**: It shall be the policy of the commission to allow on a case-by-case basis the inclusion of a schedule of compliance in a national pollutant discharge elimination system (NPDES) permit issued to an existing facility. 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. 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).

20.6.4.12 GENERAL [~~STANDARDS~~] CRITERIA[4]: General [~~standards~~] criteria[4] are established to sustain and protect existing or attainable uses of surface waters of the state. These general [~~standards~~] criteria[4] apply to all surface waters of the state at all times, unless a specified [~~standard~~] criterion[4] 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. [~~When changes in dissolved oxygen, temperature, dissolved solids, sediment or turbidity in a water of the state is attributable to natural causes or~~

~~the reasonable operation of irrigation and flood control facilities that are not subject to federal or state water pollution control permitting, numerical standards for temperature, dissolved solids content, dissolved oxygen, sediment or turbidity adopted under the Water Quality Act do not apply. The foregoing provision does not include major reconstruction of storage dams or diversion dams except for emergency actions necessary to protect health and safety of the public, or discharges from municipal separate storm sewers.~~]

Basis: Final two sentences moved to section 10.J.

A. Bottom Deposits, and Suspended or Settleable Solids:

(1) Surface waters of the state shall be free of water contaminants including fine sediment particles (less than two millimeters in diameter), precipitates, or organic or inorganic solids from other than natural causes that [~~will settle and~~] have settled to form layers on or fill the interstices of the natural or dominant substrate in quantities that damage or impair the normal growth, function, or reproduction of aquatic life or significantly alter the physical or chemical properties of the bottom.

(2) Suspended or settleable solids from other than natural causes shall not be present in surface waters of the state in quantities that damage or impair the normal growth, function, or reproduction of aquatic life or adversely affect other designated uses.

Basis: A "bottom deposit" implies a material that has settled to the bottom of a water body, but the current language refers to a material that "will settle." The use of the future tense causes ambiguity. The proposal attempts to establish separate provisions for those materials that have settled and those that have not settled.

D. [~~Odor and Taste of Fish~~] Organoleptic Quality:

(1) Flavor of Fish: Water contaminants from other than natural causes shall be limited to concentrations that will not impart unpalatable flavor to fish.

(2) Odor and taste of water:, Water contaminants from other than natural causes shall be limited to concentrations that will not result in offensive odor or taste arising in a surface water of the state or otherwise interfere with the reasonable use of the water.

Basis: Re-titled and restructured to reflect the content of the subsection. "Organoleptic" is the term generally used to describe effects registered by human senses of taste and smell.

E. Plant Nutrients: Plant nutrients from other than natural causes shall not be present in concentrations [~~which~~] that[2] will produce undesirable aquatic life or result in a dominance of nuisance species in surface waters of the state.

F. Toxic Pollutants:

(1) Except as provided in 20.6.4.15 or 20.6.4.16 NMAC, surface waters of the state shall be free of toxic pollutants from other than natural causes in amounts, concentrations or combinations [~~which~~] that[2] affect the propagation of fish or [~~which~~] that[2] 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 [~~which~~] that[2] will or can reasonably be expected to bioaccumulate in tissues of fish, shellfish and other aquatic organisms to levels [~~which~~] that[2]

will impair the health of aquatic organisms or wildlife or result in unacceptable tastes, odors or health risks to human consumers of aquatic organisms.

Basis: Provision for use of aquatic pesticides moved to separate sections.

(2) Pursuant to this section, the human health criteria shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for human health not listed in 20.6.4.900 NMAC, the following provisions shall be applied in accordance with 20.6.4.10, 20.6.4.11 and 20.6.4.13 NMAC.

(a) The human health criterion shall be the recommended human health criterion for "consumption of organisms only" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act. In determining such criterion for a cancer-causing toxic pollutant, a cancer risk of 10^{-5} (one cancer per 100,000 exposed persons) shall be used.

(b) When a numeric criterion for the protection of human health has not been published by the U.S. environmental protection agency, a quantifiable criterion may be derived from data available in the U.S. environmental protection agency's Integrated Risk Information System (IRIS).

(3) Pursuant to this section, the chronic aquatic life criteria shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for aquatic life with no chronic criterion listed in 20.6.4.900 NMAC, the following provisions shall be applied in sequential order in accordance with 20.6.4.10, 20.6.4.11 and 20.6.4.13 NMAC.

(a) The chronic aquatic life criterion shall be the "freshwater criterion continuous concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act;

(b) If the U.S. environmental protection agency has not published a chronic aquatic life criterion, a geometric mean LC-50 value shall be calculated for the particular species, genus or group[~~, which~~] that[2] is representative of the form of life to be preserved, using the results of toxicological studies published in scientific journals.

(i) The chronic aquatic life criterion for a toxic pollutant [~~which~~] that[2] does not bioaccumulate shall be 10 percent of the calculated geometric mean LC-50 value; and

(ii) The chronic aquatic life criterion for a toxic pollutant [~~which~~] that[2] does bioaccumulate shall be: the calculated geometric mean LC-50 adjusted by a bioaccumulation factor for the particular species, genus or group representative of the form of life to be preserved, but when such bioaccumulation factor has not been published, the criterion shall be one percent of the calculated geometric mean LC-50 value.

(4) Pursuant to this section, the acute aquatic life criteria shall be as set out in 20.6.4.900 NMAC. For a toxic pollutant for aquatic life with no acute criterion listed in 20.6.4.900 NMAC, the acute aquatic life criterion shall be the "freshwater criterion maximum concentration" published by the U.S. environmental protection agency pursuant to Section 304(a) of the federal Clean Water Act.

(5) Within 90 days of the issuance of a final NPDES permit containing a numeric criterion selected or calculated pursuant to Paragraph 2, Paragraph 3 or Paragraph 4 of Subsection F of this section, the Department shall petition the Commission to adopt such criterion into these standards.

~~**(6)** The use of a piscicide registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. Section 136 *et seq*., and under the New Mexico Pesticide Control Act (NMPCA), Section 76-4-1 *et seq*. NMSA 1978 (1973), shall not be a violation of Subsection F of this section when such use has been approved by the commission. Any person seeking commission approval of the use of a piscicide shall file a written petition with the commission. The petition shall contain, at a minimum, the following information: (1) petitioner's name and address; (2) identity of the piscicide; (3) documentation of registration under FIFRA and NMPCA; (4) target and potential non-target species, including threatened or endangered species; (5) potential environmental consequences and protocols for limiting such impacts; (6) affected surface water of the state; (7) results of pre-treatment survey; (8) evaluation of available alternatives and justification for selecting piscicide use; (9) post-treatment assessment monitoring protocol; and (10) any other information required by the commission. The commission shall review the petition and require a public hearing in the locality affected by the proposed use in accordance with Adjudicatory Procedures, 20.1.3 NMAC. In addition to the public notice requirements in Adjudicatory Procedures, 20.1.3 NMAC, the petitioner shall provide written notice to (1) local political subdivisions; (2) local water planning entities; (3) local conservancy and irrigation districts; and (4) local media outlets, except that the petitioner shall only be required to publish notice in a newspaper of circulation in the locality affected by the proposed use. After a public hearing, the commission may grant the petition in whole or in part, may grant the petition subject to conditions, or may deny the petition. In granting any petition in whole or part or subject to conditions, the commission shall require the petitioner to implement post-treatment assessment monitoring.~~

Basis: Paragraph 6 moved to separate section.

G. Radioactivity: The radioactivity of surface waters of the state shall be maintained at the lowest practical level and shall in no case exceed the [~~standards~~] criteria[4] set forth in the New Mexico Radiation Protection Regulations, 20.3.1.400 through 20.3.1.499 NMAC (5-3-95).

H. Pathogens: Surface waters of the state shall be [~~virtually~~] free of pathogens from other than natural sources in sufficient quantity to impair public health or the designated, existing or attainable uses of a surface water of the state. [~~In particular, surface waters of the state used for irrigation of table crops such as lettuce shall be virtually free of *Salmonella* and *Shigella* species~~.]

Basis: "Virtually free" is vague and unenforceable. The final sentence appears to come close to impinging on authorities of the Department of Agriculture or Department of Health regarding the quality of table crops.

I. Temperature: Maximum temperatures for each classified water of the state have been specified in 20.6.4.101 through 20.6.4.899 NMAC. However, the introduction of heat by other than natural causes shall not increase the temperature, as measured from above the point of introduction, by more than 2.7°C (5°F) in a stream, or more than 1.7°C (3°F) in a lake or reservoir. In no case will the introduction of heat be permitted when the maximum temperature specified for the reach [~~(generally 20°C (68°F) for coldwater fisheries and 32.2°C (90°F) for~~

~~warmwater fisheries)~~] would thereby be exceeded. These temperature [~~standards~~] criteria[4] shall not apply to impoundments constructed offstream for the purpose of heat disposal. High water temperatures caused by unusually high ambient air temperatures are not violations of these standards.

Basis: The eliminated phrase is unnecessary. The segment specific temperature criteria will control regardless of what the temperature for a use is "generally."

J. Turbidity: Turbidity attributable to other than natural causes shall not reduce light transmission to the point that the normal growth, function, or reproduction of aquatic life is impaired or that will cause substantial visible contrast with the natural appearance of the water. Turbidity shall not exceed 10 NTU over background turbidity when the background turbidity is 50 NTU or less, or increase more than 20 percent when the background turbidity is more than 50 NTU. Background turbidity shall be measured at a point immediately upstream of the turbidity-causing activity. However, limited-duration activities necessary to accommodate essential dredging, construction or other legitimate activities and that cause the criterion to be exceeded may be authorized provided all practicable turbidity control techniques have been applied and the activity is carried out under a CWA Section 404 permit issued by the U.S. Army Corps of Engineers and certified under CWA Section 401 by NMED.

Basis: The proposed language will replace all segment- and use-specific numeric turbidity criteria with a uniform requirement, applicable to all waters of the State. This proposal will allow for the protection of waters from activities that increase the levels of turbidity over background levels, while not assigning an inappropriate designation of impairment during periods of natural sediment-transport, such as runoff. This revised standard reflects findings by David Rosgen concerning the geomorphology and proper functioning of flowing waters. This proposal will also provide a mechanism for permitting activities that create short-term increases in turbidity, thus assuring that such activities will encompass all appropriate BMPs. Conditions of Section 404 permits and NMED certifications will ensure compliance with the antidegradation policy (e.g., an activity that would significantly increase bottom deposits in a coldwater fishery should not take place during spawning season, when the bottom must be free of fine sediments for spawning success).

Implementation of this proposed change will necessitate changes to existing language for the following 30 segments and for Section 20.6.4.900.C (now 20.6.4.900.H(1)):

20.6.4.102, 20.6.4.104, 20.6.4.107, 20.6.4.108, 20.6.4.109, 20.6.4.112, 20.6.4.113, 20.6.4.114, 20.6.4.115, 20.6.4.119, 20.6.4.120, 20.6.4.121, 20.6.4.122, 20.6.4.123, 20.6.4.203, 20.6.4.209, 20.6.4.210, 20.6.4.214, 20.6.4.215, 20.6.4.217, 20.6.4.302, 20.6.4.304, 20.6.4.309, 20.6.4.405, 20.6.4.406, 20.6.4.503, 20.6.4.603, 20.6.4.802, 20.6.4.804 and 20.6.4.805.

K. [~~**Salinity:** Where existing information is sufficient, numerical standards for TDS (or conductivity), chlorides and sulfates, have been adopted in 20.6.4.101 through 20.6.4.899 NMAC. The following standards apply at the downstream point of the reach in which they are set:~~] **Total Dissolved Solids (TDS)**: TDS attributable to other than natural causes shall not damage or impair the normal growth, function or reproduction of animal, plant or aquatic life.

TDS shall be measured by either the "calculation method" (sum of constituents) or the filterable residue method. Approved test procedures for these determinations are as set forth in 20.6.4.13 NMAC.

Basis: The present language does not establish a narrative criterion, it only acknowledges the existence of numeric criteria in some segments. Salinity is actually a subset of TDS, and the parameter generally measured is TDS.

~~**(1) Colorado River System:** For the tributaries of the Colorado river system, the state of New Mexico will cooperate with the Colorado river basin states and the federal government to support and implement the salinity policy and program outlined in the report "1999 Review, water quality standards for salinity, Colorado river system."~~

~~**(2) (a)** Numeric criteria for salinity are established at three points in the Colorado river basin as follows: below Hoover dam, 723 mg/L; below Parker dam, 747 mg/L; and at Imperial dam, 879 mg/L.~~

~~**(3) (b)** As a part of the program, objectives for New Mexico shall include the elimination of discharges of water containing solids in solution as a result of the use of water to control or convey fly ash from coal-fired electric generators, wherever practicable.~~

~~**(4)** In determining compliance with the numeric criteria hereby adopted, salinity (TDS) shall be determined by either the "calculation method" (sum of constituents) or the filterable residue method. Approved test procedures for these determinations are as set forth in 20.6.4.13 NMAC.~~

Basis: Restructuring to separate the general narrative from the Colorado River provision. Colorado River Basin provisions moved to new Section 54. Alternatively these provisions could be moved to Section 400, just ahead of the San Juan segments.

20.6.4.13 SAMPLING AND ANALYSIS:

A. [~~All methods of sample collection, preservation and analysis used in determining water quality and maintenance of these standards shall be in accordance with approved or accepted test procedures published in "Guidelines establishing test procedures for the analysis of pollutants under the Clean Water Act," 40 CFR Part 136 or any test procedure approved or accepted by EPA using procedures provided in 40 CFR Parts 136.3(d), 136.4, and 136.5. Test procedures approved or accepted under 40 CFR Part 136 are published in the references cited herein and in other references~~.

~~**(1)** "Standard methods for the examination of water and wastewater," American public health association.~~

~~**(2)** "Methods for chemical analysis of water and wastes," U.S. environmental protection agency.~~

~~**(3)** "Methods for determination of inorganic substances in water and fluvial sediments," techniques of water-resource investigations of the U.S. geological survey.~~

~~**(4)** "Methods for the determination of organic substances in water and fluvial sediments," techniques of water-resource investigations of the U.S. geological survey~~.]

Sampling and analytical techniques shall conform with project data quality objectives and methods described in the following references unless otherwise specified by the secretary:

(1) "Guidelines establishing test procedures for the analysis of pollutants under the Clean Water Act," 40 CFR Part 136 or any test procedure approved or accepted by EPA using procedures provided in 40 CFR Parts 136.3(d), 136.4, and 136.5.

(2) *Standard Methods for the Examination of Water and Wastewater*, latest edition, American Public Health Association; or

(3) *Methods for Chemical Analysis of Water and Waste*, and other publications of the Analytical Quality Laboratory, EPA; or

(4) *Techniques of Water Resource Investigations* of the U.S. Geological Survey; or

(5) *Annual Book of ASTM Standards*. Part 31. Water, latest edition, American Society For Testing and Materials; or

(6) Federal Register, latest methods published for monitoring pursuant to Resource Conservation and Recovery Act regulations; or

(7) *National Handbook of Recommended Methods for Water-Data Acquisition*, latest edition, prepared cooperatively by agencies of the United States Government under the sponsorship of the U.S. Geological Survey; or

(8) Federal Register, latest methods published for monitoring pursuant to the Safe Drinking Water Act regulations.

Basis: The procedures prescribed in 40 CFR 136 apply specifically to applications for a permit under section 402 of the Clean Water Act and/or to reports required to be submitted under NPDES permits or other requests for quantitative or qualitative effluent data under parts 122 to 125 of title 40, and reports required to be submitted by discharges under the NPDES established by parts 124 and 125 of title 40, and certifications issued by States pursuant to section 401 of the CWA. "Accepted" methods are not published in 40 CFR 136. Provision restructured to list the sources of test procedures. The current list of references includes only four of forty-three references listed in 40 CFR 136.3. The phrase"or in other references" is extremely vague. Proposed new references (2) through (7) are derived from the list of methods adopted by the WQCC for the Ground Water Quality Bureau under 20.6.2.3107.B NMAC. The GWQB is proposing to add the methods published pursuant to the SDWA. Proposal would bring some consistency between the regulations for SWQB and GWQB.

B. Bacteriological Surveys: The monthly geometric mean shall be used in assessing attainment of [~~standards~~] criteria[4] when a minimum of five samples is collected in a 30-day period.

C. Sampling Procedures:

(1) Streams: Stream monitoring stations below [~~waste~~] discharges shall be located a sufficient distance downstream to ensure adequate vertical and lateral mixing.

Basis: "Waste" deleted. See new definition of "discharge." "Waste discharges" are not necessarily limited to WWTPs. See also Subsection 10 D.

(2) Lakes: Sampling stations in lakes shall be located at least 250 feet from a [~~waste~~] discharge.

Basis: "Waste" deleted. See new definition of "discharge." "Waste discharges" are not necessarily limited to WWTPs.

(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 standard 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 [~~standards~~] criteria[4], except that attainment of [~~standards~~] criteria[4] 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.

D. Acute toxicity of effluent to aquatic life shall be determined using the procedures specified in U.S. environmental protection agency "*Methods for measuring the acute toxicity of effluents and receiving waters to freshwater and marine organisms*" [~~(4th Ed., 1991, EPA/600/4-90/027)~~] (5th Ed., 2002, EPA 821-R-02-012), or latest edition thereof, which is incorporated herein by reference. Acute toxicities of substances shall be determined using at least two species tested in whole effluent and a series of effluent dilutions. Acute toxicity due to discharges shall not occur within the wastewater mixing zone in any surface water of the state with an existing or designated [~~fishery~~] [5] aquatic life use.

Basis" 5th edition made available 19 Nov 2002, includes change in official title.

E. Chronic toxicity of effluent or ambient surface waters of the state to aquatic life shall be determined using the procedures specified in U.S. environmental protection agency "*Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms*" [~~(2nd Ed., 1989, EPA 600/4-89/001)~~] (4th Ed., 2002,EPA 821-R-02-013), or latest edition thereof, which is incorporated herein by reference. Chronic toxicities of substances shall be determined using at least two species tested in ambient surface water or whole effluent and a series of effluent dilutions. Chronic toxicity due to discharges shall not occur at the critical low flow, or any flow greater than the critical low flow, in any surface water of the state with an existing or designated [~~fishery~~] [5] aquatic life use more than once every three years.

Basis: 4th edition made available 19 Nov 2002.

20.6.4.14 USE ATTAINABILITY ANALYSIS:

A. A use attainability analysis is a scientific study [~~which~~] that[2] shall be conducted only 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 [~~as follows~~][3].

(1) [~~The department must conduct a use attainability analysis whenever it~~] Any person who proposes to classify or reclassify a surface water of the state with designated uses [~~which~~] that[2] do not include the uses specified in Section 101(a)(2) of the federal Clean Water Act must conduct a use attainability analysis. Section 101(a)(2) uses are also specified in Subsection B of 20.6.4.6 NMAC.

Basis: Regardless of the proponent, a UAA is necessary whenever a classification does not include the 101(a)(2) uses.

(2) A designated use cannot be removed if it is an existing use.

(3) A use attainability analysis or an equivalent study approved by the department and the regional administrator must be conducted to remove any non-existing designated use from any classified waters of the state.

[~~**B.** Any person proposing to conduct a use attainability analysis or equivalent study shall publish notice of this intent in a newspaper of local and statewide circulation. The cost of publication shall be the responsibility of the person proposing such action. The notice shall describe the surface water of the state and uses to be assessed, identify the persons to contact for complete information, and describe how interested persons can participate in the use attainability analysis or equivalent study.~~]

Basis: Any proposed changes arising as a result of a UAA will require a petition to the WQCC to revise the Standards, and publication of notice at that time will be required. Early public participation should be encouraged, but requiring publication of a "notice of intent" to conduct a UAA places an unnecessary burden on the proponent.

Former subsections D, E & F relocated here to group the general provisions, and relettered accordingly.

[~~**D**~~] **B.** Physical, chemical and biological evaluations of surface waters of the state other than lakes and reservoirs for purposes of use attainability analyses or equivalent studies shall be conducted according to the procedures outlined in the "Technical support manual: waterbody surveys and assessments for conducting use attainability analyses," United States environmental protection agency, office of water, regulations and standards, Washington, D.C., November 1983, or latest edition thereof, which is incorporated herein by reference, or an alternative equivalent study methodology approved by the department.

[~~**E**~~] **C.** Physical, chemical and biological evaluations of lakes and reservoirs for purposes of use attainability analyses or equivalent studies shall be conducted according to the procedures outlined in the "Technical support manual: waterbody surveys and assessments for conducting use attainability analyses, volume III: lake systems," United States environmental protection agency, office of water, regulations and standards, Washington, D.C., November 1984, or latest edition thereof, which is incorporated herein by reference, or an alternative equivalent study methodology approved by the department.

[~~**F**~~] **D.** A use attainability analysis or equivalent study should include [~~any applicable information concerning the following~~][3]:

(1) identification of existing uses of the surface water of the state to be reviewed [~~which~~] that[2] have existed since 1975;

(2) an evaluation of the best water quality attained in the surface water of the state to be reviewed [~~which~~] that[2] has existed since 1975;

(3) [~~a technological analysis which identifies available treatment options for point and nonpoint sources to meet applicable water quality [standards] criteria for the designated uses;~~ an analysis of appropriate factors demonstrating that attaining the designated use is not feasible because of a condition listed in 40 CFR Subsection 131.10(g).

~~**(4)** an economic analysis which evaluates social and economic impacts associated with available treatment options;~~];

Basis: Existing paragraphs (3) and (4) removed because technological and economic analyses are not appropriate for all UAAs. For instance, if a UAA is based upon naturally occurring pollutant concentrations preventing attainment of the use technological and economic factors will generally not be involved. If the UAA is prepared because of a condition listed in 40 CFR 131.10(g) that has economic or technological ramifications the new language in paragraph (3) would address those issues.

(~~5~~ 4) a physical [~~and biological~~] evaluation of the surface water of the state to be reviewed to identify [~~any~~][3] factors [~~unrelated to water quality which~~] that[2] impair attainment of designated uses and to determine which designated uses are feasible to attain in such surface water of the state [~~given existing physical limitations~~];

Basis: "And biological" removed because it is duplicative of paragraph (6) (formerly paragraph 7). "Unrelated to water quality" is ambiguous. "Given existing physical limitations" is unnecessary because it is the physical limitations that are the subject of this paragraph.

(~~6~~ 5) an evaluation of the water chemistry of the surface water of the state to be reviewed to identify chemical constituents [~~which~~] that[2] impair the designated uses [~~which~~] that[2] are feasible to attain in such water; and

(~~7~~ 6) an evaluation of the aquatic and terrestrial biota utilizing the surface water of the state to determine resident species and which species could potentially exist in such water if physical and chemical factors impairing a designated use are corrected.

[~~C~~] **E.** Any person may submit [~~a petition~~] notice to the department stating that they intend to conduct a use attainability analysis or equivalent study. [~~At a minimum, the department, the New Mexico game and fish department, the state engineer and the U.S. fish and wildlife service shall be consulted during the development of a work plan for such analysis or equivalent study.~~] The [~~petitioner~~] proponent shall develop a work plan to conduct the use attainability analysis or equivalent study and shall submit the work plan to the department and the regional [~~administrator of the~~] EPA staff for review [~~and approval~~] and comment. The work plan should identify the scope of data currently available and proposed to be gathered, the factors affecting use attainment that will be analyzed, and must contain provisions for public notice and consultation with appropriate state and federal agencies. A copy of the [~~petition~~] notice and the work plan must be submitted concurrently to the commission. Upon approval of the work plan by the department [~~and the regional administrator~~], the [~~petitioner~~] proponent shall conduct the use attainability analysis or equivalent study in accordance with the approved work plan. The cost of such analysis or equivalent study shall be the responsibility of the [~~petitioner~~] proponent.

Upon completion of the use attainability analysis or equivalent study, the proponent shall submit the data, findings and conclusions to the department and the commission .

Resons: Previously subsection C. Changes "petition" to "notice" and "petitioner" to "proponent". A petition may be submitted to the Commission if the UAA determines that a change to the standards is appropriate, but the notice and work plan do not rise to the status of a petition. Sentence concerning consultation relocated into work plan provisions because not all UAAs will involve fish or wildlife issues. For example a UAA to determine attainability of a recreational use (primary or secondary contact) would generally not require consultation with the Game and Fish Department. Approval of the work plan should include any necessary consultation requirements on a proposal-specific basis. EPA staff substituted for the administrator of EPA for review of the work plan. New sentence added to provide guidance for the content of a work plan. Reference to the EPA regional administrator removed from the sentence regarding approval of the work plan. Final sentence moved from subsection G.

G. [~~Upon completion of the use attainability analysis or equivalent study, the petitioner shall submit to the department and the commission the data and their findings and conclusions~~.] If the department determines that the analysis or equivalent study was conducted in accordance with the approved work plan and the findings and conclusions are based upon sound scientific rationale, and demonstrates that it is not feasible to attain the designated use, the department [~~shall~~] or the proponent may request [~~authority from~~] the commission to initiate rulemaking proceedings to modify the designated use for the surface water of the state that was reviewed.

Basis: First sentence moved to previous subsection. The phrase "authority from" is eliminated as unnecessary. The "authority" for the department or the proponent to request" initiation of rulemaking proceedings" is contained in Section 74-6-6(B) NMSA, which provides that "any person may petition in writing to have the commission adopt, amend or repeal a regulation or water quality standard."

20.6.4.15 Planned Use of a Pesticide: The use of a pesticide registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. Section 136 *et seq*., and under the New Mexico Pesticide Control Act (NMPCA), Section 76-4-1 *et seq*. NMSA 1978 (1973) in a surface water of the state, shall not be a violation of Subsection F of 20.6.4.12 NMAC when such use has been approved by the commission under procedures provided in this Section. The commission may approve the reasonable use of a pesticide under this Section to further a federal Clean Water Act objective to restore and maintain the physical or biological integrity of surface waters of the state, including restoration of native species or removal of invasive or nuisance aquatic plant or animal species. The commission may approve the use of a pesticide under Subsection A of this Section for a period of five years. Following the general approval of a pesticide by the commission under Subsection A of this Section, consideration of requests for specific applications or projects using an approved pesticide may be delegated to the department for administrative approval under Subsection B of this Section.

A. Any person seeking commission approval of the use of a pesticide in a surface water of the state shall file a written petition concurrently with the commission and with the department.

(1). Petition Contents: The petition shall contain the following information:

(a) petitioner's name and address;

(b) identity of the pesticide;

(c) documentation of registration under FIFRA and NMPCA;

(d) the period of time or number applications for which approval is requested;

(e) any other information required by the commission.

(2) Department Review: Within thirty days after receipt of the petition the department shall review the petition and file a recommendation with the commission to grant, grant with conditions, or deny the petition. The recommendation shall include reasons, and a copy shall be provided to the petitioner by certified mail.

(3) Hearing requirement: If the department recommends granting the petition in whole or in part, with or without conditions, the commission shall hold a public hearing. If the department recommends denial of the petition, the commission shall only hold a hearing if the petitioner files a request for hearing within fifteen days after receipt of the department's recommendation. The public hearing shall be held in the region directly affected by the proposed use, except that a public hearing regarding statewide pesticide application shall be held in Santa Fe.

(4) Scheduling the hearing: If a hearing is required, the hearing shall be held within ninety days after the later of the filing of the department recommendation to grant or the filing of a request for hearing by the Petitioner, as applicable. The ninety day deadline may be waived upon the filing of a stipulated or unopposed motion prior to the expiration of the deadline. A scheduling order shall be issued as provided in Subsection B of 20.1.3.200 NMAC, and public notice shall be given as provided in Subsection C of 20.1.3.200 NMAC.

(5). Effect of FIFRA and NMPCA Registration: In a hearing provided for in this Section, registration of a pesticide under FIFRA and NMPCA shall provide a rebuttable presumption that the determinations of the EPA Administrator in registering the pesticide, as outlined in 7 U.S.C. Section 136a(c)(5), are valid. For purposes of this Section the rebuttable presumptions regarding the pesticide include:

(a). Its composition is such as to warrant the proposed claims for it;

(b). Its labeling and other material submitted for registration comply with the requirements of FIFRA and NMPCA;

(c). It will perform its intended function without unreasonable adverse effects on the environment; and

(d). When used in accordance with all FIFRA label requirements it will not generally cause unreasonable adverse effects on the environment.

(e). "Unreasonable adverse effects on the environment" has the meaning provided in FIFRA, 7 U.S.C. Section 136(bb): "any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide."

(6) Additional Procedures: Procedures for statements of intent to present technical evidence , for participation by persons other than parties, for discovery and for the burden of persuasion shall follow the procedures in Subsection E to Subsection H of 20.1.3.200 NMAC.

(7) Post-hearing provisions: After a public hearing, the commission may grant the petition in whole or in part, may grant the petition subject to conditions, or may deny the

petition. In granting any petition in whole or in part or subject to conditions, the commission shall require the petitioner to implement post-treatment assessment monitoring and provide notice to the public prior to and during application.

B. Procedure for Use Following Pesticide Approval. Findings of the Commission following a hearing under Subsection A of this section shall be conclusive for purposes of this subsection. A person who has received approval of the use of a pesticide from the commission under Subsection A of this section, shall file a written request with the department for approval of a site-specific application. Prior to filing the written request the petitioner shall provide public information regarding the proposed pesticide application through a public meeting to be held in the locality most directly affected by the proposed use. provide notice of the public meeting to local political subdivisions, local water planning entities, local conservancy and irrigation districts, and local media outlets at least thirty days prior to the public meeting. The public meeting may be combined with a public meeting to satisfy the requirements of NEPA if such a meeting is held.

(1). Contents: The request shall contain:

(a) petitioner's name and address;

(b) identity of the pesticide;

(c) the date of commission approval for use of the pesticide and any information required by the commission as a condition of that approval;

(d) documentation of current registration under FIFRA and NMPCA;

(e) verification that the petitioner intends to use the pesticide according to the label directions, for its intended function, and in accordance with widespread and commonly recognized practice.

(f) target and potential non-target species in the treated waters and the adjacent riparian area, including threatened or endangered species;

(g) potential environmental consequences to the treated waters and the adjacent riparian area and protocols for limiting such impacts;

(h) surface water of the state proposed for treatment;

(i) results of pre-treatment survey;

(j) evaluation of available alternatives and justification for selecting pesticide use;

(k) post-treatment assessment monitoring protocol; and

(l) information obtained in the public involvement process in a form approved by the department;

(m) any other information required by the department.

(2) Department Review: Within thirty days after receipt of the request the department shall review the request and issue a recommendation to grant, grant with conditions, or deny the request. The recommendation shall include reasons, and a copy shall be provided to the petitioner by certified mail. If the department recommends granting the request in whole or in part, with or without conditions, the petitioner shall provide public information of the proposed pesticide application and the recommendations of the department through notice to local political subdivisions, local water planning entities, local conservancy and irrigation districts, and local media outlets within ten days following receipt of the department's recommendations. Additionally, the petitioner shall provide notice to all participants in the public involvement process who have requested such notice in writing and have provided the petitioner with a mailing address.

(3) Public Hearing: Within ten days of giving notice under paragraph (2), any person objecting to the recommendation of the department may request in writing that the commission conduct a hearing to consider only those matters considered by the department in its recommendation to grant, with or without conditions, the written request of the petitioner. The commission shall grant a hearing only if it finds that there significant public interest and that there is credible scientific information concerning the matters considered by the department in granting the request in whole or in part. If the department recommends denial of the request or imposes conditions deemed unacceptable to the petitioner, the commission shall only hold a hearing if the petitioner files a request for hearing within fifteen days after receipt of the department's recommendation. If a written request for hearing is not timely made the recommendations of the department shall become final by commission order and not subject to collateral attack and the petitioner shall be entitled to act, subject to conditions imposed in the granting of the request and as imposed by the commission under Subsection A. A hearing held under this paragraph shall not include a hearing *de novo* of the findings of the commission under Subsection A, and testimony concerning the issues determined in those findings shall not be heard.

(4) Scheduling the hearing: If a hearing is held, the hearing shall be held within ninety days after the filing of a request for hearing. The ninety day deadline may be waived upon the filing of a stipulated or unopposed motion prior to the expiration of the deadline. A scheduling order shall be issued as provided in Subsection B of 20.1.3.200 NMAC, and public notice shall be given as provided in Subsection C of 20.1.3.200 NMAC.

(5) Additional Procedures: Procedures for statements of intent to present technical evidence , for participation by persons other than parties, for discovery and for the burden of persuasion shall follow the procedures in Subsection E to Subsection H of 20.1.3.200 NMAC.

(6) Post-hearing Procedures: After a public hearing, the commission may affirm, affirm with revisions, or revoke the department's decision.

C. Renewal, Modification or Revocation of Approval:

(1) Renewal: When the use of a pesticide has been approved under this Section, the original petitioner may request extension of the approval for additional periods of up to five years by filing a petition for renewal. The petition for renewal shall be filed concurrently with the commission and the department at least ninety days prior to expiration of the current approval, and shall include the items listed under Paragraph 1 of Subsection A of this Section. In addition the petitioner shall provide a report summarizing the results of its pesticide applications during the current approval period. Within thirty days, the department shall review and recommend that the petition be granted, granted with conditions or denied. The recommendation shall include reasons, and a copy shall be provided to the petitioner by certified mail. If the department recommends that the petition be granted or granted with conditions, the petitioner shall provide public notice of the request for renewal of approval by publication in at least one newspaper of general circulation in the state of New Mexico within thirty days after the date of the department recommendation. Any person may request that the commission hold a hearing regarding the renewal of approval based upon new credible scientific information concerning the product or its registration not previously considered by the commission. The commission may hold a hearing if it determines that there is a significant public interest.

(2) Modification or Revocation: The commission may review the approval of a pesticide on its own motion, or any person may request the commission to hold a hearing to

modify or revoke general approval of a pesticide previously approved under Subsection A of this section based upon new credible scientific information concerning the product or its registration not previously considered by the commission, or based upon failure to comply with the conditions of the approval. The person requesting modification or revocation, or the commission when acting on its own motion, shall serve notice on the department and any person who has received approval or has a pending request for approval of the use of the pesticide under provisions of Subsection A or B of this Section. The commission may hold a hearing if it determines that there is a significant public interest. Hearing procedures shall be as described in Subsection A of this Section.

Basis: In the current standards, 20.6.4.12.F.6 provides a "safe harbor" for the use of piscicides (fish toxins). Piscicides, and pesticides in general, are toxic. The language of 20.6.4.12.F prohibits the presence of toxic pollutants in waters of the state, but recognizing that the use of aquatic pesticides may be necessary in certain circumstances, the Commission adopted paragraph (6) to exempt the use of piscicides for use in restoring fisheries. This proposed section builds upon that existing "safe harbor," clarifying the procedures, and expanding the availability of the provision to persons who have a need to use other types of aquatic pesticides.

Although the pesticides involved have been approved under state and federal pesticide control acts, court decisions in the recent past have held that the registration of a pesticide under the federal act does not relieve the user from compliance with the Clean Water Act. This proposal is not intended to affect the New Mexico Department of Agriculture with regard to administration of its pesticide program. Rather, the intent is to recognize that when pesticides have been approved for aquatic application and are used in accordance with label directions, their use in a surface water of the state will not violate the New Mexico surface water quality standards, provided that the use is consistent with the Clean Water Act and the Water Quality Act and has been approved by the Commission.

The current provision requires the user of a pesticide to request the Commission for approval of each application, resulting duplication of effort because the same evidence and argument are presented at multiple hearings. This proposal would allow the Commission to hear evidence and decide on the appropriate use of a particular pesticide, and to determine the minimum requirements for its use. For a limited period of time, and subject to modification, renewal or revocation, a user of the pesticide would apply tto the Department for administrative approval of specific projects. The Department's approval of each project would require a public notice and a public meeting to explain the project. Most of the hearing provisions are patterned on the Commission's regulations in 20.1.3.200 NMAC.

20.6.4.16 Emergency Use of a Pesticide. The use of a pesticide registered under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 7 U.S.C. Section 136 *et seq*., and under the New Mexico Pesticide Control Act (NMPCA), Section 76-4-1 *et seq*. NMSA 1978 (1973), in a surface water of the state shall not be a violation of Subsection F 20.6.4.12 NMAC when such use has been approved by the department as a reasonable and appropriate response to an emergency. For purposes of this Section, "emergency" is defined as a situation which the cabinet secretary of the department of health, or agriculture, or director of the department of game and fish declares to pose a substantial and imminent endangerment to human health or the environment resulting from the spread or imminent spread of a disease vector, noxious weed,

pest or harmful plant. The term of the emergency may not exceed one year unless a new declaration of emergency is issued by the cabinet secretary. Any person seeking departmental approval of the use of a pesticide under this provision shall file a written petition with the department.

A. Petition: The petition shall contain the following information:

(1) petitioner's name and address;

(2) identity of the pesticide;

(3) documentation of registration under FIFRA and NMPCA;

(4) target and potential non-target species in the treated waters and the adjacent riparian area, including threatened or endangered species;

(5) potential environmental consequences to the treated waters and the adjacent riparian area and protocols for limiting such impacts;

(6) surface water of the state proposed for treatment;

(7) results of pre-treatment survey;

(8) evaluation of available alternatives and justification for selecting pesticide use;

(9) post-treatment assessment monitoring protocol;

(10) a written declaration from the appropriate cabinet secretary or department director describing the emergency;

(11) any other information required by the department.

B. Procedure: The department shall publish notice in a newspaper of circulation in the locality affected by the proposed use no later than five days after a person files a petition. The department shall review and grant, grant subject to conditions, or deny the petition within fourteen (14) days of filing. The department shall not be required to hold a public hearing. The commission shall review the department's decision at its next regularly scheduled meeting. The commission may require a public hearing in the locality affected by the proposed use in accordance with Adjudicatory Procedures, 20.1.3.200 NMAC. The commission may affirm, affirm with revisions, or revoke the department's decision.

Basis: Provides that use of pesticides for emergency purposes will not violate the water quality standards.

20.6.4.50 BASINWIDE PROVISIONS – Special provisions arising from interstate compacts, international treaties or court decrees or that otherwise apply to a basin are contained in 20.6.4.51 through 20.6.4.59.

Basis: Reserves sections for basin-specific standards. Under this proposal the final digit of the section number would be the same as the first digit of the basin segments. For example, the Rio Grande segments are numbered beginning with Section 101, so any basinwide provisions for the Rio Grande would be contained in Section 51, etc. The only basin for which basinwide provisions currently exist is the San Juan, which is subject to provisions of the Colorado River Basin Salinity Control Act.

20.6.4.54 COLORADO RIVER BASIN

A. For the tributaries of the Colorado river system, the state of New Mexico will cooperate with the Colorado river basin states and the federal government to support and implement the salinity policy and program outlined in the [~~report "1999~~] most current "*Review,*

water quality standards for salinity, Colorado river system" or equivalent report by the Colorado river salinity control forum.

Basis: A new report was published in 2002. Change to "most current" would eliminate the necessity to amend the regulations every time a new report is issued. Final phrase added to accommodate changes in the title of the report.

(1) Numeric criteria expressed as the flow-weighted annual average concentration for salinity are established at three points in the Colorado river basin as follows: below Hoover dam, 723 mg/L; below Parker dam, 747 mg/L; and at Imperial dam, 879 mg/L.

Basis: Conformed with the language of the Salinity Control Forum and other member states.

(2) As a part of the program, objectives for New Mexico shall include the elimination of discharges of water containing solids in solution as a result of the use of water to control or convey fly ash from coal-fired electric generators, wherever practicable.

Basis: Moved from Section 12K(1). Alternatively this provision could be numbered as Section 400, preceding the San Juan River segments.

20.6.4.98 EPHEMERAL AND INTERMITTENT WATERS – All ephemeral and intermittent surface waters of the state that are not included in a classified water of the state in 20.6.4.101 through 20.6.4.899 NMAC.

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

B. Criteria:

(1) The use-specific criteria in 20.6.4.900 NMAC, except the chronic criteria for aquatic life are applicable for the designated uses listed in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Provides designated uses and criteria for all ephemeral and intermittent waters that are currently considered unclassified. This proposal formalizes the current presumption of livestock watering and wildlife habitat as default uses for all unclassified waters of the state. The standard proposed includes protection for the "fishable/swimmable" goal uses of aquatic life and wildlife habitat and recreation.

20.6.4.99 PERENNIAL WATERS – All perennial surface waters of the state that are not included in a classified water of the state in 20.6.4.101 through 20.6.4.899 NMAC.

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

B. Criteria:

(1) Temperature shall not exceed 34°C (93.2°F). The use-specific criteria in 20.6.4.900 NMAC are applicable to the designated uses listed in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Provides designated uses and criteria for all perennial waters that are currently considered unclassified. The standard proposed includes protection for the "fishable/swimmable" goal uses of aquatic life and wildlife habitat and recreation.

20.6.4.101 RIO GRANDE BASIN - The main stem of the Rio Grande from the international boundary [~~and water commission sampling station above American dam~~] with Mexico upstream to one mile below Percha dam. [~~(Sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.)~~]

A. Designated Uses: irrigation, [~~limited~~] marginal[13] warmwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 34°C (93.2°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At mean monthly flows above 350 cfs, the monthly average concentration for: TDS shall not exceed 2,000 mg/L, and sulfate shall not exceed 500 mg/L., and chlorides shall not exceed 400 mg/L.

(C) Remarks: [Sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.]

Basis: Segment description changed. Standards for the Rio Grande from the international boundary and water commission sampling station above American Dam to the Mexico line need to be protective of designated uses in downstream waters. Leaving the reach below the sampling station out of this segment leaves a gap where only the basic uses and criteria of either proposed segments 98 or 99 would apply. Either the reach should be included in this segment or a new segment should be established to carry standards to the international boundary. Remarks currently included in the segment description are moved to a separate section. "Limited" changed to "marginal" to conform with change in definitions.

20.6.4.102 RIO GRANDE BASIN - The main stem of the Rio Grande from one mile below Percha dam upstream to [~~the headwaters of~~] Caballo [~~reservoir~~] dam [~~including Caballo reservoir~~]. [~~(Sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.)~~]

A. Designated Uses: irrigation, livestock watering, wildlife habitat, primary contact, and warmwater [~~fishery~~] aquatic life[5].

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F), [~~and turbidity shall not exceed 50 NTU~~][11]. The use-

specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

(C) Remarks: [Sustained flow in the Rio Grande below Caballo reservoir is dependent on release from Caballo reservoir during the irrigation season; at other times of the year, there may be little or no flow.]

Basis: Segment description changed, Caballo Reservoir moved to Segment 104 with Elephant Butte Reservoir. Remarks currently included in the segment description moved to a separate section.

20.6.4.103 RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Caballo [~~lake~~] reservoir upstream to Elephant Butte dam and perennial reaches of tributaries to the Rio Grande in Sierra and Socorro counties. [~~(Flow in this reach of the Rio Grande main stem is dependent upon release from Elephant Butte dam.)~~]

A. Designated Uses: fish culture, irrigation, livestock watering, wildlife habitat, marginal coldwater [~~fishery~~] [5] aquatic life, secondary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 25°C (77°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [10] ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

(C) Remarks: [Flow in this reach of the Rio Grande main stem is dependent upon release from Elephant Butte dam.]

Basis: Remarks currently included in the segment description are moved to a separate section.

20.6.4.104 RIO GRANDE BASIN – Caballo and Elephant Butte reservoirs.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F)[~~, and turbidity shall not exceed 50 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli

bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.105 RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Elephant Butte reservoir upstream to Alameda bridge (Corrales bridge), [~~the Jemez river from the Jemez pueblo boundary upstream to the Rio Guadalupe~~,] and intermittent flow below the perennial reaches of the Rio Puerco [~~and Jemez river which~~] that[2] enters the main stem of the Rio Grande.

A. Designated Uses: irrigation, [~~limited~~] marginal[13] warmwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [10] ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At mean monthly flows above 100 cfs,] the monthly average concentration for: TDS shall not exceed l,500 mg/L, sulfate shall not exceed 500 mg/L, and chloride shall not exceed 250 mg/L.

Basis: The Jemez River from the Jemez Pueblo boundary to Rio Guadalupe is moved to segment 107, which is contiguous with that reach. The intermittent flow of the Jemez River that enters the main stem of the Rio Grande is moved to segment 106, which is the segment where the flow enters the Rio Grande.

20.6.4.106 RIO GRANDE BASIN - The main stem of the Rio Grande from Alameda bridge (Corrales bridge) upstream to the Angostura diversion works, and intermittent flow in the Jemez river below the Jemez pueblo boundary that enters the main stem of the Rio Grande.

A. Designated Uses: irrigation, [~~limited~~] marginal[13] warmwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: dissolved oxygen shall be greater than 5.0 mg/L, pH shall be within the range of 6.6 to 9.0, and temperature shall be less than 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS shall [~~be less than~~] not exceed 1,500 mg/L, sulfate shall [~~be less than~~] not exceed 500 mg/L, and chloride shall [~~be less than~~] not exceed 250 mg/L.

Basis: "Be less than" replaced by "not exceed" for consistency with other Sections.

20.6.4.107 RIO GRANDE BASIN - The Jemez river from [~~its confluence with the Rio Guadalupe~~] the Jemez pueblo boundary upstream to [~~state highway 4~~] Soda dam near the town of Jemez Springs and perennial reaches of Vallecito creek.

A. Designated Uses: coldwater [~~fishery~~] [5] aquatic life, primary contact, irrigation, livestock watering, and wildlife habitat.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: temperature shall not exceed 25°C (77°F), and pH shall be within the range of 6.6 to 8.8[~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[6] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: "State highway 4" in description changed to "Soda dam" to use a geologic rather than a cultural feature.

20.6.4.108 RIO GRANDE BASIN - [~~The~~] Perennial reaches of the[12] Jemez river and all its tributaries above [~~state highway 4~~] Soda Dam near the town of Jemez Springs, except Sulphur creek above its confluence with Redondo creek, and perennial reaches of[12] the Guadalupe river and all its tributaries.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 400 µmhos, pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F)[~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: This will change the reference from "state highway 4" to "Soda dam" to use a geologic rather than a cultural feature. Currently, the description of this segment includes all reaches or all tributaries in the Jemez and Guadalupe River watersheds, instead of just those perennial waters. Removes Sulphur Creek to a new section.

20.6.4.108a[24] RIO GRANDE BASIN – Perennial reaches of Sulphur Creek from its headwaters to its confluence with Redondo Creek.

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

B. Criteria:

(1) In any single sample: pH shall be within the range of 2.0 to 9.0, and temperature shall not exceed 30ºC (86ºF). The use-specific criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: New section based upon unique conditions of Sulphur Creek that make the criterion for pH, and uses for segment 108 inappropriate.

20.6.4.109 RIO GRANDE BASIN - Perennial reaches of Bluewater creek, Rio Moquino, Seboyeta creek, Rio Paguate, the Rio Puerco [~~within the Santa Fe national forest~~] above the village of Cuba, and all other perennial reaches of tributaries to the Rio Puerco including the Rio San Jose in Cibola county from the USGS gaging station at Correo upstream to Horace springs.

A. Designated Uses: coldwater [~~fishery~~] [5] aquatic life, domestic water supply, fish culture, irrigation, livestock watering, wildlife habitat, and primary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and total phosphorus (as P) shall not exceed 0.1 mg/L [~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Segment description amended to extend segment to include perennial reaches downstream from the Santa Fe national forest boundary.

20.6.4.110 RIO GRANDE BASIN - The main stem of the Rio Grande from Angostura diversion works upstream to Cochiti dam.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, secondary contact, coldwater [~~fishery~~] [5] aquatic life, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 25°C (77°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.111 RIO GRANDE BASIN - Perennial reaches of Las Huertas and San Pedro creeks.

A. Designated Uses: coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 25°C (77°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.112 RIO GRANDE BASIN - Cochiti reservoir.

A. Designated Uses: livestock watering, wildlife habitat, warmwater [~~fishery~~] [5] aquatic life, coldwater [~~fishery~~] [5] aquatic life, and primary contact.

B. [~~Standards~~]Criteria[4]:

(l) At any sampling site: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 25°C (77°F) [~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.113 RIO GRANDE BASIN - The Santa Fe river and perennial reaches of[12] its tributaries from Cochiti reservoir upstream to the outfall of the Santa Fe wastewater treatment facility.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, marginal coldwater [~~fishery~~] [5] aquatic life, secondary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(l) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 30°C (86°F), [~~turbidity shall not exceed 50 NTU,~~] [11] and dissolved oxygen shall not be less than 4.0 mg/L. Dissolved oxygen shall not be less than 5.0 mg/L as a 24-hour average. Values used in the calculation of the 24-hour average for dissolved oxygen shall not exceed the dissolved oxygen saturation value. For a measured value above the dissolved oxygen saturation value, the dissolved oxygen saturation value will be used in calculating the 24-hour average. The dissolved oxygen saturation value shall be determined from the table set out in [~~P~~] N[14] of 20.6.4.900 NMAC. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [10] ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL

(see Subsection B of 20.6.4.13 NMAC).

20.6.4.114 RIO GRANDE BASIN - The main stem of the Rio Grande from the headwaters of Cochiti reservoir upstream to [~~Taos Junction bridge~~] Rio Pueblo de Taos, Embudo creek from its mouth on the Rio Grande upstream to the junction of the Rio Pueblo and the Rio Santa Barbara, the Santa Cruz river below Santa Cruz dam, the Rio Tesuque below the Santa Fe national forest and the Pojoaque river below Nambe dam.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, marginal coldwater [~~fishery~~] [5] aquatic life, primary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 22°C (71.6°F) [~~, and turbidity shall not exceed 50 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[6] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At mean monthly flows above 100 cfs, the monthly average concentration for: TDS shall not exceed 500 mg/L, sulfate shall not exceed 150 mg/L, and chloride shall not exceed 25 mg/L.

Basis: "Taos Junction Bridge" replaced by "Rio Pueblo de Taos" to use a hydrologic rather than a cultural feature.

20.6.4.115 RIO GRANDE BASIN - The perennial reaches of Rio Vallecitos and its tributaries, and perennial reaches of[12] Rio del Oso, and perennial reaches of[12] El Rito creek above the town of El Rito.

A. Designated Uses: domestic water supply, irrigation, high quality coldwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 300 µmhos, and pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 10 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.116 RIO GRANDE BASIN - The Rio Chama from its mouth on the Rio Grande upstream to Abiquiu reservoir, perennial reaches of[12] the Rio Tusas, perennial reaches of[12] the Rio Ojo Caliente, perennial reaches of[12] Abiquiu creek, and perennial reaches of[12] El Rito creek below the town of El Rito.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, coldwater [~~fishery~~] [5] aquatic life, warmwater [~~fishery~~] [5] aquatic life, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 31°C (87.8°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [10] ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.117 RIO GRANDE BASIN - Abiquiu reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact, coldwater [~~fishery~~] [5] aquatic life and, warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 25°C (77°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.118 RIO GRANDE BASIN - The Rio Chama from the headwaters of Abiquiu reservoir upstream to El Vado reservoir and perennial reaches of[12] **the Rio Gallina and Rio Puerco de Chama north of state highway 96.**

A. Designated Uses: irrigation, livestock watering, wildlife habitat, coldwater [~~fishery~~] [5] aquatic life, warmwater [~~fishery~~] [5] aquatic life, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 26°C (78.8°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.119 RIO GRANDE BASIN - All perennial reaches of tributaries to the Rio Chama above Abiquiu dam except the Rio Gallina and Rio Puerco de Chama north of state highway 96 and the main stem of the Rio Chama from the headwaters of El Vado reservoir upstream to the New Mexico-Colorado line.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. **[~~Standards~~]Criteria**[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 500 µmhos (1,000 µmhos for Coyote creek), pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.120 RIO GRANDE BASIN - El Vado and Heron reservoirs.

A. **Designated Uses**: irrigation storage, livestock watering, wildlife habitat, primary contact, and coldwater [~~fishery~~] [5] aquatic life.

B. **[~~Standards~~]Criteria**[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.121 RIO GRANDE BASIN - Perennial tributaries to the Rio Grande in Bandelier national monument and their headwaters in Sandoval county, and all perennial reaches of tributaries to the Rio Grande in Santa Fe county unless included in other segments.

A. **Designated Uses**: domestic water supply, high quality coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, secondary contact, and primary contact.

B. **[~~Standards~~]Criteria**[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 300 µmhos, pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 10 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Adds "and" in segment description where it appears to be missing.

20.6.4.121a[24] RIO GRANDE BASIN – Perennial portions of Los Alamos Canyon below Los Alamos Reservoir and Perennial Portions of Cañon deValle, Sandia and Pajarito Canyons.

A. Designated Uses: coldwater aquatic life, irrigation, livestock watering, wildlife habitat, secondary contact, and primary contact.

B. Criteria:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: New segment to classify waters based upon study by Fish and Wildlife Service.

20.6.4.121b[24] RIO GRANDE BASIN – Perennial portions of Los Alamos Canyon upstream from Los Alamos Reservoir and Los Alamos Reservoir.

A. Designated Uses: coldwater aquatic life, livestock watering, wildlife habitat, irrigation, secondary contact, and primary contact.

B. Criteria:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: New segment to classify waters based upon study by Fish and Wildlife Service.

20.6.4.122 RIO GRANDE BASIN - The main stem of the Rio Grande from [~~Taos Junction bridge~~] Rio Pueblo de Taos upstream to the New Mexico-Colorado line, the Red river from its mouth on the Rio Grande upstream to the mouth of Placer creek, and the Rio Pueblo de Taos from its mouth on the Rio Grande upstream to the mouth of the Rio Grande del Rancho.

A. Designated Uses: coldwater [~~fishery~~] [5] aquatic life, fish culture, irrigation, livestock watering, wildlife habitat, and primary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 50 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: "Taos Junction bridge" changed to "Rio Pueblo de Taos" to use a hydrologic rather than a cultural feature.

20.6.4.123 RIO GRANDE BASIN - [~~The~~] Perennial reaches of the[12] Red river upstream of the mouth of Placer creek, all perennial reaches of[12] tributaries to the Red river, and all other perennial reaches of tributaries to the Rio Grande in Taos and Rio Arriba counties unless included in other segments.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 400 µmhos (500 µmhos for the Rio Fernando de Taos), pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and [~~turbidity shall not exceed 25 NTU~~] [11]. For the Red river in this segment total phosphorous (as P) shall be less than 0.1 mg/L. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: To include a numeric segment-specific criterion for total phosphorus for the Rio Hondo and Red river. This criterion was applicable to this segment until the recent triennial review, when it was inadvertently removed. Similar segment-specific criteria for total phosphorus are currently applicable to segments 20.6.4.109, 20.6.4.208, 20.6.4.404, 20.6.4.406, and 20.6.4.407.

20.6.4.124 RIO GRANDE BASIN - Perennial reaches of the Rio Hondo.

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

B. Criteria:

(1) In any single sample: specific conductance shall not exceed 400 µmhos, pH shall be within the range of 6.6 to 8.8, total phosphorous (as P) shall be less than 0.1 mg/L, and temperature shall not exceed 20°C (68°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 126 cfu/100 mL; no single sample shall exceed 410 cfu/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Formerly part of Segment 123, split out to restore phosphorous criterion that was previously included for this segment and removed inadvertently in the last triennial review.

20.6.4.201 PECOS RIVER BASIN - The main stem of the Pecos river from the New Mexico-Texas line upstream to the mouth of the Black river (near Loving).

A. Designated Uses: irrigation, livestock watering, wildlife habitat, secondary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(l) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set

forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 50 cfs: TDS shall not exceed 20,000 mg/L, sulfate shall not exceed 3,000 mg/L, and chloride shall not exceed l0,000 mg/L.

20.6.4.202 PECOS RIVER BASIN - The main stem of the Pecos river from the mouth of the Black river upstream to lower Tansil dam [~~(diversion for irrigation frequently limits summer flow in this reach to that contributed by springs along the watercourse)~~], including perennial reaches of[12] the Black river, the Delaware river and Blue spring.

A. Designated Uses: industrial water supply, irrigation, livestock watering, wildlife habitat, secondary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(l) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 34°C (93.2°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 50 cfs: TDS shall not exceed 8,500 mg/L, sulfate shall not exceed 2,500 mg/L, and chloride shall not exceed 3,500 mg/L.

C. Remarks: [Diversion for irrigation frequently limits summer flow in this reach of the main stem Pecos river to that contributed by springs along the watercourse.]

Basis: Remarks moved from segment description to separate remarks section.

20.6.4.202a[24] PECOS RIVER BASIN - Tansil lake and Lake Carlsbad.

A. Designated Uses: industrial water supply, livestock watering, wildlife habitat, primary contact, and warmwater aquatic life.

B. Criteria:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 34°C (93.2°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 126 cfu/100 mL; no single sample shall exceed 410 cfu/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Reservoirs separated from stream segment.

20.6.4.203 PECOS RIVER BASIN - The main stem of the Pecos river from lower [~~Tansil dam~~] the headwaters of Lake Carlsbad upstream to Avalon dam[~~, including Tansil lake~~].

A. Designated Uses: industrial water supply, livestock watering, wildlife habitat, primary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) [~~At any sampling site~~] In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 34°C (93.2°F) [~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Reservoirs separated from stream segment.

20.6.4.203a[24] PECOS RIVER BASIN - Avalon reservoir.

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

B. Criteria:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 548 cfu/100 mL, no single sample shall exceed 2507 cfu/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Reservoir separated from stream segment.

20.6.4.204 PECOS RIVER BASIN - The main stem of the Pecos river from [~~Avalon dam~~] the headwaters of Avalon reservoir upstream to Brantley dam[~~, including Avalon reservoir~~].

A. Designated Uses: irrigation [~~storage~~], livestock watering, wildlife habitat, secondary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) [~~At any sampling site~~] In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [10] ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 548 cfu/100 mL, no single sample shall exceed 2880 cfu/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Reservoir separated from stream segment.

20.6.4.205 PECOS RIVER BASIN - Brantley reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[6] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

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[12] the Rio Peñasco downstream from state highway 24 near Dunken, [~~any flow at the mouth of~~] perennial reaches of[12] the Rio Hondo and its tributaries below Bonney canyon and [~~any flow from~~] perennial reaches of[12] the Rio Felix [~~which enters the main stem of the Pecos river~~].

A. Designated Uses: irrigation, livestock watering, wildlife habitat, secondary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [10] ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 50 cfs: TDS shall not exceed 14,000 mg/L, sulfate shall not exceed 3,000 mg/L, and chloride shall not exceed 6,000 mg/L.

Basis: Segment described to downstream end at Bonney Canyon to eliminate possible conflict with Segment 208. TDS, sulfate and chloride criteria replaced by criteria in Section 900.

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, [~~limited~~] marginal[13] warmwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [10] ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 50 cfs: TDS shall not exceed 8,000 mg/L, sulfate shall not exceed 2,500 mg/L, and chloride shall not exceed 4,000 mg/L.

20.6.4.208 PECOS RIVER BASIN - Perennial reaches of the Rio Peñasco and its tributaries above state highway 24 near Dunken, 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[12] Agua Chiquita.

A. Designated Uses: fish culture, irrigation, livestock watering, wildlife habitat, coldwater [~~fishery~~] [5] aquatic life, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 30°C (86°F), and total phosphorus (as P) shall be less than 0.1 mg/L. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Segment redescribed to end Rio Hondo portion at Bonney Canyon to eliminate possible conflict with Segment 206.

20.6.4.209 PECOS RIVER BASIN - Perennial reaches of[12] Eagle creek above Alto reservoir, perennial reaches of[12] the Rio Bonito and its tributaries[12] upstream of state highway 48 (near Angus), and perennial reaches of[12] the Rio Ruidoso and its tributaries upstream of the U.S. highway 70 bridge near Seeping Springs lakes.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 600 µmhos in Eagle creek, 1,100 µmhos in Bonito creek, and 1,500 µmhos in the Rio Ruidoso, pH shall be within the range of 6.6 to 8.8, total phosphorus (as P) shall be less than 0.1 mg/L, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 10 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Restores phosphorous criterion that was previously included for this segment and removed inadvertently in the last triennial review.

20.6.4.210 PECOS RIVER BASIN - Sumner reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F) [~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.211 PECOS RIVER BASIN - The main stem of the Pecos river from the headwaters of Sumner reservoir upstream to [~~Anton Chico~~] Tecolote Creek.

A. Designated Uses: fish culture, irrigation, [~~limited~~] marginal[13] warmwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 50 cfs: TDS shall not exceed 3,000 mg/L, sulfate shall not exceed 2,000 mg/L, and chloride shall not exceed 400 mg/L.

Basis: Segment description amended to use Tecolote Creek as a break point because "Anton Chico" describes an areal extent rather than a point, and causes ambiguity regarding the place where the segment changes.

20.6.4.212 PECOS RIVER BASIN - Perennial tributaries to the main stem of the Pecos river from the headwaters of Sumner reservoir upstream to Santa Rosa dam.

A. Designated Uses: irrigation, coldwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and primary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8 and temperature shall not exceed 25°C (77°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[6] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.213 PECOS RIVER BASIN - McAllister lake.

A. Designated Uses: coldwater [~~fishery~~][5] aquatic life, secondary contact, livestock watering, and wildlife habitat.

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8 and temperature shall not exceed 25°C (77°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[10] ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.214 PECOS RIVER BASIN - Storrie lake.

A. Designated Uses: coldwater [~~fishery~~][5] aquatic life, warmwater [~~fishery~~][5] aquatic life, primary contact, livestock watering, wildlife habitat, municipal water supply, and irrigation storage.

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 25 NTU~~][11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.215 PECOS RIVER BASIN - [~~The~~] Perennial reaches of the[12] **Gallinas river and all its tributaries above the diversion for the Las Vegas municipal reservoir and perennial reaches of Tecolote creek and its perennial tributaries.**

A. Designated Uses: domestic water supply, high quality coldwater [~~fishery~~][5] aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 300 µmhos except [~~conductivity~~] specific conductance[23] shall not exceed 450 µmhos in Wright Canyon creek, pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 10 NTU~~][11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.216 The main stem of the Pecos river from [~~Anton Chico~~] Tecolote Creek upstream to[~~the southern boundary of the Pecos national historical park~~] Cañon de Manzanita~~, and perennial reaches of the Gallinas river from its mouth upstream to the diversion for the Las Vegas municipal reservoir~~.

A. Designated Uses: irrigation, livestock watering, wildlife habitat, marginal coldwater [~~fishery~~][5] aquatic life, and [~~secondary~~] primary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 30°C (86°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL, no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

(3) At all flows above 10 cfs: TDS shall not exceed 250 mg/L, sulfate shall not exceed 25 mg/L, and chloride shall not exceed 5 mg/L.

Basis: Segment description amended to use hydrologic features to define the segment rather than cultural features. "Anton Chico" describes an areal extent rather than a point, and causes ambiguity regarding the place where the segment changes. Secondary contact changed to primary contact based upon evidence of use of the segment for swimming; primary contact criteria included. Gallinas River moved to separate sections. Secondary contact changed to primary contact based upon evidence of swimming in this reach.

20.6.4.217 PECOS RIVER BASIN – Perennial reaches of the Gallinas River and its tributaries 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, and primary contact.

B. Criteria:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 30°C (86°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section. (see Subsection B of 20.6.4.13 NMAC).

(2) The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL, no single sample shall exceed 410/100 mL

Basis: Formerly part of segment 216, moved to separate segment because of different chemical quality due primarily to contributions of hot springs above the village of Pecos and from Pecos

Arroyo. Pecos Arroyo excepted due to naturally high salinity. Primary contact use observed near the hot springs.

20.6.4.218 PECOS RIVER BASIN -- Pecos Arroyo

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

B. Criteria:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Formerly part of segment 216, moved to separate segment because of naturally high salinity.

[~~20.6.4.217~~] 20.6.4.219 PECOS RIVER BASIN - Perennial reaches of[12] Cow creek and all perennial reaches of its[12] tributaries and the main stem of the Pecos river from [~~the southern boundary of the Pecos national historical park~~] Cañon de Manzanita upstream to its headwaters, including perennial reaches of[12] all tributaries thereto.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 300 µmhos, pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 10 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.301 CANADIAN RIVER BASIN - The main stem of the Canadian river from the New Mexico-Texas line upstream to Ute dam, and any flow [~~which~~] that[2] enters the main stem from Revuelto creek.

A. Designated Uses: irrigation, [~~limited~~] marginal[13] warmwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 32.2°C (90°F), and TDS shall not exceed 6,500 mg/L at flows above 25 cfs. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E.

coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.302 CANADIAN RIVER BASIN - Ute reservoir.

A. Designated Uses: livestock watering, wildlife habitat, municipal and industrial water supply, primary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, [~~turbidity shall not exceed 25 NTU~~] [11] and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.303 CANADIAN RIVER BASIN - The main stem of the Canadian river from the headwaters of Ute reservoir upstream to Conchas dam, the perennial reaches of Pajarito [~~creek, and Ute creek and its perennial tributaries~~] and Ute creeks and their perennial tributaries[12]**.**

A. Designated Uses: irrigation, [~~limited~~] marginal[13] warmwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Segment description amended to include the perennial tributaries of Pajarito Creek.

20.6.4.304 CANADIAN RIVER BASIN - Conchas reservoir.

A. Designated Uses: irrigation storage, livestock watering, wildlife habitat, primary contact and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F) [~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.305 CANADIAN RIVER BASIN - The main stem of the Canadian river from the headwaters of Conchas reservoir upstream to the New Mexico-Colorado line, perennial reaches of[12] the Conchas river, the Mora river downstream from the USGS gaging station near Shoemaker, the Vermejo river downstream from Rail canyon, and perennial reaches of Raton, Chicorica and Una de Gato creeks.

A. Designated Uses: irrigation, [~~limited~~] marginal[13] warmwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~**Standards**~~] **Criteria**[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 32.2°C (90°F). , and TDS shall not exceed 3,500 mg/L at flows above 10 cfs. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Upper reaches of the Vermejo River are moved to Segment 309

20.6.4.306 CANADIAN RIVER BASIN - The Cimarron river downstream from state highway 21 in Cimarron to the Canadian river and all perennial reaches of tributaries to the Cimarron river downstream from state highway 21 in Cimarron.

A. Designated Uses: irrigation, warmwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~**Standards**~~]**Criteria**[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, temperature shall not exceed 32.2°C (90°F), and TDS shall not exceed 3,500 mg/L at flows above 10 cfs. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

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, perennial reaches of Ocate creek and its tributaries downstream of Ocate, and perennial reaches of Rayado creek downstream of Miami lake diversion in Colfax county.

A. Designated Uses: marginal coldwater [~~fishery~~] [5] aquatic life, warmwater [~~fishery~~] [5] aquatic life, secondary contact, irrigation, livestock watering, and wildlife habitat.

B. [~~**Standards**~~]**Criteria**[4]:

(1) [~~At any sampling site~~] In any single sample: temperature shall not exceed 25°C (77°F), and pH shall be within the range of 6.6 to 9.0. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: "At any sampling site" changed to "In any single sample" for consistency with other sections.

20.6.4.308 CANADIAN RIVER BASIN - Charette lakes.

A. Designated Uses: coldwater [~~fishery~~] [5] aquatic life, warmwater [~~fishery~~] [5] aquatic life, secondary contact, livestock watering, and wildlife habitat.

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [10] ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.309 CANADIAN RIVER BASIN - The Mora river and perennial reaches of[12] its tributaries upstream from the state highway 434 bridge in Mora, all perennial reaches of[12] tributaries to the Mora river upstream from the USGS gaging station at La Cueva, perennial reaches of[12] Coyote creek and its tributaries, the Cimarron river and its perennial tributaries[12] above state highway 21 in Cimarron, all perennial[12] reaches of tributaries to the Cimarron river north and northwest of highway 64, perennial reaches of[12] Rayado creek and its tributaries above Miami lake diversion, Ocate creek and perennial reaches of[12] its tributaries upstream of Ocate, perennial reaches of the Vermejo river upstream from Rail canyon, and all other perennial reaches of[12] 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 [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 500 µmhos/cm [~~(at 25°C)~~][23], pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Upper reaches of the Vermejo River moved to this section from Section 305.

20.6.4.310 CANADIAN RIVER BASIN – Perennial reaches of Corrumpa creek and perennial reaches of tributaries of the Canadian river north of U.S. highway 54/66 and east and northeast of the Ute creek drainage.

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

B. Criteria:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL
(see Subsection B of 20.6.4.13 NMAC).

Basis: Corrumpa Creek is currently classified in the Dry Cimmaron River segment 701. In addition, Seneca, Apache, Perico, Carrizo, Tramperos and other creeks may have perennial reaches and are logically included with Corrumpa.

20.6.4.401 SAN JUAN RIVER BASIN - The main stem of the San Juan river from the [~~point where the San Juan leaves New Mexico and enters Colorado the~~] Navajo Nation boundary at the Hogback upstream to [~~U.S. highway 64 at Blanco~~] its confluence with the Animas river [~~and any flow which enters the San Juan river from the Mancos and Chaco rivers~~].

A. Designated Uses: municipal and industrial water supply, irrigation, livestock watering, wildlife habitat, secondary contact, marginal coldwater [~~fishery~~][5] aquatic life and warmwater [~~fishery~~][5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: The main stem of the San Juan river below the Hogback and the Mancos and Chaco rivers are entirely within the Navajo Nation. Segment split proposed at the confluence of the Animas River because of changes to the influence of the Animas.

20.6.4.401a[24] 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 Largo.

A. Designated Uses: municipal and industrial water supply, irrigation, livestock watering, wildlife habitat, secondary contact, marginal coldwater aquatic life, and warmwater aquatic life.

B. Criteria:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Formerly part of Segment 401, segment is split due to the influence of the Animas.

20.6.4.402 SAN JUAN RIVER BASIN - La Plata river from its confluence with the San Juan river upstream to the New Mexico-Colorado line.

A. Designated Uses: irrigation, [~~limited~~] marginal[13] warmwater [~~fishery~~] [5] aquatic life, marginal coldwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0 and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.403 SAN JUAN RIVER BASIN - The Animas river from its confluence with the San Juan upstream to [~~U.S. highway 550 at Aztec~~] Estes Arroyo.

A. **Designated Uses**: municipal and industrial water supply, irrigation, livestock watering, wildlife habitat, marginal coldwater [~~fishery~~] [5] aquatic life, [~~secondary~~] primary contact, and warmwater [~~fishery~~] [5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 27°C (80.6°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Segment description amended to use a hydrologic rather than a cultural feature. Proposed change from secondary contact to primary contact based upon evidence that primary contact is an existing use in this segment.

20.6.4.404 SAN JUAN RIVER BASIN - The Animas river from [~~U.S. highway 550 at Aztec~~] Estes Arroyo upstream to the New Mexico-Colorado line.

A. Designated Uses: coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and total phosphorus (as P) shall not exceed 0.1 mg/L. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Segment description amended to use a hydrologic rather than a cultural feature.

20.6.4.405 SAN JUAN RIVER BASIN - The main stem of the San Juan river from [~~U.S. highway 64 at Blanco~~] Canyon Largo upstream to the Navajo dam.

A. Designated Uses: high quality coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 400 µmhos/cm [~~(at 25°C)~~], pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 10 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Segment description amended to use a hydrologic rather than a cultural feature.

20.6.4.406 SAN JUAN RIVER BASIN - Navajo reservoir in New Mexico.

A. Designated Uses: coldwater [~~fishery~~] [5] aquatic life, warmwater [~~fishery~~] [5] aquatic life, irrigation storage, livestock watering, wildlife habitat, municipal and industrial water storage, and primary contact.

B. [~~Standards~~]Criteria[4]:

(1) At any sampling site: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F), and total phosphorus (as P) shall not exceed 0.1 mg/L [~~, and turbidity shall not exceed 25 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in

20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[7] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.407 SAN JUAN RIVER BASIN - [~~The~~] Perennial reaches of the[12] Navajo and Los Pinos rivers in New Mexico.

A. Designated Uses: coldwater [~~fishery~~][5] aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F) and total phosphorus (as P) shall not exceed 0.1 mg/L. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.501 GILA RIVER BASIN - The main stem of the Gila river from the New Mexico-Arizona line upstream to [~~state highway 464 in Red Rock~~] Redrock canyon, and perennial reaches of streams in Hidalgo county.

A. Designated Uses: irrigation, [~~limited~~] marginal[13] warmwater [~~fishery~~][5] aquatic life, livestock watering, wildlife habitat, and primary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[6] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Segment description amended to use a hydrologic rather than a cultural feature.

20.6.4.502 GILA RIVER BASIN - The main stem of the Gila river from [~~state highway 464 in Red Rock~~] Redrock canyon upstream to [~~Gila hot springs~~] the confluence of the West Fork Gila river and East Fork Gila river, and perennial reaches of tributaries to the Gila river below [~~the town of Cliff~~] Mogollon creek.

A. Designated Uses: industrial water supply, irrigation, livestock watering, wildlife habitat, marginal coldwater [~~fishery~~][5] aquatic life, primary contact, and warmwater [~~fishery~~][5] aquatic life.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 28°C (82.4°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[6] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Segment description amended to use a hydrologic rather than a cultural feature (highway 464), also, the main stem of the Gila River ends at the confluence of the East Fork and West Fork.

20.6.4.503 GILA RIVER BASIN – [~~The main stem of the Gila river from Gila hot springs upstream to the headwaters and all~~] All perennial tributaries to the Gila river [~~at or~~] above [~~the town of Cliff~~] and including Mogollon creek.

A. Designated Uses: domestic water supply, high quality coldwater [~~fishery~~][5] aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 300 µmhos for the main stem of the Gila river above Gila hot springs and 400 µmhos for other reaches, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F) except in the east fork of the Gila river and Sapillo creek below Lake Roberts where the temperature shall not exceed 32.2°C (90°F) [~~, and turbidity shall not exceed 10 NTU~~][11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Segment description amended to use a hydrologic rather than a cultural feature, also, the main stem of the Gila River ends at the confluence of the East Fork and West Fork.

20.6.4.504 GILA RIVER BASIN - Wall lake, Lake Roberts, [~~Bear Canyon lake~~] and Snow lake.

A. Designated Uses: coldwater [~~fishery~~][5] aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 300 µmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 22°C (72°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E.

coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Bear Canyon Lake is in the Mimbres River basin, not in the Gila River basin.

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 and perennial reaches of Mule creek.

A. Designated Uses: irrigation, [~~limited~~] marginal[13] warmwater and marginal coldwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 32.2°C (90°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

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

A. Designated Uses: coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, and primary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 25°C (77°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[6] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.603 SAN FRANCISCO RIVER BASIN - All perennial reaches of tributaries to the San Francisco river [~~at or above the town of Glenwood~~] above the confluence of Whitewater creek and including Whitewater creek.

A. Designated Uses: domestic water supply, fish culture, high quality coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 400 µmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 20°C (68°F) except in Tularosa creek, where the temperature shall not exceed 25°C (77°F) [~~, and turbidity shall not exceed 10 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Segment description amended to use a hydrologic rather than a cultural feature.

20.6.4.701 DRY CIMARRON RIVER - Perennial portions of the Dry Cimarron river below Oak creek, and perennial portions of Long canyon and Carrizozo creeks.

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

B. Criteria:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 32.2°C (90°F), TDS shall not exceed 1,200 mg/L, sulfate shall not exceed 600 mg/L, and chloride shall not exceed 40 mg/L. The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 126 cfu/100 mL; no single sample shall exceed 235 cfu/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Investigations indicate that this reach was mistakenly classified as coldwater.

20.6.4.[~~701~~]702 DRY CIMARRON RIVER - Perennial portions of the Dry Cimarron river [~~in Union and Colfax counties~~] above Oak creek and perennial reaches of Oak creek[~~, Long canyon, and Corrumpa and Carrizozo creeks~~].

A. Designated Uses: marginal coldwater [~~fishery~~][5] aquatic life, warmwater aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 25°C (77°F), TDS shall not exceed 1,200 mg/L, sulfate shall not exceed 600 mg/L, and chloride shall not exceed 40 mg/L. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Investigations indicate that this reach was mistakenly classified as coldwater. Corrumpa Creek is tributary to the Canadian River. It is not in the Dry Cimmaron Basin, therefore has been split out and placed within its proper basin.

20.6.4.801 CLOSED BASINS - Rio Tularosa lying east of the old U.S. highway 70 bridge crossing east of Tularosa, and all perennial tributaries to the Tularosa basin except Three Rivers.

A. Designated Uses: coldwater [~~fishery~~] [5] aquatic life, fish culture, irrigation, livestock watering, wildlife habitat, municipal and industrial water supply, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.802 CLOSED BASINS - Perennial reaches of Three Rivers.

A. Designated Uses: irrigation, domestic water supply, high quality coldwater [~~fishery~~] [5] aquatic life, secondary contact, livestock watering, and wildlife habitat.

B. [~~Standards~~] Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 500 µmhos, pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 10 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.803 CLOSED BASINS - Perennial reaches of the Mimbres river downstream of [~~the USGS gaging station at Mimbres~~] the confluence with Willow Springs canyon and all perennial reaches of tributaries thereto.

A. Designated Uses: coldwater [~~fishery~~] [5] aquatic life, irrigation, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F). The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Current USGS topographic maps do not show the gage at Mimbres. Older USGS topographic maps show the gage at a location approximately 1½ miles above the present location. Description changed to avoid ambiguity and to reference a hydrologic feature. Change results in moving the segment boundary approximately 100 feet upstream.

20.6.4.804 CLOSED BASINS – [~~The~~] Perennial reaches of the[12] Mimbres river upstream of [~~the USGS gaging station at Mimbres~~] the confluence with Willow Springs canyon and all perennial tributaries thereto.

A. Designated Uses: irrigation, domestic water supply, high quality coldwater [~~fishery~~] [5] aquatic life, livestock watering, wildlife habitat, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: [~~conductivity~~] specific conductance[23] shall not exceed 300 µmhos, pH shall be within the range of 6.6 to 8.8, and temperature shall not exceed 20°C (68°F) [~~, and turbidity shall not exceed 10 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) [9] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 100/100 mL; no single sample shall exceed 200/100 mL~~] The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 235/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Current USGS topographic maps do not show the gage at Mimbres. Older USGS topographic maps show the gage at a location approximately 1½ miles upstream from the present location. Description changed to avoid ambiguity and to reference a hydrologic feature. Change results in moving the segment boundary approximately 100 feet upstream.

20.6.4.804a[24] CLOSED BASINS - Bear Canyon reservoir.

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

B. Criteria:

(1) In any single sample: specific conductance shall not exceed 300 µmhos, pH shall be within the range of 6.6 to 8.8, temperature shall not exceed 22°C (72°F). The use-specific numeric criteria set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2) The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

Basis: Formerly erroneously included in Segment 504 in the Gila River basin.

20.6.4.805 CLOSED BASINS - Perennial reaches of the Sacramento river (Sacramento-Salt Flat closed basin) and all perennial tributaries thereto.

A. Designated Uses: domestic and municipal water supply, livestock watering, wildlife habitat, marginal coldwater [~~fishery~~] [5] aquatic life, and secondary contact.

B. [~~Standards~~]Criteria[4]:

(1) In any single sample: pH shall be within the range of 6.6 to 9.0, and temperature shall not exceed 25°C (77°F) [~~, and turbidity shall not exceed 10 NTU~~] [11]. The use-specific numeric [~~standards~~] criteria[4] set forth in 20.6.4.900 NMAC are applicable to the designated uses listed above in Subsection A of this section.

(2)[8] [~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL; no single sample shall exceed 400/100 mL~~] The monthly geometric mean of E.

coli bacteria shall not exceed 126/100 mL; no single sample shall exceed 410/100 mL (see Subsection B of 20.6.4.13 NMAC).

20.6.4.900 [~~STANDARDS~~] CRITERIA[4] APPLICABLE TO ATTAINABLE OR DESIGNATED USES UNLESS OTHERWISE SPECIFIED IN 20.6.4.101 THROUGH 20.6.4.899 NMAC.

[~~I.~~]A. Fish culture, [~~secondary contact~~], and municipal and industrial water supply and storage are [~~also~~] designated uses in particular classified waters of the state where these uses are actually being realized. However, no numeric [~~standards~~] criteria[4] apply uniquely to these uses. Water quality adequate for these uses is ensured by the general [~~standards~~] criteria[4] and numeric [~~standards~~] criteria[4] for bacterial quality, pH, and temperature [~~which~~] that[2] are established for all classified waters of the state listed in 20.6.4.101 through 20.6.4.899 NMAC.

Basis: Secondary contact moved to a new section.

~~**A. Coldwater Fishery**: Dissolved oxygen shall not be less than 6.0 mg/L, temperature shall not exceed 20°C (68°F), and pH shall be within the range of 6.6 to 8.8. The acute and chronic aquatic life standards set out in subsections J and M of this section are applicable to this use. The total ammonia standards set out in Subsection O of this section and the human health standards listed in Subsection M of this section are applicable to this use.~~

Basis: Moved to aquatic life, Subsection H.

B. Domestic Water Supply: Surface waters of the state designated for use as domestic water supplies shall not contain substances in concentrations that create a lifetime cancer risk of more than one cancer per 100,000 exposed persons. ~~The following numeric standards and t~~Those [~~standards~~] criteria[4] listed under domestic water supply and the criteria listed under human health, water plus organisms, in Subsection [~~M~~] J[14] of this section shall not be exceeded.

~~**(1)** dissolved nitrate (as N) 10. mg/L~~
~~**(2)** radium-226 + radium-228 5. pCi/L~~
~~**(3)** strontium-90 8 pCi/L~~
~~**(4)** tritium 20,000 pCi/L~~
~~**(5)** gross alpha (including radium-226, but excluding radon and uranium) 15 pCi/L~~

(1) For purposes of this Subsection and the table in Subsection J of 20.6.4.900 NMAC the term "gross alpha" includes radium 226, but excludes radon and uranium.

Basis: Criteria moved to table in Subsection J. New Paragraph (1) is retained here because Subsection I of 1.24.10.12 NMAC, regulations of the New Mexico Commission of Public Records, does not allow the use of footnotes in rules.

~~**C. High Quality Coldwater Fishery**: Dissolved oxygen shall not be less than 6.0 mg/L, temperature shall not exceed 20°C (68°F), pH shall be within the range of 6.6 to 8.8,~~

~~turbidity shall not exceed 10 NTU (25 NTU in certain reaches where natural background prevents attainment of lower turbidity), and conductivity (at 25°C) shall not exceed a limit varying between 300 µmhos/cm and 1,500 µmhos/cm depending on the natural background in particular surface waters of the state (the intent of this standard is to prevent excessive increases in dissolved solids which would result in changes in community structure). The acute and chronic aquatic life standards set out in subsections J and M of this section are applicable to this use. The total ammonia standards set out in Subsection O of this section and the human health standards for pollutants listed in Subsection M of this section are applicable to this use.~~

Basis: Moved to aquatic life, Subsection H.

[~~D~~]C. Irrigation and Irrigation Storage: The monthly geometric mean of fecal coliform bacteria shall not exceed 1,000/100 mL; no single sample shall exceed 2,000/100 mL. The following numeric [~~standards~~] criteria[4] and those [~~standards~~] criteria[4] listed under irrigation in Subsection [~~M~~] J[14] of this section shall not be exceeded:

(1) dissolved selenium 0.13 mg/L

(2) dissolved selenium in presence of >500 mg/L SO4 0.25 mg/L .

Basis: Selenium criteria are retained here because Subsection I of 1.24.10.12 NMAC, regulations of the New Mexico Commission of Public Records, does not allow the use of footnotes in rules.

~~**E. Limited Warmwater Fishery**: Dissolved oxygen shall not be less than 5 mg/L, pH shall be within the range of 6.6 to 9.0, and on a case by case basis maximum temperatures may exceed 32.2°C. The acute and chronic aquatic life standards set out in Subsections J and M of this section are applicable to this use. The total ammonia standards set out in Subsection N of this section and the human health standards listed in Subsection M of this section are applicable to this use.~~

~~**F. Marginal Coldwater Fishery**: Dissolved oxygen shall not be less than 6 mg/L, on a case by case basis maximum temperatures may exceed 25°C and the pH may range from 6.6 to 9.0. The acute and chronic aquatic life standards set out in subsections J and M of this section are applicable to this use. The total ammonia standards set out in Subsection O of this section and the human health standards listed in Subsection M of this section are applicable to this use.~~

Basis: Moved to aquatic life, Subsection H.

[~~G~~]D. Primary Contact: ~~The monthly geometric mean of fecal coliform bacteria shall not exceed 200/100 mL, no single sample shall exceed 400/100 mL~~ The monthly geometric mean of E. coli bacteria shall not exceed 126/100 mL and no single sample shall exceed 410/100 mL, and pH shall be within the range of 6.6 to 9.0.

Basis: Change from fecal coliform to E. coli criteria based upon latest EPA guidance. This will also require changes to every segment, since each segment contains fecal coliform criteria.

E. Secondary Contact: The monthly geometric mean of E. coli bacteria shall not exceed 548/100 mL, no single sample shall exceed 2507/100 mL.

Basis: Although EPA guidance continues to accept a secondary contact criterion five times the primary contact criterion for the geometric mean (which would result in a geometric mean for secondary contact of 630/100 mL), the guidance does not make a recommendation for a single sample maximum for secondary contact. EPA guidance provides a range of values that could be adopted to protect recreation use based upon projected illness rates. This proposal adopts the geometric mean density of 548/100 mL associated with an illness rate of 14 per 1000 persons exposed to bacteria in water by ingestion of water as a result of immersion, and 2507/100 mL for a single sample maximum for waters infrequently used for full body contact at a 95% confidence limit.

~~**H. Warmwater Fishery**: Dissolved oxygen shall not be less than 5 mg/L, temperature shall not exceed 32.2°C (90°F), and pH shall be within the range of 6.6 to 9.0. The acute and chronic aquatic life standards set out in subsections J and M of this section are applicable to this use. The total ammonia standards set out in Subsection N of this section and the human health standards listed in Subsection M of this section are applicable to this use.~~

Basis: moved to aquatic life, Subsection H.

[~~**K**~~]**F. Livestock Watering**: ~~The following numeric standards and those standards~~] The criteria[4] listed in Subsection [~~**M**~~] J[14] for livestock watering shall not be exceeded:

~~**(1)** radium-226 + radium-228 30.0 pCi/L~~

~~**(2)** tritium 20,000 pCi/L~~

~~**(3)** total gross alpha (including radium-226, but excluding radon and uranium) 15 pCi/L~~

(1) For purposes of this Subsection and the table in Subsection J of 20.6.4.900 of NMAC the term "gross alpha" includes radium 226, but excludes radon and uranium.

Basis: Criteria moved to table in Subsection J.

[~~**L**~~]**G. Wildlife Habitat**: Wildlife habitat [~~should~~] shall be free from any substances at concentrations that are toxic to or will adversely affect plants and animals that use these environments for feeding, drinking, habitat or propagation[~~, or~~] ; can bioaccumulate; [~~and~~] or might impair the community of animals in a watershed or the ecological integrity of surface waters of the state. [~~In the absence of site-specific information, and subject to the following paragraph, the chronic numeric standards listed in Subsection M for wildlife habitat shall not be exceeded.~~] The discharge of substances [~~which~~] that[2] bioaccumulate, in excess of levels listed in Subsection [~~**M**~~] J for wildlife habitat is allowed if, and only to the extent that, the substances are present in the intake waters [~~which~~] that[2] are diverted and utilized prior to discharge, and then only if the discharger utilizes best available treatment technology to reduce the amount of bioaccumulating substances [~~which~~] that[2] are discharged. The chronic numeric criteria listed in Subsection J for wildlife habitat shall not be exceeded except when a site-specific or segment-specific criterion has been adopted under 20.6.4.101 through 20.6.4.899 NMAC.

Basis: "Should" changed to "shall" for consistency with other provisions of this section. Criteria for specific substances were moved to the table in Section J. The second sentence

(strikeout) makes reference to a "following paragraph", which does not exist as the result of a revision in a previous triennial review. The remainder of the second sentence is revised and placed as the last sentence.

H. Aquatic Life: Waters 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. The acute and chronic aquatic life criteria set out in subsections I and J of this section are applicable to this use except the limited aquatic life subcategory. In addition, the specific criteria for aquatic life subcategories in the following paragraphs shall apply to waters classified under the respective designations

Basis: Former Subsections A, C, E, F and H "fishery" classifications are combined under this Subsection. The sentence from each of the former subsections dealing with applicability of acute and chronic aquatic life criteria has been moved to this introductory paragraph and eliminated from the separate paragraphs.

(1) High Quality Coldwater: Dissolved oxygen shall not be less than 6.0 mg/L, temperature shall not exceed 20°C (68°F), and pH shall be within the range of 6.6 to 8.8, and specific conductance shall not exceed a limit varying between 300 µmhos/cm and 1,500 µmhos/cm depending on the natural background in particular surface waters of the state (the intent of this criterion is to prevent excessive increases in dissolved solids which would result in changes in community structure). The total ammonia criteria set out in Subsections K,L and M of this section and the human health criteria for pollutants listed in Subsection J of this section are applicable to this use.

Basis: This proposal would remove the use-specific numeric criteria for turbidity for high quality cold water fishery and replace it with a narrative criterion in section 12. Otherwise, there are no substantive changes to this provision.

(2) Coldwater: Dissolved oxygen shall not be less than 6.0 mg/L, temperature shall not exceed 20°C (68°F), and pH shall be within the range of 6.6 to 8.8. The total ammonia criteria set out in Subsections K, L and M of this section and the human health criteria listed in Subsection J of this section are applicable to this use.

(3) Marginal Coldwater: Dissolved oxygen shall not be less than 6 mg/L, on a case by case basis maximum temperatures may exceed 25°C and the pH may range from 6.6 to 9.0. The total ammonia criteria set out in Subsections K, L and M of this section and the human health criteria listed in Subsection J of this section are applicable to this use.

(4) Warmwater: Dissolved oxygen shall not be less than 5 mg/L, temperature shall not exceed 32.2°C (90°F), and pH shall be within the range of 6.6 to 9.0. The total ammonia criteria set out in Subsections K, L and M of this section and the human health criteria listed in Subsection J of this section are applicable to this use.

(5) Marginal Warmwater: Dissolved oxygen shall not be less than 5 mg/L, pH shall be within the range of 6.6 to 9.0, and on a case by case basis maximum temperatures may exceed 32.2°C. The total ammonia criteria set out in Subsections K, L and M of this section and the human health criteria listed in Subsection J of this section are applicable to this use.

Basis: Formerly Subsections A, C, E, F and H "fishery" classifications. These classifications have not been substantively altered, except that the sentence regarding applicability of the acute and chronic aquatic life criteria has been moved to the introductory paragraph.

(6) Limited Aquatic Life: Criteria shall be developed on a segment-specific basis to protect the aquatic life community that has developed in a location where natural conditions preclude attainment of criteria otherwise applicable.

Basis: This new classification is intended to allow for development of segment-specific criteria for waters that support an aquatic life population under conditions that would otherwise result in natural exceedences of criteria. An example is the proposal for a new segment for Sulphur Creek, which generally has a very low pH.

[~~J~~]I. The following schedule of equations for the determination of numeric [~~standards~~] criteria[4] for the substances listed and those [~~standards~~] criteria[4] listed in Subsection [~~M~~] J[14] for aquatic life shall apply to the subcategories of [~~fisheries~~] aquatic life identified in this section:

(1) Acute [~~standards~~] criteria[4]

(a) dissolved silver $0.85\ e^{(1.72[\ln(\text{hardness})]-[\cancel{6.6825}]6.59)}$ µg/L

(b) dissolved cadmium $(e^{([\cancel{1.128}]1.0166[\ln(\text{hardness})][\cancel{-3.6867}]-3.924)})\text{cf}$ µg/L

The hardness-dependent formulae for cadmium must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The acute factor for cadmium is cf = 1.136672 - [(ln hardness)(0.041838)].

(c) dissolved chromium $0.316\ e^{(0.819[\ln(\text{hardness})]+[\cancel{2.5736}]3.7256)}$ µg/L

(d) dissolved copper $0.960\ e^{(0.9422[\ln(\text{hardness})]-[\cancel{1.7408}]1.700)}$ µg/L

(e) dissolved lead $(e^{(1.273[\ln(\text{hardness})]-1.46)})\text{cf}$ µg/L The hardness-dependent formulae for lead must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The acute and chronic factor for lead is cf = 1.46203 - [(ln hardness)(0.145712)].

(f) dissolved nickel $0.998\ e^{(0.8460[\ln(\text{hardness})]+[\cancel{2.253}]2.255)}$ µg/L

(g) dissolved zinc $0.978\ e^{(0.8473[\ln(\text{hardness})]+[\cancel{0.8618}]0.884)}$ µg/L

(2) Chronic [~~standards~~] criteria[4]

(a) dissolved cadmium $(e^{([\cancel{0.7852}]0.7409[\ln(\text{hardness})]-[\cancel{2.715}]4.719)})\text{cf}$ µg/L

The hardness-dependent formulae for cadmium must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The chronic factor for cadmium is cf = 1.101672 - [(ln hardness)(0.041838)].

(b) dissolved chromium $0.860\ e^{(0.819[\ln(\text{hardness})]+[\cancel{0.534}]0.6848)}$ µg/L

(c) dissolved copper $0.960\ e^{(0.8545[\ln(\text{hardness})]-[\cancel{1.7428}]1.702)}$ µg/L

(d) dissolved lead $(e^{(1.273[\ln(\text{hardness})]-4.705)})\text{cf}$ µg/L

The hardness-dependent formulae for lead must be multiplied by a conversion factor (cf) to be expressed as dissolved values. The acute and chronic factor for lead is cf = 1.46203 - [(ln hardness)(0.145712)].

(e) dissolved nickel $0.997\ e^{(0.846[\ln(\text{hardness})]+[\cancel{0.0554}]0.0584)}$ µg/L

(f) dissolved zinc $0.986\ e^{(0.8473[\ln(\text{hardness})]+[\cancel{0.8699}]0.884)}$ µg/L

corrected 5/1/03

Basis: "Fisheries" changed to "aquatic life" as described earlier . Formulae are updated based upon latest EPA guidance. National Recommended Water Quality Criteria: 2002, EPA-822-R-02-047, United States Environmental Protection Agency, November 2002. http://www.epa.gov/waterscience/pc/revcom.pdf

[~~M~~] J. Numeric criteria

The following table sets forth the numeric criteria adopted by the Commission to protect existing, designated and attainable uses. Additional criteria that are not compatible with this table [~~and~~][3] are found in Subsections A through [~~L~~] I[14] of this section.

	Pollutant total unless indicated	CAS Number	Domestic Water Supply µg/L unless indicated	Irrigation µg/L unless indicated	Livestock Watering µg/L unless indicated	Wildlife Habitat µg/L unless indicated	Aquatic Life Acute µg/L	Aquatic Life Chronic µg/L	Human Health µg/L	Cancer Causing (C) [~~and/~~]or Persistent (P)
~~1~~	Aluminum, dissolved	7429-90-5		5,000			750	87		
	Aluminum	7429-90-5			500[18]					
~~2~~	Antimony, dissolved	7440-36-0	[~~6~~] 5.6[17]						[~~4,300~~]640[17]	P
~~3~~	Arsenic, dissolved	7440-38-2	[~~50~~] 2.3[22]	100	~~200~~		340	150	[~~24.2~~] 9.0[22]	C,P
	Arsenic	7440-38-2			20[18]					
	Asbestos	1332-21-4	7,000,000 fibers/L[17]							
~~4~~	Barium, dissolved	7440-39-3	2,000							
	Barium (mg/L)	7440-39-3			10 mg/L[18]					
~~5~~	Beryllium, dissolved	7440-41-7	4				130	5.3		
~~6~~	Boron, dissolved	7440-42-8		750	5,000					
~~7~~	Cadmium, dissolved	7440-43-9	5	10	~~50~~		see 20.6.4.900.[~~J~~]I	see 20.6.4.900.[~~J~~]I		
	Cadmium	7440-43-9			5[18]					
~~8~~	Chlorine residual	7782-50-5				11	19	11		
~~9~~	Chromium, dissolved	18540-29-9	100	100	1,000		see 20.6.4.900.[~~J~~]I	see 20.6.4.900.[~~J~~]I		
~~10~~	Cobalt, dissolved	7440-48-4		50	1,000					
~~11~~	Copper, dissolved	7440-50-8	1,300[17]	200	500		see 20.6.4.900.[~~J~~]I	see 20.6.4.900.[~~J~~]I		
~~12~~	Cyanide, dissolved	57-12-5	200							
~~13~~	Cyanide, weak acid dissociable	57-12-5	700[17]			5.2	22.0	5.2	220,000	
	Fluoride, (mg/L)				2 mg/L[18]					
~~14~~	Lead, dissolved	7439-92-1	50	5,000	100		see 20.6.4.900.[~~J~~]I	see 20.6.4.900.[~~J~~]I		
	Lead	7439-92-1			15[18]					

	Pollutant total unless indicated	CAS Number	Domestic Water Supply µg/L unless indicated	Irrigation µg/L unless indicated	Livestock Watering µg/L unless indicated	Wildlife Habitat µg/L unless indicated	Aquatic Life Acute µg/L	Aquatic Life Chronic µg/L	Human Health µg/L	Cancer Causing (C) [~~and/~~]or Persistent (P)
~~15~~	Mercury	7439-97-6	2		10	0.77	[~~2.4~~]1.4	0.012		
~~16~~	Molybdenum, dissolved	7439-98-7		1,000						
~~17~~	Nickel, dissolved	7440-02-0	100				see 20.6.4.900.[~~J~~]I	see 20.6.4.900.[~~J~~]I	4,600	P
	Nickel	7440-02-0			250[18]					
	Nitrate as N (mg/L)		10 mg/L[15]		10 mg/L[18]					
	Nitrite + Nitrate as N (mg/L)				100 mg/L[18]					
~~18~~	Selenium, dissolved	7782-49-2	50	see 20.6.4.900.[~~D~~]C	50				[~~11,000~~] 4,200[17]	P
~~19~~	Selenium, total recoverable	7782-49-2				5.0	20.0	5.0		
~~20~~	Silver, dissolved	7440-22-4					see 20.6.4.900.[~~J~~]I			
	Total Dissolved Solids Dried at 180 degrees Celsius (mg/L)				5,000 mg/L[18]	2212 mg/L[21]				
~~21~~	Thallium, dissolved	7440-28-0	~~2~~ 1.7[17]						6.3	P
~~22~~	Uranium, dissolved	7440-61-1	5,000							
~~23~~	Vanadium, dissolved	7440-62-2		100	100					
~~24~~	Zinc, dissolved	7440-66-6	7,400[17]	2,000	~~25,000~~		see 20.6.4.900.[~~J~~]I	see 20.6.4.900.[~~J~~]I	[~~69,000~~] 26,000[17]	P
	Zinc	7440-66-6			5 mg/L[18]					
	Gross alpha (see 20.6.4.900.B & K)		15 pCi/L[15]		15 pCi/L[16]					
	Radium 226 + Radium 228		5 pCi/L[15]		30.0 pCi/L[16]					
	Strontium 90		8 pCi/L[15]							
	Tritium		20,000 pCi/L[15]		20,000 pCi/L[16]					
~~25~~	Acenaphthene	83-32-9	670[17]						[~~2,700~~] 990[17]	
~~26~~	Acrolein	107-02-8	190[17]						[~~780~~]290[17]	
~~27~~	Acrylonitrile	107-13-1	0.51[17]						[~~6.6~~] 2.5[17]	C

	Pollutant total unless indicated	CAS Number	Domestic Water Supply µg/L unless indicated	Irrigation µg/L unless indicated	Livestock Watering µg/L unless indicated	Wildlife Habitat µg/L unless indicated	Aquatic Life		Human Health µg/L	Cancer Causing (C) [~~and/~~]or Persistent (P)
							Acute µg/L	Chronic µg/L		
~~28~~	Aldrin	309-00-2	0.00049[17]				3.0		[~~0.0014~~] 0.00050[17]	C,P
~~29~~	Anthracene	120-12-7	8,300[17]						[~~110,000~~] 40,000[17]	
~~30~~	Benzene	71-43-2	22[17]						[~~710~~] 510[17]	C
~~31~~	Benzidine	92-87-5	0.00086[17]						[~~0.0054~~] 0.0020[17]	C
~~32~~	Benzo(a)anthracene	56-55-3	0.038[17]						[~~0.49~~] 0.18[17]	C
~~33~~	Benzo(a)pyrene	50-32-8	0.038[17]						[~~0.49~~] 0.18[17]	C,P
~~34~~	Benzo(b)fluoranthene	205-99-2	0.038[17]						[~~0.49~~] 0.18[17]	C
~~35~~	Benzo(k)fluoranthene	207-08-9	0.038[17]						[~~0.49~~] 0.18[17]	C
~~36~~	alpha-BHC	319-84-6	0.026[17]						[~~0.13~~] 0.049[17]	C
~~37~~	beta-BHC	319-85-7	0.091[17]						[~~0.46~~] 0.17[17]	C
~~38~~	gamma-BHC (Lindane)	58-89-9	0.19[17]				0.95		0.63	C
~~39~~	Bis(2-chloroethyl) ether	111-44-4	0.30[17]						[~~14~~] 5.3[17]	C
~~40~~	Bis(2-chloroisopropyl) ether	108-60-1	1,400[17]						[~~170,000~~] 65,000[17]	
~~41~~	Bis(2-ethylhexyl) phthalate	117817	12[17]						[~~59~~] 22[17]	C
~~42~~	Bromoform	75-25-2	43[17]						[~~3600~~] 1,400[17]	C
~~43~~	Butylbenzyl phthalate	85-68-7	1,500[17]						[~~5,200~~] 1,900[17]	
~~44~~	Carbon tetrachloride	56-23-5	2.3[17]						[~~44~~] 16[17]	C
~~45~~	Chlordane	57-74-9	0.0080[17]				2.4	0.0043	[~~0.022~~] 0.0081[17]	C,P
~~46~~	Chlorobenzene	108-90-7	680[17]						21,000	
~~47~~	Chlorodibromomethane	124-48-1	4.0[17]						[~~340~~] 130[17]	C
~~48~~	Chloroform	67-66-3	57[17]						4,700	C
~~49~~	2-Chloronaphthalene	91-58-7	1,000[17]						[~~4,300~~] 1,600[17]	
~~50~~	2-Chlorophenol	95-57-8	81[17]						[~~400~~] 150[17]	
~~51~~	Chrysene	218-01-9	0.038[17]						[~~0.49~~] 0.18[17]	C
~~52~~	4,4'-DDT and derivatives	[~~50-29-3~~]	0.0022[17]			0.001	1.1	0.001	[~~0.0059~~] 0.0022[17]	C,P
~~53~~	Dibenzo(a,h)anthracene	53-70-3	0.038[17]						[~~0.49~~]0.18[17]	C
~~54~~	Dibutyl phthalate	84-74-2	2,000[17]						[~~12,000~~] 4,500[17]	
~~55~~	1,2-Dichlorobenzene	95-50-1	2,700[17]						17,000	
~~56~~	1,3-Dichlorobenzene	541-73-1	320[17]						[~~2,600~~] 960[17]	

	Pollutant total unless indicated	CAS Number	Domestic Water Supply µg/L unless indicated	Irrigation µg/L unless indicated	Livestock Watering µg/L unless indicated	Wildlife Habitat µg/L unless indicated	Aquatic Life		Human Health µg/L	Cancer Causing (C) [~~and/~~]or Persistent (P)
							Acute µg/L	Chronic µg/L		
~~57~~	1,4-Dichlorobenzene	106-46-7	400[17]						2,600	
~~58~~	3,3'-Dichlorobenzidine	91-94-1	0.21[17]						[~~0.77~~] 0.28[17]	C
~~59~~	Dichlorobromomethane	75-27-4	5.5[17]						[~~460~~] 170[17]	C
~~60~~	1,2-Dichloroethane	107-06-2	3.8[17]						[~~990~~] 370[17]	C
~~61~~	1,1-Dichloroethylene	75-35-4	0.57[17]						32	C
~~62~~	2,4-Dichlorophenol	120-83-2	77[17]						[~~790~~] 290[17]	
~~63~~	1,2-Dichloropropane	78-87-5	5.0[17]						[~~390~~] 150[17]	C
~~64~~	1,3-Dichloropropene	542-75-6	10[17]						1,700	
~~65~~	Dieldrin	60-57-1	0.00052[17]				0.24	0.056	[~~0.0014~~] 0.00054[17]	C,P
~~66~~	Diethyl phthalate	84-66-2	17,000[17]						[~~120,000~~] 44,000[17]	
~~67~~	Dimethyl phthalate	131-11-3	270,000[17]						[~~2,900,000~~] 1,100,000[17]	
~~68~~	2,4-Dimethylphenol	105-67-9	380[17]						[~~2,300~~] 850[17]	
~~69~~	2,4-Dinitrophenol	51-28-5	69[17]						[~~14,000~~] 5,300[17]	
~~70~~	2,4-Dinitrotoluene	121-14-2	1.1[17]						[~~91~~] 34[17]	C
~~71~~	2,3,7,8-TCDD Dioxin	1746-01-6	5.0E-08[17]						[~~1.4E-07~~] 5.1E-08[17]	C,P
~~72~~	1,2-Diphenylhydrazine	122-66-7	0.36[17]						[~~5.4~~] 2.0[17]	C
~~73~~	alpha-Endosulfan	959-98-8	62[17]				0.22	0.056	[~~240~~] 89[17]	
~~74~~	beta-Endosulfan	33213-65-9	62[17]				0.22	0.056	[~~240~~] 89[17]	
~~75~~	Endosulfan sulfate	1031-07-8	62[17]						[~~240~~] 89[17]	
~~76~~	Endrin	72-20-8	0.76[17]				0.086	0.036	0.81	
~~78~~	Endrin aldehyde	7421-93-4	0.29[17]						[~~0.81~~] 0.30[17]	
~~79~~	Ethylbenzene	100-41-4	3,100[17]						29,000	
~~80~~	Fluoranthene	206-44-0	130[17]						[~~370~~] 140[17]	
~~81~~	Fluorene	86-73-7	1,100[17]						[~~14,000~~] 5,300[17]	
~~82~~	Heptachlor	76-44-8	0.00079[17]				0.52	0.0038	[~~0.0021~~] 0.00079[17]	C
~~83~~	Heptachlor epoxide	1024-57-3	0.00039[17]				0.52	0.0038	[~~0.0011~~] 0.00039[17]	C
~~84~~	Hexachlorobenzene	118-74-1	0.0028[17]						[~~0.0077~~] 0.0029[17]	C,P
~~85~~	Hexachlorobutadiene	87-68-3	4.4[17]						[~~500~~] 180[17]	C

	Pollutant total unless indicated	CAS Number	Domestic Water Supply µg/L unless indicated	Irrigation µg/L unless indicated	Livestock Watering µg/L unless indicated	Wildlife Habitat µg/L unless indicated	Aquatic Life		Human Health µg/L	Cancer Causing (C) [~~and/~~]or Persistent (P)
							Acute µg/L	Chronic µg/L		
~~86~~	Hexachlorocyclopentadiene	77-47-4	240[17]						17,000	
~~87~~	Hexachloroethane	67-72-1	14[17]						[~~89~~] 33[17]	C
~~88~~	Ideno(1,2,3-cd)pyrene	193-39-5	0.038[17]						[~~0.49~~] 0.18[17]	C
~~89~~	Isophorone	78-59-1	350[17]						[~~26,000~~] 9,600[17]	C
~~90~~	Methyl bromide	74-83-9	47[17]						[~~4000~~] 1,500[17]	
~~91~~	2-Methyl-4,6-dinitrophenol	534-52-1	13[17]						[~~765~~] 280[17]	
~~92~~	Methylene chloride	75-09-2	46[17]						[~~16,000~~] 5,900[17]	C
~~93~~	Nitrobenzene	98-95-3	17[17]						[~~1,900~~] 690[17]	
~~94~~	N-Nitrosodimethylamine	62-75-9	0.0069[17]						[~~81~~] 30[17]	C
~~95~~	N-Nitrosodi-n-propylamine	621-64-7	0.050[17]						[~~14~~] 5.1[17]	C
~~96~~	N-Nitrosodiphenylamine	86-30-6	33[17]						[~~160~~] 60[17]	C
~~97~~	PCBs	[~~1336-36-3~~]	0.00064[17]			0.014		0.014	[~~0.0017~~] 0.00064[17]	C,P
~~98~~	Pentachlorophenol	87-86-5	2.7[17]				19	15	[~~82~~] 30[17]	C
~~99~~	Phenol	108-95-2	21,000[17]						[~~4,600,000~~] 1,700,000[17]	
~~100~~	Pyrene	129-00-0	830[17]						[~~11,000~~] 4,000[17]	
~~101~~	1,1,2,2-Tetrachloroethane	79-34-5	1.7[17]						[~~110~~] 40[17]	C
~~102~~	Tetrachloroethylene	127-18-4	6.9[17]						[~~88.5~~] 33[17]	C,P
~~103~~	Toluene	108-88-3	6,800[17]						200,000	
~~104~~	Toxaphene	8001-35-2	0.0028[17]				0.73	0.0002	[~~0.0075~~] 0.0028[17]	C
~~105~~	1,2-Trans-dichloroethylene	156-60-5	700[17]						140,000	
~~106~~	1,2,4-Trichlorobenzene	120-82-1	260[17]						940	
~~107~~	1,1,2-Trichloroethane	79-00-5	5.9[17]						[~~420~~] 160[17]	C
~~108~~	Trichloroethylene	79-01-6	25[17]						[~~810~~] 300[17]	C
~~109~~	2,4,6-Trichlorophenol	88-06-2	14[17]						[~~65~~] 24[17]	C
~~110~~	Vinyl chloride	75-01-4	20[17]						[~~5,250~~] 5,300[17]	C

Basis: First column of table proposed for elimination as unnecessary. CAS Numbers eliminated for "DDT and derivatives" and "PCBs" because they have multiple associated CAS numbers. Column headings changed to allow for use of units other than µg/L. New criteria proposed to protect Irrigation, Livestock Watering and Wildlife Habitat uses. Internal references revised.

~~N. Total Ammonia (mg/L as N), Warmwater Fisheries:~~

~~(1) acute [standards] criteria~~

pH

Temperature °C	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	29	26	23	19	14	10	6.6	3.7	2.1	1.2	0.70
1	28	26	23	19	14	9.9	6.5	3.7	2.1	1.2	0.70
2	28	26	22	18	14	9.7	6.4	3.6	2.1	1.2	0.69
3	28	25	22	18	14	9.6	6.3	3.6	2.0	1.2	0.69
4	27	25	22	18	14	9.5	6.2	3.5	2.0	1.2	0.69
5	27	25	22	18	13	9.4	6.1	3.5	2.0	1.2	0.68
6	27	24	21	18	13	9.3	6.1	3.5	2.0	1.1	0.68
7	26	24	21	17	13	9.2	6.0	3.4	2.0	1.1	0.68
8	26	24	21	17	13	9.1	6.0	3.4	1.9	1.1	0.68
9	26	24	21	17	13	9.0	5.9	3.4	1.9	1.1	0.68
10	25	23	21	17	13	8.9	5.9	3.3	1.9	1.1	0.68
11	25	23	20	17	13	8.9	5.8	3.3	1.9	1.1	0.68
12	25	23	20	17	13	8.8	5.8	3.3	1.9	1.1	0.69
13	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.69
14	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.70
15	24	23	20	16	12	8.6	5.7	3.3	1.9	1.1	0.70
16	24	22	20	16	12	8.6	5.7	3.3	1.9	1.1	0.71
17	24	22	20	16	12	8.5	5.6	3.2	1.9	1.1	0.72
18	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.73
19	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.74
20	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.75
21	24	22	19	16	12	8.4	5.6	3.2	1.9	1.2	0.77
22	24	22	19	16	12	8.4	5.6	3.3	1.9	1.2	0.78
23	24	22	19	16	12	8.4	5.6	3.3	1.9	1.2	0.80
24	24	22	19	16	12	8.4	5.6	3.3	2.0	1.2	0.81
25	24	22	19	16	12	8.4	5.6	3.3	2.0	1.2	0.83
26	22	20	18	15	11	7.9	5.2	3.1	1.9	1.2	0.80
27	20	19	17	14	10	7.3	4.9	2.9	1.8	1.1	0.76
28	19	18	15	13	9.7	6.9	4.6	2.7	1.7	1.1	0.73
29	18	16	14	12	9.1	6.4	4.3	2.6	1.6	1.0	0.70
30	17	15	13	11	8.5	6.0	4.1	2.4	1.5	0.97	0.68

~~(2) chronic [standards] criteria~~

~~pH~~

Temperature °C	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.84	0.48	0.28	0.16
1	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.83	0.47	0.27	0.16
2	2.4	2.4	2.4	2.4	2.4	2.2	1.5	0.82	0.47	0.27	0.16
3	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.81	0.46	0.27	0.16
4	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.80	0.46	0.27	0.16
5	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.80	0.45	0.26	0.16
6	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.79	0.45	0.26	0.16
7	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.78	0.45	0.26	0.16
8	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.77	0.44	0.26	0.15
9	2.2	2.2	2.2	2.2	2.2	2.1	1.3	0.77	0.44	0.26	0.16
10	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
11	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
12	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.44	0.26	0.16
13	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.43	0.26	0.16
14	2.1	2.1	2.1	2.1	2.2	2.0	1.3	0.75	0.43	0.26	0.16
15	2.1	2.1	2.1	2.1	2.1	2.0	1.3	0.74	0.43	0.26	0.16
16	2.1	2.1	2.1	2.1	2.1	2.0	1.3	0.74	0.43	0.26	0.16
17	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.43	0.26	0.16
18	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.43	0.26	0.17
19	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.44	0.26	0.17
20	2.1	2.1	2.1	2.1	2.1	1.9	1.3	0.74	0.44	0.27	0.17
21	1.9	1.9	1.9	1.9	1.9	1.8	1.2	0.69	0.41	0.25	0.16
22	1.8	1.8	1.8	1.8	1.8	1.7	1.1	0.65	0.38	0.24	0.15
23	1.7	1.7	1.7	1.7	1.7	1.6	1.0	0.60	0.36	0.22	0.15
24	1.6	1.6	1.6	1.6	1.6	1.5	0.97	0.57	0.34	0.21	0.14
25	1.4	1.4	1.5	1.5	1.5	1.4	0.91	0.53	0.32	0.20	0.13
26	1.3	1.3	1.4	1.4	1.4	1.3	0.85	0.50	0.30	0.19	0.13
27	1.3	1.3	1.3	1.3	1.3	1.2	0.79	0.47	0.28	0.18	0.12
28	1.2	1.2	1.2	1.2	1.2	1.1	0.74	0.44	0.27	0.17	0.12
29	1.1	1.1	1.1	1.1	1.1	1.0	0.70	0.41	0.25	0.16	0.11
30	1.0	1.0	1.0	1.0	1.0	0.97	0.65	0.39	0.24	0.16	0.11

O. Total Ammonia (mg/L as N), Coldwater Fisheries:

(1) acute [standards] criteria

pH

Temperature °C	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	29	26	23	19	14	10	6.6	3.7	2.1	1.2	0.70
1	28	26	23	19	14	9.9	6.5	3.7	2.1	1.2	0.70
2	28	26	22	18	14	9.7	6.4	3.6	2.1	1.2	0.69
3	28	25	22	18	14	9.6	6.3	3.6	2.0	1.2	0.69
4	27	25	22	18	14	9.5	6.2	3.5	2.0	1.2	0.69
5	27	25	22	18	13	9.4	6.1	3.5	2.0	1.2	0.68
6	27	24	21	18	13	9.3	6.1	3.5	2.0	1.1	0.68
7	26	24	21	17	13	9.2	6.0	3.4	2.0	1.1	0.68
8	26	24	21	17	13	9.1	6.0	3.4	1.9	1.1	0.68
9	26	24	21	17	13	9.0	5.9	3.4	1.9	1.1	0.68
10	25	23	21	17	13	8.9	5.9	3.3	1.9	1.1	0.68
11	25	23	20	17	13	8.9	5.8	3.3	1.9	1.1	0.68
12	25	23	20	17	13	8.8	5.8	3.3	1.9	1.1	0.69
13	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.69
14	25	23	20	16	12	8.7	5.7	3.3	1.9	1.1	0.70
15	24	23	20	16	12	8.6	5.7	3.3	1.9	1.1	0.70
16	24	22	20	16	12	8.6	5.7	3.3	1.9	1.1	0.71
17	24	22	20	16	12	8.5	5.6	3.2	1.9	1.1	0.72
18	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.73
19	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.74
20	24	22	19	16	12	8.5	5.6	3.2	1.9	1.2	0.75
21	22	20	18	15	11	7.9	5.2	3.0	1.8	1.1	0.71
22	21	19	17	14	10	7.3	4.9	2.8	1.7	1.0	0.68
23	19	18	15	13	9.7	6.8	4.5	2.7	1.6	0.98	0.65
24	18	16	14	12	9.0	6.4	4.2	2.5	1.5	0.93	0.62
25	17	15	13	11	8.4	6.0	4.0	2.3	1.4	0.88	0.59
26	16	14	13	10	7.9	5.6	3.7	2.2	1.3	0.84	0.56
27	14	13	12	9.6	7.3	5.2	3.5	2.1	1.2	0.79	0.54
28	13	12	11	9.0	6.9	4.9	3.3	1.9	1.2	0.76	0.52
29	13	12	10	8.4	6.4	4.6	3.1	1.8	1.1	0.72	0.50
30	12	11	10	7.8	6.0	4.3	2.9	1.7	1.1	0.69	0.48

(2) chronic [standards] criteria

pH

Temperature °C	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00
0	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.84	0.48	0.28	0.16
1	2.5	2.5	2.5	2.5	2.5	2.3	1.5	0.83	0.47	0.27	0.16
2	2.4	2.4	2.4	2.4	2.4	2.2	1.5	0.82	0.47	0.27	0.16
3	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.81	0.46	0.27	0.16
4	2.4	2.4	2.4	2.4	2.4	2.2	1.4	0.80	0.46	0.27	0.16
5	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.80	0.45	0.26	0.16
6	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.79	0.45	0.26	0.16
7	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.78	0.45	0.26	0.16
8	2.3	2.3	2.3	2.3	2.3	2.1	1.4	0.77	0.44	0.26	0.15
9	2.2	2.2	2.2	2.2	2.2	2.1	1.3	0.77	0.44	0.26	0.16
10	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
11	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.76	0.44	0.26	0.16
12	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.44	0.26	0.16
13	2.2	2.2	2.2	2.2	2.2	2.0	1.3	0.75	0.43	0.26	0.16
14	2.1	2.1	2.1	2.1	2.2	2.0	1.3	0.75	0.43	0.26	0.16
15	2.1	2.1	2.1	2.1	2.1	2.0	1.3	0.74	0.43	0.26	0.16
16	2.0	2.0	2.0	2.0	2.0	1.8	1.2	0.69	0.40	0.24	0.15
17	1.8	1.8	1.8	1.8	1.8	1.7	1.1	0.64	0.38	0.23	0.14
18	1.7	1.7	1.7	1.7	1.7	1.6	1.0	0.60	0.35	0.21	0.14
19	1.6	1.6	1.6	1.6	1.6	1.5	0.97	0.56	0.33	0.20	0.13
20	1.5	1.5	1.5	1.5	1.5	1.4	0.90	0.52	0.31	0.19	0.12
21	1.4	1.4	1.4	1.4	1.4	1.3	0.84	0.49	0.29	0.18	0.12
22	1.3	1.3	1.3	1.3	1.3	1.2	0.79	0.46	0.27	0.17	0.11
23	1.2	1.2	1.2	1.2	1.2	1.1	0.73	0.43	0.26	0.16	0.10
24	1.1	1.1	1.1	1.1	1.1	1.0	0.69	0.40	0.24	0.15	0.10
25	1.0	1.0	1.0	1.0	1.0	0.96	0.64	0.38	0.23	0.14	0.095
26	0.95	0.95	0.96	0.96	0.97	0.9	0.60	0.35	0.21	0.13	0.091
27	0.89	0.89	0.89	0.90	0.91	0.84	0.56	0.33	0.20	0.13	0.087
28	0.83	0.83	0.83	0.84	0.85	0.79	0.53	0.31	0.19	0.12	0.084
29	0.77	0.78	0.78	0.78	0.79	0.73	0.49	0.29	0.18	0.12	0.080
30	0.72	0.72	0.73	0.73	0.74	0.69	0.46	0.28	0.17	0.11	0.077

K. Acute Criteria, Total Ammonia (mg/L as N)

pH	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8.	8.9	9.0
Salmonids Present	32.6	31.3	29.8	28.1	26.2	24.1	22.0	19.7	17.5	15.4	13.3	11.4	9.65	8.11	6.77	5.62	4.64	3.83	3.15	2.59	2.14	1.77	1.47	1.23	1.04	0.885
Salmonids Absent	48.8	46.8	44.6	42.0	39.1	36.1	32.8	29.5	26.2	23.0	19.9	17.0	14.4	12.1	10.1	8.40	6.95	5.72	4.71	3.88	3.20	2.65	2.20	1.84	1.56	1.32

L. Chronic Criteria, Total Ammonia (mg/L as N), Fish Early Life Stages Present

Temperature, C \ pH	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8.	8.9	9.0
0	6.67	6.57	6.44	6.29	6.12	5.91	5.67	5.39	5.08	4.73	4.36	3.98	3.58	3.18	2.80	2.43	2.10	1.79	1.52	1.29	1.09	0.920	0.778	0.661	0.565	0.486
14	6.67	6.57	6.44	6.29	6.12	5.91	5.67	5.39	5.08	4.73	4.36	3.98	3.58	3.18	2.80	2.43	2.10	1.79	1.52	1.29	1.09	0.920	0.778	0.661	0.565	0.486
15	6.46	6.36	6.25	6.10	5.93	5.73	5.49	5.22	4.92	4.59	4.23	3.85	3.47	3.09	2.71	2.36	2.03	1.74	1.48	1.25	1.06	0.892	0.754	0.641	0.548	0.471
16	6.06	5.97	5.86	5.72	5.56	5.37	5.15	4.90	4.61	4.30	3.97	3.61	3.25	2.89	2.54	2.21	1.91	1.63	1.39	1.17	0.990	0.836	0.707	0.601	0.513	0.442
18	5.33	5.25	5.15	5.03	4.89	4.72	4.53	4.31	4.06	3.78	3.49	3.18	2.86	2.54	2.24	1.94	1.68	1.43	1.22	1.03	0.870	0.735	0.622	0.528	0.451	0.389
20	4.68	4.61	4.52	4.42	4.30	4.15	3.98	3.78	3.57	3.32	3.06	2.79	2.51	2.23	1.96	1.71	1.47	1.26	1.07	0.906	0.765	0.646	0.547	0.464	0.397	0.342
22	4.12	4.05	3.98	3.89	3.78	3.65	3.50	3.33	3.13	2.92	2.69	2.45	2.21	1.96	1.73	1.50	1.29	1.11	0.941	0.796	0.672	0.568	0.480	0.408	0.349	0.300
24	3.62	3.56	3.50	3.42	3.32	3.21	3.08	2.92	2.76	2.57	2.37	2.16	1.94	1.73	1.52	1.32	1.14	0.973	0.827	0.700	0.591	0.499	0.422	0.359	0.306	0.264
26	3.18	3.13	3.07	3.00	2.92	2.82	2.70	2.57	2.42	2.26	2.08	1.90	1.71	1.52	1.33	1.16	1.00	0.855	0.727	0.615	0.520	0.439	0.371	0.315	0.269	0.232
28	2.80	2.75	2.70	2.64	2.57	2.48	2.38	2.26	2.13	1.98	1.83	1.67	1.50	1.33	1.17	1.02	0.879	0.752	0.639	0.541	0.457	0.386	0.326	0.277	0.237	0.204
30	2.46	2.42	2.37	2.32	2.25	2.18	2.09	1.99	1.87	1.74	1.61	1.47	1.32	1.17	1.03	0.897	0.773	0.661	0.562	0.475	0.401	0.339	0.287	0.244	0.208	0.179

M. Chronic Criteria, Total Ammonia (mg/L as N), Fish Early Life Stages Absent

Temperature, C \ pH	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8.	8.9	9.0
0	10.8	10.7	10.5	10.2	9.93	9.60	9.20	8.75	8.24	7.69	7.09	6.46	5.81	5.17	4.54	3.95	3.41	2.91	2.47	2.09	1.77	1.49	1.26	1.07	0.917	0.790
7	10.8	10.7	10.5	10.2	9.93	9.60	9.20	8.75	8.24	7.69	7.09	6.46	5.81	5.17	4.54	3.95	3.41	2.91	2.47	2.09	1.77	1.49	1.26	1.07	0.917	0.790
8	10.1	9.99	9.81	9.58	9.31	9.00	8.63	8.20	7.73	7.21	6.64	6.05	5.45	4.84	4.26	3.70	3.19	2.73	2.32	1.96	1.66	1.40	1.18	1.01	0.860	0.740
9	9.51	9.37	9.20	8.98	8.73	8.43	8.09	7.69	7.25	6.76	6.23	5.67	5.11	4.54	3.99	3.47	2.99	2.56	2.18	1.84	1.55	1.31	1.11	0.944	0.806	0.694
10	8.92	8.79	8.62	8.42	8.19	7.91	7.58	7.21	6.79	6.33	5.84	5.32	4.79	4.26	3.74	3.26	2.81	2.40	2.04	1.73	1.46	1.23	1.04	0.855	0.756	0.651
11	8.36	8.24	8.08	7.90	7.68	7.41	7.11	6.76	6.37	5.94	5.48	4.99	4.49	3.99	3.51	3.05	2.63	2.25	1.91	1.62	1.37	1.15	0.976	0.829	0.709	0.610
12	7.84	7.72	7.58	7.40	7.20	6.95	6.67	6.34	5.97	5.57	5.13	4.68	4.21	3.74	3.29	2.86	2.47	2.11	1.79	1.52	1.28	1.08	0.915	0.778	0.664	0.572
13	7.35	7.24	7.11	6.94	6.75	6.52	6.25	5.94	5.60	5.22	4.81	4.38	3.95	3.51	3.09	2.68	2.31	1.98	1.68	1.42	1.20	1.01	0.858	0.729	0.623	0.536
14	6.89	6.79	6.66	6.51	6.33	6.11	5.86	5.57	5.25	4.89	4.51	4.11	3.70	3.29	2.89	2.52	2.17	1.85	1.58	1.33	1.13	0.951	0.805	0.684	0.584	0.503
15	6.46	6.36	6.25	6.10	5.93	5.73	5.49	5.22	4.92	4.59	4.23	3.85	3.47	3.09	2.71	2.36	2.03	1.74	1.48	1.25	1.06	0.892	0.754	0.641	0.548	0.471
	At 15º C and above, the criterion for fish early life stages absent is the same as the criterion for fish early life stages present (refer to Subsection L of 20.6.4.900 NMAC).																									

Basis: Current criteria for Ammonia to protect aquatic life proposed to be changed to those in new Subsections K. L and M. 1999 Update of Ambient Water Quality Criteria for Ammonia, EPA-822-R-99-014, United States Environmental Protection Agency, December 1999. http://www.epa.gov/waterscience/standards/ammonia/99update.pdf; National Recommended Water Quality Criteria: 2002, EPA-822-R-02-047, United States Environmental Protection Agency, November 2002; http://www.epa.gov/waterscience/pc/revcom.pdf.

[~~P~~] N[14]. Dissolved oxygen saturation based on temperature and elevation.

Elevation (feet)

Temperature °C	0	500	1,000	1,500	2,000	2,500	3,000	3,500	4,000	4,500	5,000	5,500	6,000	6,500	7,000	7,500	8,000	8,500	9,000	9,500	10,000
0	14.6	14.3	14.1	13.8	13.6	13.3	13.1	12.8	12.6	12.3	12.1	11.9	11.6	11.4	11.2	11.0	10.8	10.6	10.3	10.1	9.9
1	14.2	13.9	13.7	13.4	13.2	12.9	12.7	12.5	12.2	12.0	11.8	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7
2	13.8	13.6	13.3	13.1	12.8	12.6	12.4	12.1	11.9	11.7	11.5	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4
3	13.4	13.2	13.0	12.7	12.5	12.3	12.0	11.8	11.6	11.4	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.3	9.1
4	13.1	12.8	12.6	12.4	12.2	11.9	11.7	11.5	11.3	11.1	10.9	10.7	10.4	10.2	10.0	9.8	9.7	9.5	9.3	9.1	8.9
5	12.7	12.5	12.3	12.1	11.8	11.6	11.4	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4	9.2	9.0	8.9	8.7
6	12.4	12.2	12.0	11.8	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.4	9.2	9.0	8.8	8.6	8.5
7	12.1	11.9	11.7	11.5	11.3	11.1	10.8	10.6	10.4	10.2	10.1	9.9	9.7	9.5	9.3	9.1	8.9	8.8	8.6	8.4	8.2
8	11.8	11.6	11.4	11.2	11.0	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.4	9.3	9.1	8.9	8.7	8.6	8.4	8.2	8.0
9	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.8	9.6	9.4	9.2	9.0	8.9	8.7	8.5	8.3	8.2	8.0	7.8
10	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.4	9.2	9.0	8.8	8.7	8.5	8.3	8.1	8.0	7.8	7.7
11	11.0	10.8	10.6	10.4	10.2	10.0	9.9	9.7	9.5	9.3	9.1	9.0	8.8	8.6	8.5	8.3	8.1	8.0	7.8	7.6	7.5
12	10.8	10.6	10.4	10.2	10.0	9.8	9.6	9.5	9.3	9.1	8.9	8.8	8.6	8.4	8.3	8.1	7.9	7.8	7.6	7.5	7.3
13	10.5	10.3	10.1	9.9	9.8	9.6	9.4	9.2	9.1	8.9	8.7	8.6	8.4	8.2	8.1	7.9	7.8	7.6	7.5	7.3	7.2
14	10.3	10.1	9.9	9.7	9.6	9.4	9.2	9.0	8.9	8.7	8.5	8.4	8.2	8.1	7.9	7.7	7.6	7.4	7.3	7.1	7.0
15	10.1	9.9	9.7	9.5	9.3	9.2	9.0	8.8	8.7	8.5	8.4	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8
16	9.8	9.7	9.5	9.3	9.2	9.0	8.8	8.7	8.5	8.3	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8	6.7
17	9.6	9.5	9.3	9.1	9.0	8.8	8.6	8.5	8.3	8.2	8.0	7.9	7.7	7.6	7.4	7.3	7.1	7.0	6.8	6.7	6.6
18	9.4	9.3	9.1	8.9	8.8	8.6	8.5	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.3	7.1	7.0	6.8	6.7	6.6	6.4
19	9.3	9.1	8.9	8.8	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3
20	9.1	8.9	8.7	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2
21	8.9	8.7	8.6	8.4	8.3	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.0
22	8.7	8.6	8.4	8.2	8.1	8.0	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9
23	8.6	8.4	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9	5.8
24	8.4	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.4	6.3	6.2	6.1	5.9	5.8	5.7
25	8.2	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.8	5.7	5.6
26	8.1	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.8	5.7	5.6	5.5
27	7.9	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.8	6.7	6.6	6.5	6.3	6.2	6.1	6.0	5.9	5.7	5.6	5.5	5.4
28	7.8	7.7	7.5	7.4	7.2	7.1	7.0	6.9	6.7	6.6	6.5	6.4	6.2	6.1	6.0	5.9	5.8	5.6	5.5	5.4	5.3
29	7.7	7.5	7.4	7.3	7.1	7.0	6.9	6.7	6.6	6.5	6.4	6.2	6.1	6.0	5.9	5.8	5.7	5.5	5.4	5.3	5.2
30	7.5	7.4	7.3	7.1	7.0	6.9	6.7	6.6	6.5	6.4	6.3	6.1	6.0	5.9	5.8	5.7	5.6	5.4	5.3	5.2	5.1

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 and the New Mexico environment department public library. 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, 20h Edition.* Washington, D.C. 1112 p.

[~~B~~] D. United States geological survey. 1987. *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 p.

[~~C~~] E. 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.* Washington, D.C. 80 p.

[~~D~~] F. United States environmental protection agency. 1974. *Methods for chemical analysis of water and wastes.* National environmental research center, Cincinnati, Ohio. (EPA-625-/6-74-003). 298 p.

[~~E~~] G. New Mexico water quality control commission. [~~1978~~]. 2003 *(208) state of New Mexico water quality management plan* [~~(updated 1988)~~]. Santa Fe, New Mexico. [~~226~~] 85. p.

[~~F~~] H. Colorado river basin salinity control forum. [~~1993~~] 2002. *[~~1993~~] 2002 Review, water quality standards for salinity, Colorado river system.* Phoenix, Arizona. [~~154~~] 176 p.

[~~G~~] I. United States environmental protection agency. [~~1991~~] 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. ([~~4th~~] 5th Ed., [~~EPA/600/4-90/027)~~] EPA 821-R-02-012. 293 p. http://www.epa.gov/ost/WET/atx.pdf

[~~H~~] J. United States environmental protection agency. 1989. *Short-term methods for estimating the chronic toxicity of effluents and receiving waters to freshwater organisms.* Environmental monitoring systems laboratory, Cincinnati, Ohio. (2nd Ed., EPA 600/4-89/001). 250 p. http://www.epa.gov/OST/WET/ctf.pdf

[~~I~~] K. Ambient-induced mixing, in United States environmental protection agency. 1991. *Technical support document for water quality-based toxics control*. Office of water, Washington, D.C. (EPA/505/2-90-001). 2 p.

[~~J~~] L. United States environmental protection agency. 1983. *Technical support manual: waterbody surveys and assessments for conducting use attainability analyses*. Office of water, regulations and standards, Washington, D.C. 251 p. http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf

[~~K~~] M. 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. http://www.epa.gov/OST/library/wqstandards/uaavol123.pdf

ENDNOTES

1. Basis: "Which" introduces a non-essential phrase, which must be preceded by a comma. A non-essential phrase provides information helpful, but not necessary, to the reader's comprehension. This clause is non-essential because "surface waters of the state" is a term defined in Subsection 7(RR), and the standards apply only to "surface waters of the state."

2. Basis: "That" introduces an essential phrase, and is not preceded by a comma. An essential phrase cannot be eliminated without changing the meaning of the sentence. No substantive change is intended.

3. Basis: Surplus verbiage that can be eliminated without substantive effect.

4. Basis: See definition of "criteria" at 20.6.4.7.K. Whenever a reference is made to a "constituent concentration, level, or narrative statement, representing a quality of water that supports a use", the reference is to a **criterion,** not a standard. In the context of the water quality standards document itself (not necessarily the federal and state acts), **standard** consists of the use(s) <u>and</u> the supporting criteria; also see 20.6.4.6(A) for a description of the term "standards". No substantive change is intended.

5. Basis: The objective of the Clean Water Act is to "restore and maintain the chemical, physical and <u>biological integrity</u> of the Nation's waters." 33 U.S.C. 1251(a) (emphasis added). A primary goal of the Clean Water Act is the "protection and <u>propagation</u> of fish, shellfish and wildlife…." 33 U.S.C. 1251(a)(2) (emphasis added), see also 33 U.S.C. 1313(c)(2)(a). Biological integrity and propagation of fish and shellfish involves all the organisms that comprise the aquatic community, not simply the fish and shellfish. Fish are dependent upon other organisms that make up the food web by which they survive. The use of "fishery" nomenclature creates a false impression that the water quality standards are only concerned with protection of fish. Further, criteria for aquatic life uses listed in 20.6.4.900 J are based on the effects of regulated pollutants upon a broad spectrum of aquatic organisms not limited to fish. Revisions are also proposed to the narrative portions of 20.6.4.900 to identify existing fishery uses as subcategories of aquatic life, to add a new subsection 20.6.4.10.H(6) that addresses non-fishery aquatic life issues, and to propose a new designated use of "limited aquatic life" for waters that support a unique aquatic community but that cannot meet the criteria for the "fishery" subcategories due to natural conditions, e.g. Sulphur Creek.

6. Basis: This segment currently has a designated use of primary contact and criteria based upon former EPA recommendations for fecal coliform bacteria of 200/100 mL (geometric mean) and 400/100 mL (single sample). The EPA primary contact recommendation for E. coli criteria is a geometric mean of 126/100 mL based upon an assumed illness rate of 8 illnesses per 1000 exposed persons. EPA guidance suggests a single sample maximum of 410/100 mL based upon lightly used full body contact with an upper 90% confidence limit. This criterion appears to provide approximately the same level of protection provided by the existing fecal coliform criteria.

7. Basis: This segment currently has a designated use of primary contact and more stringent criteria for fecal coliform bacteria of 100/100 mL (geometric mean) and 200/100 mL (single sample). The EPA primary contact recommendation for E. coli criteria is a geometric mean of 126/100 mL based upon an assumed illness rate of 8 illnesses per 1000 exposed persons. EPA guidance suggests a single sample maximum of 235/100 mL based upon beach area full body contact with an upper 75% confidence limit. This criterion appears to provide approximately the same level of protection as the existing more stringent fecal coliform criteria.

8. Basis: This segment currently has a designated use of secondary contact and primary contact criteria for fecal coliform bacteria of 200/100 mL (geometric mean) and 400/100 mL (single sample). The approximately equivalently protective E. coli criterion of 126/100 mL (geometric mean) and 410/100 mL (single sample) is proposed.

9. Basis: This segment currently has a designated use of secondary contact and more stringent primary contact criteria for fecal coliform bacteria of 100/100 mL (geometric mean) and 200/100 mL (single sample). The approximately equivalently protective E. coli criterion of 126/100 mL (geometric mean) and 235/100 mL (single sample) is proposed.

10. Basis: This segment currently has a designated use of secondary contact and criteria for secondary contact of 1000/100 mL (geometric mean) and 2000/100 mL (single sample) based upon former EPA guidance providing that a secondary contact criterion five times the primary contact criterion was acceptable. Although EPA guidance continues to accept a secondary contact criterion five times the primary contact criterion for the geometric mean, it does not make a recommendation for a single sample maximum for secondary contact. EPA guidance provides a range of values that could be adopted to protect recreation use based upon projected illness rates. This proposal adopts the geometric mean density of 548/100 mL associated with an illness rate of 14 per 1000 persons exposed to bacteria in water by ingestion of water as a result of immersion, and 2507/100 mL for a single sample maximum for waters infrequently used for full body contact at a 95% confidence limit.

11. Basis: The segment-specific numeric turbidity criterion will be replaced by a narrative criterion in section 20.6.4.12, applicable to all surface waters of the State. This approach looks at the increase in turbidity over background instead of an absolute turbidity level and should limit the designation of impairment to those segments with actual problems.

12. Basis: This will change the segment description to limit the application of designated uses to perennial waters within the described segment.

13. Basis: “Limited warmwater” is renamed “marginal warmwater” to parallel the marginal coldwater subclassification, and to avoid confusion with the new “limited aquatic life subclassification.” No substantive change is intended.

14. Basis: Correction of internal references resulting from renumbering of sections. No substantive change is intended.

15. Basis: Existing criteria for Domestic Water Supply use moved from Subsection B without change. No substantive change is intended.

16. Basis: Existing criteria for Livestock Watering use moved from Subsection F (formerly Subsection K) without change. No substantive change is intended.

17. Basis: *National Recommended Water Quality Criteria: 2002*, EPA-822-R-02-047., www.epa.gov/waterscience/pc/revcom.pdf. Recalculations of criteria integrate an updated national default fish consumption rate (17.5 g/day) and, in some cases, previously determined relative source contribution values obtained from primary drinking water standards as well as new cancer potency information from EPA's Integrated Risk Information System (IRIS).

18. Basis: *Water Quality Criteria 1972*, EPA-R3-73-033 (a.k.a. *The Blue Book*); Water for Dairy Cattle, Guide D-107, Cooperative Extension Service, New Mexico State University, February 2002, http://www.cahe.nmsu.edu/pubs/_d/D-107.pdf; Water Quality for Livestock and Poultry, Guide M-112, Cooperative Extension Service, New Mexico State University, October, 1997, http://www.cahe.nmsu.edu/pubs/_m/m-112.pdf;

19. Basis: Flynn, Robert, 2002, Personal communication (letter dated April 3, 2002), NMSU Agricultural Science Center at Artesia; Flynn, Robert, and Craig Runyon, 2002. Personal communication (letter dated May 7, 2002), NMSU College of Agriculture and Home Economics Water Task Force.

20. Basis: Stevenson, Tod, Chief, Conservation Services Division, New Mexico Dept. of Game & Fish. Personal communication. Letter to Dr. Jim Davis dated May 21, 2002.

21. Basis: *Guidelines for Interpretation of the Biological Effects of Selected Constituents in Biota, Water and Sediment*, *National Irrigation Water Quality Program Information Report No. 3*, U.S. Department of the Interior, November 1998.

22. Basis: Arsenic criteria recalculated based upon recommended change in fish consumption rate from 6.5 g/day to 17.5 g/day. A recent federal study provided the basis for the Department's current criterion, and the proposed revised criterion. In 1997, the USGS published a study of arsenic in the Rio Grande in the vicinity of Albuquerque. The study, conducted in conjunction with EPA, the New Mexico Environment Department, Isleta Pueblo, and the City of Albuquerque, yielded data that can be used to calculate an arsenic criterion as follows: The geometric mean of dissolved arsenic concentrations from all river and drain stations during this study is 2.88 mg/L. The geometric mean of total arsenic concentrations in the eight composited fish-tissue samples from fish collected in the river and drains is 13.13 µg/kg. Using the following assumptions: risk level = 10^{-5}, body weight = 70 kg, cancer potency factor = 1.5, bioaccumulation factor = 4.57 L/kg (geomean tissue 13.13/ geomean H20 2.88) fish consumption rate = 0.0175 kg/day , inorganic As = 65 percent, produces a criterion of 9.0 µg/L for consumption of organisms only, and 2.3 µg/L for consumption of water plus organisms.

23. Basis: Conductivity varies with temperature and should be referenced to a standard temperature. The term that describes conductivity adjusted to a standard temperature is “specific conductance.”

24. Section designation provided for reference purposes only. Sections will be renumbered in accordance with requirements of the New Mexico Administrative Code before filing.

25. Subsection designation provided for reference purposes only. Subsections will be renumbered in accordance with requirements of the New Mexico Administrative Code before filing.